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# BABA MALAY: THE LANGUAGE OF THE 'STRAITS-BORN' CHINESE 

Sonny Lim

## 1. INTRODUCTION

This investigation of Baba Malay was carried out in Malacca and based on approximately 15 hours of recorded speech from a total of 25 informants ranging in age from 18 to 85. The chief method used to elicit speech samples from them was to invite them to talk about aspects of their unique culture, such as their cuisine, their marriage, birth and funeral ceremonies, the impact of modern changes on their traditions and on their personal lives. No difficulties were encountered in eliciting samples of Baba Malay. Generally, native speakers of Baba Malay were enlisted to conduct the interviews in my presence, but on the occasions when these assistants were unavailable, I conducted the interviews myself. My less-than-fluent Baba Malay proved to be no hindrance as a few carefully chosen questions were enough to inspire my informants to talk at great length.

It will be observed from the linguistic illustrations used in the following pages that English words are frequently used by my informants. This is because until recently nearly all 'Straits-born' Chinese, if they received any education, were educated in English. That is to say, they went to schools which offered English as the medium of instruction. If they formally studied Standard Malay at all, they studied it as a second language at school. Recent changes in educational policy in Malaysia will mean that the present generation of Straits-born Chinese, or Baba Chinese as they are often referred to, like every other ethnic group in Malaysia, will be educated primarily in Standard Malay.

In addition to Baba Malay, speech samples of Chitty-Indian Malay and the Malay of a Malaccan Portuguese and a non-Baba Chinese were also recorded for the purposes of comparison. Each of these represented a major non-Malay ethnic group found in Malacca, and a comparison of the three varieties of 'reduced Malay' spoken by them with Baba Malay was an aid in placing Baba Malay in perspective with other varieties of 'reduced Malay' in Malacca.

While this investigation may offer linguistic insights into Baba Malay, it is not meant as an exhaustive description of the lanquage. Its primary aim where a linguistic description is concerned is to point out the distinguishing features of Baba Malay and to relate them where appropriate to the two sourcelanguages, Hokkien and Malay. It has also to be noted that no attempt has been made to frame the linguistic description within any specific current linguistic theory as it is felt that much of the theoretical discussion still remains unsettled. In any case, it was felt that linguistic enquiry may still

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proceed profitably independent of the dictates of specified theoretical frameworks, and that concern with any particular linguistic framework is of less importance for our purposes than seeing which of the insights offered by recent linguistic research best explain or describe the specific linguistic phenomenon under scrutiny. Thus, the linguistic approach used in the following pages lies well within the theoretical domain of general linguistics even though it avoids adherence to any one linguistic theory.

For the sake of convenience and simplicity, an orthographic system has been devised for Baba Malay, which, being an oral, uncodified language, currently has no written form. This seemed preferable to the alternative of a phonetic transcription because, quite apart from its inconvenience, the focus in this investigation is essentially on the syntactic structure of Baba Malay rather than on its phonological structure. The orthographic system used for Baba Malay has been guided by the Standard Malay system for the purpose of easy cross-reference. The table below sets out the system.

| Baba Malay orthographic system |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONSONANTS | SOUND | SYMBOL | SOUND | SYMBOL | SOUND | SYMBOL |
|  | /p/ | P | $/ \mathrm{t} / \mathrm{l}$ | c | /r/ | $r$ |
|  | /t/ | t | /d3/ | j | /w/ | w |
|  | /k/ | k | /s/ | s | /m/ | m |
|  | /b/ | b | /h/ | h | /n/ | n |
|  | /d/ | d | /1/ | 1 | /ヶ/ | ny |
|  | /g/ | g | /j/ | y | /ヵ/ | ng |
| vowels | /i/ | i |  |  |  |  |
|  | /e/ | e | $/ \varepsilon /$ | $\varepsilon$ | /o/ | - |
|  | /ə/ | $\dot{\text { e }}$ | /a/ | a | /u/ | $u$ |

It should be noted that because an orthographic system has been used for Baba Malay throughout these pages, any peculiarities of individual pronunciation of the informants are not revealed, nor are the ellisions and contractions of natural speech. Thus, for example, punya is usually pronounced [pia] or [mia], and semua is pronounced [smua]. The policy being followed is that for the sake of easy recognition, the existing Malay spelling of words should be retained unless the Baba Malay pronunciation is so distinctively and consistently different from that suggested by the Malay orthography and it does not permit the variant pronunciation suggested by that orthography. Thus, Baba Malay has bole, mintak, pigi and pake where Malay has boleh, minta, pergi and pakai. On the other hand, a word such as tahun is always pronounced [taun] in Malay, with a silent 'h', and this spelling has also been adopted for Baba Malay in which the ' h ' is also not sounded.

The spelling of Hokkien words follows, with modifications, the system of romanisation used by Chiang Ker-Chiu in his A Practical English-Hokkien dictionary. The system is as follows:

| Hokkien orthographic system |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONSONANTS | SOUND | SYMBOL | SOUND | SYMBOL | SOUND | SYMBOL |
|  | /p/ | p | /ph/ | ph | /s/ | s |
|  | /t/ | t | /th/ | th | /h/ | h |
|  | /k/ | k | $/ k^{\text {h/ }}$ | kh | /m/ | m |
|  | /b/ | b | /ts/ | ch | /n/ | n |
|  | /d/ | d | $/ \mathrm{tsh} /$ | chh | /ヵ/ | ng |
|  | /g/ | g | /d3/ | j | /1/ | 1 |
|  | /7/ | 7 |  |  |  |  |
| VOWELS | /i/,1í | i,î | /a/, /ã/ | a, ã | /o/,/õ/ | ○, ${ }^{\text {o }}$ |
|  | /e/,/ẽ | e, ${ }^{\text {e }}$ | 101, /ั1 | ○, ${ }^{\text {a }}$ | /u/,/ũ/ | u, ũ |
| TONES | lst to | upper even |  | unmarked |  |  |
|  | 2nd to | upper |  | , |  |  |
|  | 3 rd to | upper departing |  |  |  |  |
|  | 4 th to | upper entering |  | unmarked |  |  |
|  | 5 th to | lower even |  | $\wedge$ |  |  |
|  | 6 th to | upper |  | , |  |  |
|  | 7 th to | lower departing |  | - |  |  |
|  | 8 th to | lower entering |  |  |  |  |

### 1.1 Baba Malay and the question of pidgins and creoles

'Baba Malay' is the name given to the native language of a community of people in Malaysia and Singapore who are commonly referred to as the 'Babas' or 'Straits-born Chinese'. The Straits-born Chinese are the descendants of the earliest Chinese settlers in the Malay peninsula who arrived there primarily from the southern Chinese province of Fukien long before the period of mass emigration from China (i.e. the the latter half of the 19 th century) which was to result in the present ethnic Chinese composition of the region. The first major Chinese settlements were in Malacca, though after the foundation of the ports of Penang and Singapore in the years 1786 and 1819 respectively, both these islands also saw major Chinese settlement. Together, Malacca, Penang and Singapore, all found along the important narrow strip of seaway known as the Straits of Malacca, make up, along with Labuan, the 'British Straits Settlements'; hence the source of the initially somewhat enigmatic designation 'Straits-born' to these Chinese immigrants.

Today, the most concentrated pocket of Straits-born Chinese or Babas in the Malay peninsula is to be found in Malacca, the smallest of the ll states that make up the nation of Malaysia. In all other places, the Baba is hard to pick out from the rest of the community, having been greatly outnumbered by the non-Straits-born Chinese who, taken together, comprise some $40 \%$ of the population of Malaysia, and are the second largest ethnic group in the country. The present numbers of the Babas, however, cannot be gauged. Even apart from the fact that they are officially designated 'Chinese' for all purposes (they are so in the national census), continual marriage with other Chinese means that the boundaries for such terms as 'Baba' and 'Chinese' have become rather nebulous. It is only in a place such as Malacca, regarded by many Straits-born Chinese as the ancestral homeland of the Baba, that the Baba community has been close-knit enough to maintain its identity more successfully. The distinctness of the Baba identity there is plainly evident: the style of dress favoured by the women, the forms of jewellery, the distinctive cuisine, the customs and rites, the traditions, all are neither strictly Chinese nor Malay, but an interesting and unique blend of both.

Although the Baba is descended from the first Chinese settlers, he is not a 'Baba' by virtue of this fact alone. Another, and more significant defining feature of this designation is the fact that he has mixed Chinese-Malay ancestry, a consequence of the fact that the immigration of Chinese women took place much later than the immigration of Chinese men. The first Chinese settlers were, in fact, all males who, in the absence of Chinese women, married local Malay women. It is out of this inter-racial background that the language of the Baba Chinese developed.
The language of the Baba Chinese, popularly known as 'Baba Malay', therefore has its basis in the two relevant languages, Malay and Hokkien-Chinese, the latter because the first Chinese immigrants were in fact predominantly from the Hokkien-speaking province of Fukien in southern China. The fact that Baba Malay has its basis in both these two languages is not immediately obvious. The language appears, apart from the obvious Hokkien loan words, to be simply a reduced form of Malay, having undergone the process of 'simplification' in the Hymesian sense (i.e. reduction in the complexity of the outer form - Hymes 1971:65-85), which is one of the three parameters along which Hymes proposed to define the processes of pidginisation and creolisation. However, when the pidginisation/creolisation process can be defined along another parameter, that presented by the notion of 'convergence', the influence of Hokkien will be seen to be greater than is initially apparent.
Baba Malay is essentially the Malay language pared down to the minimum, with the expected morphological and some syntactical features of Malay altered or missing, and with radically modified phonology. Affixation, for instance, a feature of Malay, is not a systematic process in Baba Malay, so that affixes are either not analysed as separate morphological entities at all, or are used in a way that is idiosyncratic and not associated with speakers of Malay (e.g. ketawa-kan to laugh, has a suffix, -kan, the presence of which would not be acceptable to a speaker of Malay). In addition, there are many examples of the process of semantic neutralisation that is frequently associated with pidgin and creole languages, such as the neutralisation of the inclusive-exclusive distinction of $k i t a$ and kami (lst person plural pronoun) and the human-nonhuman distinction of laki-laki and jantan male found in Malay. Semantic extensions, as represented by the extension of the word banyak many to fulfil the function of an adjectival intensifier very, are also a feature of Baba Malay. To the
non-linguist, the overall impression is that of a vulgar and 'market-place' language whose chief virtue is that from time to time its peculiarities do provide moments of mirth. To the linguist, however, these impressions are familiar enough; they are encountered wherever any kind of proximity between a 'pidginised' variety and its source language is found. And the term 'pidginised' does spring immediately to the mind because it is a readily accessible and convenient one.

However, the use of such a readily-accessible term does nothing in the way of providing definitions, for to the linguist confronted with a linguistic variety of the type exemplified by Baba Malay, the ability to characterise it precisely in linguistic terms is of some theoretical importance. It certainly demands an adequate description. In this particular case, reaching out for the established labels is a natural response to the demand, but one finds that the need to qualify and modify these labels arises much too rapidly and too frequently for comfort. It is clearly inevitable, then, that one should arrive at the conclusion that the labels themselves are imprecise.

However, although imprecise, the labels need not be a bad thing, for they serve to provide reference-points against which all the facts of the specific case may be measured up, useful sign-posts that tell us how close or how far we are from the mark. Against the established sign-posts, then, the patois or 'mixedlanguage' Baba Malay, being the native tongue of a portion of the speech community, would be a 'creole', while Bazaar Malay (a closely related 'reduced' variety in widespread use in the region as a lingua franca - see below), being the native tongue of no one, would be a 'pidgin'. This is the usual first step in the sorting out and labelling process, and although of course, the matter is quite a bit more complex than this and has in fact been recognised to be so by linguists, particularly in the last few years, this basic criterion does serve to underline an important distinction within the category of 'reduced languages'. For the acquiring of native speakers by a language is not merely a simple fact. It has sociological and linguistic interest because of the kind of changes that take place within both the speech community and its linguistic system during the process of the language's acquisition of native speakers. Something significant happens when a reduced language becomes the native tongue of a community that makes it important and necessary that a distinction be made between a variety that is the unique property of a group of human beings and a variety that is not uniquely the property of anyone. For convenience, therefore, we shall call one a 'pidgin' and the other a 'creole', although it must be kept in mind that it is also our intention to question both the adequacy and the accuracy of the type of relationship that is usually posited between them.

Any consideration of Baba Malay will need to take note of the other reduced Malay variety very widespread in the Malay peninsula, and that is the variety commonly known as 'Bazaar Malay'. Bazaar Malay is the lingua franca of the non-English-educated Malays, Indians and Chinese of Malaysia and Singapore (those who are English-educated will use English as a lingua franca).

It should be noted at this point that the Bazaar Malay in widespread use in these two countries differs from the other variety (or varieties) of pidgin Malay used in the Indonesian archipelago, though it too is known as 'Bazaar Malay'. The reason for taking note of this version of Bazaar Malay is that it bears a striking resemblance to Baba Malay and the two are clearly related. This fact has obvious theoretical significance and will be examined in the course of this study.

The purpose of the investigation undertaken here is two-fold. First, it is to examine where a 'mixed language' such as Baba Malay stands in relation to the theoretical perspectives on the linguistic processes of pidginisation and creolisation that have emerged in recent years and to place Baba Malay firmly within the bounds of those perspectives. It is intended, of course, that such an approach will both contribute to clarifying Baba Malay as a language-type, as well as to clarifying the theory underpinning discussions of pidginisation and creolisation. Secondly, it is to provide, for the first time, a record of Baba Malay as a language, its basic syntactic make-up and the source of some of its enigmatic characteristics, for although many know 'about' the language, its existence as a rational linguistic system is not commonly acknowledged. The record, however, is not intended as a comprehensive grammar of the language, but serves merely to note the basic features of its structure and to highlight the areas of its uniqueness as a language distinct from its source languages, Hokkien and Malay.

## 2. BABA MALAY: THE SOCIAL, HISTORICAL AND LINGUISTIC BACKGROUND

### 2.1 Baba Malay and present-day Malacca

Before proceeding to sketch in the history of Chinese immigration to Malacca and the historical conditions out of which Baba Malay developed, it is necessary to look at the position of Baba Malay in present-day Malacca for a contemporary perspective on the language.

The linguistic situation that exists in Malacca today is not a simple and straight-forward one. In the urban areas, no single ethnic group predominates, and so the question of who speaks what to whom is largely dependent on the ethnic background of the participants and the language in which they received their education. Because of Malaysia's colonial links with Britain, English was until recently the favoured medium of education, and it is still in frequent and widespread use. However, the true lingua franca in Malacca would seem to be the non-standard variety of Malay which, for convenience, we will call 'reduced Malay'. The rule to follow when in Malacca is that if all else fails, use 'reduced Malay'. It is the lowest common linguistic denominator.

The term 'reduced Malay' covers a gamut of linguistic varieties that include Baba Malay and the whole continuum represented by Bazaar Malay. These varieties are all mutually intelligible, but this is not to say that they are all 'the same thing'. Baba Malay can be differentiated from the others by certain syntactic characteristics peculiar to it and by its sizeable lexicon of Chinese loan-words, and against the Bazaar Malay continuum, it is differentiated by its stability of structure. In other words, it is a more clearly-defined linguistic system.

Baba Malay speakers, therefore, may use Baba Malay in communicating with members of other ethnic groups should English be unavailable. Among themselves, i.e. in intra-group communication, Baba Malay is invariably used if either participant has no access to English; otherwise, English or a mixture of both English and Baba Malay may just as likely be heard (socio-linguistic determinants such as the setting and the topic of discourse, for instance, obviously govern the choice of either English or Baba Malay in specific cases).

In recent years, changes in the educational policy of Malaysia have had some effect on the language situation in Malacca. The use of English as a medium of instruction in schools is being gradually phased out in favour of Standard Malay. The effect this will have on the future generations of Baba Malay speakers can only be guessed at, but it does seem that there will be an extension of the linguistic continuum, with Baba Malay (and reduced Malay in general) moving towards Standard Malay, thus bridging the gap that quite clearly exists at present between Standard Malay and reduced Malay. There has thus far been a great difference between these two broadly-labelled varieties because they really constitute two separate systems; no linguistic continuum can be said to have spanned these two varieties thus far. However, the change in this state of affairs is already evident in the speech of Baba Chinese children of school age, in whom there is, for example, a tendency to observe the morphological inflections of Standard Malay. Other influences such as the use of Standard Malay passive structures and vocabulary are also noticeable in the speech of the generation of Baba Chinese who are gaining their literacy in Malay.

The implications of the change in educational policy where Baba Malay is concerned would seem to be obvious. Baba Malay is not likely to remain the language as we now know it. Indeed, the extension of the linguistic continuum would so obliterate the very defining linguistic features of Baba Malay that it would become pointless and also inaccurate to maintain that there would any longer be a demonstrably well-defined and self-contained linguistic system that ought to be identified by any special name.

The position of Baba Malay, like that of many creole languages, is of course made more tenuous by its lack of a current body of literature. It is not possible today to be 'literate' in the language, and this naturally prevents it from being a functional system in every possible way. However, Baba Malay has not always been a language without a written form. For a few years at the end of the last century there was in circulation a daily newspaper in reduced Malay called Bintang Timor (Eastern Star) published in Singapore and apparently catering to the Baba Chinese community. The language of Bintang Timor, although recognisably reduced Malay, does not entirely resemble the Baba Malay as spoken by the Baba Chinese today. Rather, it seems to be an attempt to approximate Standard Malay with its morphological affixation (not entirely systematic) and stylistic formality. The result is clumsy and unmistakeably non-Standard Malay, despite its apparent intentions. Aside from Bintang Timor (which began publication in 1894), there also existed a large number of works of fiction in reduced Malay, usually reinterpretations of Chinese 'classics' that tell of the exploits of errant warriors. One informant, a woman in her eighties, recalled that she and her brothers and sisters did go to school to learn Standard Malay, though the schooling was merely for a short period of time (two or three years). The purpose seemed more to have been to acquire literacy, to be able to 'read the written word' than to acquire a competence in Standard Malay as such. This would explain the impression gained from looking at the early written literature that the language resembled Standard Malay imperfectly acquired.
Literacy, then, did exist among the Baba Chinese, though it was probably not very widespread and was a prerogative of the wealthy. However, whatever literacy there was in Malay gradually became less widespread in this century (due to the preference among the Baba Chinese for an English education) as evinced by the disappearance of this body of literature. It would seem that
the ability to read and write Malay was not universal enough among the Baba Chinese and did not remain with them long enough for it to lead to the codification of Baba Malay. Had there been an opportunity for the codification of Baba Malay, the development of the language might have taken a different course.

### 2.2 Chinese settlement in Malacca

In the l6th Century, Malacca was a great trading-port. There was a steady flow of trade between Asia and Europe, and Malacca was the most convenient mid-point port of call for merchant vessels from both continents. In fact, goods from both continents changed hands at Malacca as it was not normal for merchant ships, whether east-bound or west-bound, to travel beyond Malacca because sailing conditions were found to be neither congenial nor convenient. The vitality of Malacca as a trading-port may be seen from this contemporary account:

Those from Cairo bring the merchandise brought by the galleys of Venice... Those from Mecca bring a great quantity of opium... In these companies go Parsees, Turks, Turcomans and Armenians, and they come and take up their companies for their cargo in Gujerat and from there they embark in March and sail direct for Malacca; and on the return journey they call at the Maldive Islands. ${ }^{1}$

Although the Chinese were known to have periodically visited the Malay archipelago from an early date (even as early as the 5th Century), it was not until after the foundation of the Malay kingdom of Malacca at the beginning of the l5th Century that their presence could be said to be of significance (Purcell 1948:14-26). For, although it was possible that there could have been temporary trading settlements, it was only after this date that any evidence of permanent settlements made by the Chinese can be established without doubt. As further attestation to this, Purcell has noted that no records of any Malacca Chinese family go back further than the first half of the 17th Century.
The Chinese population was, initially, not large. At the beginning of the 17 th Century, there were only an estimated 300-400 Chinese in Malacca. In 1750, 150 years later, they numbered 2,161 in a total population of 9,635 , and by 1860 , the Chinese population was 10,039 in a total 67,276 (Purcell 1948:x). By this time, however, Malacca was by no means the only place with a permanent Chinese settlement. To the north of Malacca, the island of Penang, which had been founded in 1786, saw its Chinese population rise to 28,018 in a total of 59,956 by 1860. By the same year too, the number of Chinese in the settlement at Singapore, which was founded in 1819, was 50,034 in a total of 81,734 . These figures, while showing the steady increase in number, do not, however, reveal that some very important differences were emerging between the early Chinese settlers and the later immigrants. For it does appear that by the middle of the 19th Century, a clear distinction had already arisen between the 'native' Chinese and the 'sinkheh', the recent arrivals from China. Purcell gives this account of the attitudes of the 'native' Chinese towards the newcomers (Purcell 1948:61) :

It is in the Malacca and the Penang of this period i.e.
around 1860 that we can obtain a view of the Baba, or
Straits-born Chinese, as he was after he had been
conditioned by local influences, but before he was swamped in numbers by the China-born and before he came under the immediate influences, either of the West with its ever accelerating tempo of existence or of cultural revolution in China which gave birth to modern nationalism. The Baba felt his apartness from the newcomers and was inclined to despise them. Some even repudiated the suggestion that they were Chinese at all and claimed to be 'orang puteh' or white men, meaning that they were British subjects and proud of it. They had clubs of their own to which natives of China were not admitted. Yet at the same time they adhered punctiliously to the outward signs of a Chinaman. The queue was a badge of servitude, having been forced on the Chinese by the Manchus, and every Baba knew it, but it had come to be looked on as a badge of honour in his fatherland, and he was careful to preserve it as a tradition of his ancestry as he did his thick-soled shoes, mandarin costumes, and conical hats. He rejected, however, the barbarous custom of binding the feet of his females which was of greater antiquity than the queue, dating from about the tenth century. The Baba's claim to consideration was the claim of most aristocracies - the priority of arrival.

We know that the Straits-born were not pure Chinese by blood, but although they would have Malay or half-caste mothers, children of Babas were almost always brought up in the ways of their fathers; even when the fathers died young and the children were left to the local mothers. Vaughan [see Vaughan 1971] says that it was striking sometimes to see 'black Chinese' with all the characteristics of their fathers strongly brought out. But in Malacca, where the Malays were in majority, he tells us that the women were more prejudiced and leant more to their own people. It is remarkable to consider the tenacity with which those Malacca Baba, who did not speak anything but Malay, adhered to the Chinese way of life, modified though it was by Malay and other local influences.
That there had arisen a difference in appearance and outlook between the Baba and the 'sinkheh' was quite evident. However, the question is, what was the basis for the Baba's perception of his own distinctness of identity? This question is important because one of the things that characterise this distinctness of identity is, of course, the fact that the Baba spoke a different language. Purcell's account raises a few questions on this score. We are told that the Straits-born Chinese had 'Malay or half-caste' mothers, but this should surely be amended to read 'Malay or half-caste ancestry', for I doubt that a 'sinkheh' who took a Malay or half-caste woman for a wife would, simply by such an act, afford his progeny immediate entry into the exclusive circle of the Straits-born community. For a 'sinkheh', the gap between being a lowly new immigrant (who would usually arrive without a cent to his name and whose status on arrival was hardly any different from that of a slave), and a proud and wealthy Baba (to judge by his thick-soled shoes, mandarin costumes and conical hats, in contrast to the sinkheh's 'pair of short drawers tied around
the waist with a piece of string and a pair of straw sandals' - Purcell 1948:62) cannot be so easily bridged, one would imagine, by simply taking a Malay woman for a wife. It is more likely, then, that the Baba identity was already well and truly established by this time, and that the fact of the Babas having Malay or half-caste mothers was significant only at a much earlier stage. From Purcell's account, therefore, it is clear that the fact of the Babas being descended from the earliest Chinese immigrants was one of the factors which contributed to the distinctness of the Baba identity. What is not so clear, however, is that the thing which more than any other set him apart from the new immigrants was his higher economic standing in the community. Sinkhehs, after all, were commonly employed as household servants and gardeners in Baba homes. This feeling of class difference was quite likely a very important factor. Wealth has always had a notoriety for elevating the common man a notch above others who would otherwise have been equally common. The Baba's claim to aristocracy, as given by one's socioeconomic status, was indeed his priority of arrival; it is, as ever, the familiar principle of the 'early bird'.

### 2.3 The origin of Baba Malay

### 2.3.1 Baba Malay and the pre-pidgin continuum

The origin of Baba Malay cannot be considered without reference to the related variety, Bazaar Malay. The l9th Century Malay scholar, W.G. Shellabear, who was probably the first writer to give any attention to Baba Malay, in fact wrote of Baba Malay and Bazaar Malay as if they were one and the same language, and astutely noted that 'Low Malay' (which is the term he uses to refer to both varieties collectively) was the unique creation of the Chinese in Malaysia (Shellabear 1913). It would be hard to dispute that Baba Malay and Bazaar Malay are essentially the same language, with the difference that the latter, being a 'pidgin', is more variable in structure and has not the sizeable lexicon of Hokkien loan words to be found in Baba Malay. What is more interesting, however, is Shellabear's observation that what we have called 'reduced Malay' ('Low Malay' is Shellabear's term) was originally created by the Chinese. The investigation undertaken will certainly support Shellabear's claim, and it will be seen that not only is Baba Malay a creation of the Chinese (which is an obvious fact given that its native speakers are ethnic Chinese) but that Bazaar Malay, the lingua franca widespread in Malay peninsula, was also created in large part by the Chinese. ${ }^{2}$

Given what we know about both Baba Malay and Bazaar Malay from this investigation in the following pages, then, the picture of the linguistic situation that existed in Malacca in the 17 th and l8th Centuries would seem to be quite clear. The Chinese in Malacca during that period created a pidginised Malay, which gained currency and acceptance due in large part to the economic importance of the Baba Chinese in the community. Shellabear notes that '... in the British settlements ... the Chinese have always had a commanding influence in all business affairs, and in a proportionate degree have left their impress upon the languaqe in which the business of the Settlements has always been transacted...' (Shellabear 1913:51). Although by far the largest proportion of the population in Malacca was formed by the Malays, the linguistic situation was not a simple bilingual one. There were present in Malacca southern Indians and other traders from the surrounding regions as well. As Whinnom (197l) has pointed out, probably no pidgin arises out of a simple bilingual situation, particularly in a situation where one group is disadvantaged in any way, as for example, by the lack of sheer numbers.

This, however, presupposes that there are no other extraneous 'barriers' between the two groups. Shellabear claims that the Baba Chinese held the language of the Malays in some contempt, no doubt regarding it as the unsophisticated language of a commercially unimportant sector of the community, for Malay is 'bahasa hutan', the language of the jungle. Even in a bilingual situation, then, such an attitude on the part of the minority group might well constitute a barrier to the effective learning of the numerically or geographically dominant language. Such an attitude would probably serve to maintain and consolidate the pidginised Malay that was used by the Baba Chinese. Even the initial intermarriage with the Malay women would not have undermined this, for the tendency of the Baba Chinese to cling tenaciously to their Chinese identity would have been another factor in their maintaining their distance from the larger Malay-speaking community.

The linguistic situation, then, was no doubt an interesting one, but due to the paucity of our knowledge regarding the real facts as they existed in that period, more than one hypothesis for the actual manner in which Baba Malay developed is possible.
At this point, however, it may be worthwhile to state an important distinction easily overlooked, and that is the difference between a 'pidgin' and a 'pidginised variety'. The latter term refers to any linguistic variety that has been simplified or reduced in form, while the former is applied to such varieties when they have attained a measure of stability, i.e. when they in time come to exhibit certain norms and hence become much less subject to the personal idiosyncracies of their speakers and other variation of this kind.

Whether Baba Malay was ever a fully-fledged pidgin before undergoing creolisation remains uncertain. If it was, then the situation would be that creolisation took place in only one sector of the speech community while elsewhere the pidgin remained technically a pidgin (thus giving rise to the two varieties for which we have two distinct names). If, on the other hand, there was only some kind of pre-pidgin continuum, then creolisation took place without the varieties having gone through a prior pidgin stage, and the pidgin that is now called Bazaar Malay stabilised independently. The second possibility does seem more convincing. A full-fledged pidgin would hardly have had the time to develop in the light of what we can guess about the frenetic linguistic situation that existed in Malacca then. A reduced form of Malay would have been in vigorous use then, and certainly immediately in use even in the homes of the Chinese who had, after all, married the local Malay women. Given the fact that a reduced form of Malay would probably have been used in Chinese homes as well as, of course, used in the trading community at large, then it does not seem likely that the language we now call 'Baba Malay' would have developed diachronically from the pidgin now called 'Bazaar Malay'. Rather, it would seem that a general form of reduced Malay was in use, a form that was probably quite unstable and variable over a range of speakers, i.e. a pre-pidqin continuum rather than a stable linguistic variety. On examining the two varieties, it would thus appear that a creole emerged against the background of a pre-pidgin continuum, and that furthermore this creole actually exerted some influence on the grammatical structure of the as yet unsettled variety, in the process helping to stabilise its structure. The process was probably never quite as clear-cut as this, and the interaction that took place was likely to have been quite complex, but the mutual clarifying and stabilising effect was clearly a benefit. The establishment of two new, related, though technically distinct, varieties of Malay must have come about more quickly because of the peculiar characteristics of the linguistic situation that existed in Malacca at the time.

If this view of the relationship between Baba Malay and Bazaar Malay is correct, then the relationship that is usually posited between a pidgin and its kin creole, and even the very definition of a creole itself, is called into question. Not only would it no longer be valid to assume that there is always a diachronic relationship between pidgin and creole, but it would also be invalid to insist on a necessary prior pidgin stage as a condition in the definition of a creole. Bickerton (1974) and Tonkin (1971) have both propounded the same idea. Bickerton suggests that immediate creolisation must have taken place among children of slaves or immigrant indentured labourers before any pidgin had had time to stabilise because they would have needed immediately a language to use, and Tonkin suggests that creoles may originate as native languages in mixed households and subsequently become contact languages between different ethnic groups. In both suggestions, creolisation is seen to be a relatively immediate process, with pidginisation taking place either concurrently or perhaps even occurring later.

## 3. BABA MALAY AS CREOLE: A BASIS FOR A DEFINITION

If the foregoing discussion reveals anything at all, it is that it is singularly unhelpful to approach the question of pidgins and creoles, and to attempt to define the notions of pidgins and creoles, from the point of view of their evolutionary history. The labels 'pidgin' and 'creole' are, as has been pointed out, useful as an initial working classification of particular linguistic types, but they are clearly not the end of the matter, and no completely satisfactory classification can be expected to issue from their application.
Hymes (1971) was among the first to recognise the limitations of these labels and to argue for a more precise definition of these linguistic types. He suggests that the processes of pidginisation and creolisation would be best examined along three parameters:

1. Change in the complexity of the outer form of the variety (i.e. its morphological structure) - positive change being designated by the term
'complication', negative change by the term 'simplification'.
2. Change in the scope of the inner form (i.e. its syntactic-semantic structure) - positive change being designated by the term 'expansion', negative change by the term 'reduction'.
3. Change in the scope of its function - positive change being designated by the term 'extension', negative change by the term 'restriction'.

Pidginisation, then, would be characterised by simplification, reduction and restriction, while creolisation would be characterised by complication, expansion and extension.
This set of criteria, Hymes argues, must be viewed in conjunction with another important criterion: that of 'convergence'. The term 'convergence' refers to the mixture of linguistic elements that is found in pidgins and creoles at each of the phonetic, the lexical, the syntactic and the semantic levels. The criterion of convergence is usually assumed, but Hymes underlines its importance. Convergence, unlike the other criteria already mentioned, does not, of course, distinguish pidgins and creoles from other languages, but it would be clearly strange to talk about the concept of pidgins and creoles if there were no
evidence of convergence whatsoever in the language under examination. Hymes argues that 'if creolization is to have significant meaning... creolization, like pidginization, must be understood as a complex process, involving the occurrence of three components, here expansion, and extension of role, as well as convergence. It is not reducible to any one of them' (Hymes 1971:77).
Hymes' framework seems a reasonable one, and cognisance of it will be taken in this investigation. It does at least provide a set of guidelines to keep in mind during the course of the investigation, and what is more important, it will serve its function even in the cases when it may be found to be faulty or inadequate, for that is the inherent value of theoretical frameworks. Perhaps 'faulty' and 'inadequate' are overly strong terms, but there are certainly problems nevertheless.

The first and more obvious of these is associated with the idea of specifying the direction of the changes that take place. Unless one has prior documentation and a description of the pidgin or the pre-pidgin continuum (and this is very uncommon indeed), how does one decide whether there has been complication or simplification, expansion or reduction? The conjectures of the linguist about the earlier structure and form of the language, however plausible, will remain mere conjectures. This is precisely the problem we encounter in our examination of Baba Malay.
The other and not so obvious problem is that where non-European-based pidgins and creoles are concerned, some of Hymes' considerations are not at all relevant. Malay, one of the two languages from which Baba Malay is derived, has a wellestablished system of affixation; but Hokkien, the other source-language, is an analytic language and its words are largely monomorphemic in nature. In Baba Malay, the systematic process of affixation is virtually non-existent. According to one of Hymes' criteria for distinguishing pidginisation from creolisation, then, there has been a negative change in the complexity of the outer form, a 'simplification'. Clearly this is some evidence of the simplification that Malay underwent, but the fact that there has developed no complexity in the morphological structure of Baba Malay even after all this time (no form of systematic affixation, for instance, has arisen), is no indication that creolisation has not in fact taken place. For it is not illogical that Baba Malay should follow Hokkien in not considering the grammatical function of affixation to be 'necessary'. After all, looked at from the point of language learning, Hokkien is the source- and Malay the target-language. This being the case, many of the apparent pidgin/creole features of Baba Malay could be interpreted simply as examples of source language interference. One typically pidgin/creole feature already noted, that in place of the derivational and inflectional morphological variation found in Malay, there is an invariant relation between form and grammatical function, is in fact the normal state of affairs in Hokkien. It is therefore always prudent to bear in mind the specific nature of the languages on which the pidgin or creole in question is based. This is no less necessary when it comes to examining the changes in the syntactic structure of the pidgin or creole, for, as will be seen with Baba Malay, given the particular syntactic make-up of both Hokkien and Malay and the resulting convergence in Baba Malay, it is by no means a simple matter to decide whether there has in fact been, in Hymes' terms, an 'expansion' or a 'reduction'.

The first two parameters in Hymes's schema, then, are not without problems. The third, which attempts to specify the changes in the scope of the pidgin/creole's function, is perhaps more straightforward. Where Baba Malay is concerned, its
use as a primary language in the homes of the Straits-born Chinese surely constitutes an extension in scope, albeit a limited one. Baba Malay is never called upon to serve any function more complex than that associated with normal, daily social intercourse.

### 3.1 Convergence in Baba Malay

An examination of the amount and the kind of convergence in Baba Malay provides the most direct and interesting way of observing the results of the linguistic contact between Hokkien and Malay. It will also serve to reveal something of the phonological, morphological and syntactic differences between the two languages.

### 3.1.1 Phonological convergence

The phonological system of Baba Malay is, curiously enough, completely congruent with that of Malay. None of the uniquely Hokkien phonemic elements can be found in Baba Malay. The most prominent of these, viz., the Hokkien phonemic tones, with their seven-way distinction, are likewise conspicuously absent. Even the body of Hokkien loan words in Baba Malay has been phonologically modified, and rigidly conforms to the phonological pattern of Malay. Hokkien and Malay have the following phonemic inventories of segmental consonants:

| (i) Hokkien |  |  | LABIAL | DENTAL | VELAR | GLOTTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STOPS | unasp. | v'less | P | t | k | $?$ |
|  |  | voiced | b | d |  |  |
|  | asp. | v'less | $p^{h}$ | $t^{\text {h }}$ | $k^{h}$ |  |
| AFFRICATES | unasp. | v'less |  | ts |  |  |
|  |  | voiced |  | $d 3_{h}$ |  |  |
| FRICATIVES |  | v'less |  | 5 |  | h |
| NASALS |  | voiced | m | ก | 7 |  |
| LATERAL |  | v'less |  | 1 |  |  |
| (ii) Malay |  | LABIAL | DENTAL | PALATAL | VELAR | GLOTTAL |
| STOPS | v'less | p | t |  | k | $?$ |
|  | voiced | b | d |  | 9 |  |
| AFFRICATES | v'less |  |  | t $\int$ |  |  |
|  | voiced |  |  | d3 |  |  |
| FRICATIVES | v'less | f | S | ¢ |  | $h$ |
|  | voiced |  | $z$ |  |  |  |
| LIQUIDS | voiced |  | 1 | $r$ |  |  |
| NASALS | voiced | m | n | ก | $\square$ |  |
| SEMI-VOWELS |  | w |  | j |  |  |

The consonant inventory of Baba Malay is identical with that of Malay with three exceptions. The voiceless labio-dental/f/, the voiceless palatal fricative / $/$, the voiced dental fricative /z/ and the voiceless velar fricative /x/ are not present in Baba Malay. However, it should be noted that these four phonemes are not indigeneous to the Malay sound system, but were introduced into the system by way of the Arabic loan-words that have been taken into the language. The majority of native Malay speakers tend to avoid these three sounds and substitute instead the voiceless labial stop/p/for /f/, the voiced palatal affricate /dz/ for /z/, the glottal fricative $/ \mathrm{h} /$ for $/ \mathrm{x} /$, and occasionally the voiceless dental fricative /s/ for / / /. Thus, the consonant inventory of Baba Malay would look like this:


As can be seen from a comparison of the three tables, there is almost no admixture in the phonological system of Baba Malay (the total consonant and vowel inventory attest to this - see the discussion on vowels below). The system is almost exactly congruent with that of Malay, and there is no interference from the Hokkien system whatsoever. All the lexical borrowings from Hokkien into Baba Malay are phonologically modified to conform to the Malay sound system. The modifications are regular and predictable. Examples:

| HOKKIEN | BABA MALAY |  |
| :--- | :--- | :--- |
| /lautén/ | /lo ten/ upstairs |  |
| /thïa/s | /tia/ | living-room |
| /pd pîa/ | /popia/ spring-rolz |  |
| /sin khe?/ | /sinkek/ new immigrant |  |
| /tê kó/ | /teko/ | kettle |

The loan words are also without phonemic tone, of course.
The vowel system of Baba Malay is absolutely congruent with that of Malay. A comparison of the three tables below will show this:

Hokkien has a set of corresponding nasal and non-nasal vowels:

|  | FRONT |  | CENTRAL | BACK |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| HIGH | i | $\tilde{i}$ |  | u | $\tilde{u}$ |
| MID | e | $\tilde{\mathrm{e}}$ |  | 0 | $\tilde{o}$ |
| LOW | a | $\tilde{\mathrm{a}}$ |  | 0 | $\tilde{\jmath}$ |


| Malay |  |  |  |
| :---: | :---: | :---: | :---: |
|  | FRONT | CENTRAL | BACK |
| HIGH | i |  | $u$ |
| MID | e | ə | 0 |
| LOW | a |  |  |
| Baba Malay |  |  |  |
|  | FRONT | CENTRAL | BACK |
| HIGH | i |  | $u$ |
| MID | e ( $\varepsilon$ ) | ) | - |
| LOW |  | a |  |

The vowel systems of Malay and Baba Malay are congruent in all respects except that Baba Malay possesses an extra vowel / $\varepsilon /$. This vowel, however, is not present in all Baba Malay speakers but only in those who live in the urban areas (as opposed to those who reside in the rural areas). The difference in the speech of urban and rural speakers of Baba Malay is slight but quite discernible. The presence of the vowel / $\varepsilon /$ is, however, the clearest mark of an urban speaker. It occurs in those Malay words which have, as consecutive segments in syllable-final positions, the sequence $/ a /+/ r /$ or $/ a /+/ 1 /$. For example, the Malay word /tingal/ to stay is [tinge] for the urban Baba Malay speaker, and the Malay word /ular/ snake has as the urban Baba Malay equivalent [ulع]. For the rural speaker of Baba Malay, these words are rendered [tingal] and [ula] respectively. This shows up one difference in the distribution of phonemes between Malay and urban Baba Malay. In contrast to the pattern in Malay, the phonemes $/ \mathrm{h} /$ and $/ \mathrm{r} /$ do not occur in word-final positions.

The presence and the distribution of the vowel / $\varepsilon$ / among urban speakers of Baba Malay is a matter for speculation. It would seem that the early Straits-born Chinese could have had contacts with speakers of some particular Malay dialect that must have had the vowel $/ \varepsilon /$ as a variant realisation of the segmental clusters /ar/ and /al/ (which dialect that was is not known but it is clearly not the present Malay dialect of Malacca). The fact that it is the urban speakers of Baba Malay who possess this vowel is significant, for they are the ones who have the closest links with the early Chinese settlers. Many of them still live in the area around the Malacca River, in the central and oldest part of the city. One would logically expect this sub-community of speakers to be the most conservative linguistically, quite in contrast with rural Baba Malay speakers who have been in greater contact with the local Malay population.

In any case, the most interesting fact to emerge from the comparison of sound systems is that unlike most creoles, which show the influence of their substrate languages in their phonology, Baba Malay reveals hardly any influence at all of its substrate language, Hokkien, in its phonology.

### 3.1.2 Syntactic-semantic convergence

Syntactically, the gap between Baba Malay and colloquial Malay is less great that that between Baba Malay and formal Malay (which is the 'educated' codified variety of the language). The spoken language of the Malay who has had limited contact with formal Malay for instance, can often approach the syntactic and
morphological terseness of Baba Malay, so that on occasion, what is 'grammatical' Baba Malay is also 'grammatical' colloquial Malay. However, what keeps Baba Malay distinct is the quite obvious admixture of linguistic elements that are derived from Hokkien. These elements are, however, calques from Hokkien, so that the essential Malay nature of Baba Malay lexicon and phonology is preserved. Where these elements are concerned, then, what is borrowed from Hokkien is their meaning, not their form. The most salient of these elements that are derived from Hokkien are the following.

### 3.1.2.1 Punya

The word punya has the literal meaning of to possess in Malay, and is semantically related to the Hokkien morpheme $\hat{e}$. However, the meaning of the Hokkien $\hat{e}$ is a grammatical one whereas the meaning of the Malay punya is a lexical one. $\hat{e}$ is often termed a 'possessive particle', somewhat akin to the possessive suffix in English which is rendered orthographically as "-'s". In Baba Malay, however, punya has acquired the grammatical function of its Hokkien semantic counterpart. Punya has no lexical meaning in Baba Malay, and has in fact become another member of the closed set of function words in the language, It is phonologically realised either as [pia] or [mia] (very rarely as [puna]) and receives no stress within the sentence contour. In short, it behaves just like any purely functional element phonologically.

The example of punya illustrates the particular nature of linguistic convergence or admixture in a creole such as Baba Malay. Convergence takes place in Baba Malay without damage to the essential lexical and phonological patterning of the language which has been, it might even be said, almost rigidly based on the formal example of the superstrate language, Malay. Just as no Hokkien phonological feature was allowed to intrude into the phonological system which Baba Malay had evolved for itself, so no formally Hokkien grammatical element could be taken into its syntactic system, although its function could be appropriated with no qualms. In this way, Baba Malay preserves its homogeneity of form.
Punya in Baba Malay has in fact three grammatical functions, all of which are conceptually related to the idea of 'possession', and all of which correspond exactly to the grammatical functions of the word $\hat{e}$ in Hokkien. These functions are (a) as possessive marker, (b) as marker of temporal and locative modifiers, and (c) as relativiser.

### 3.1.2.1.1 Punya as possessive marker

As possessive marker, punya occurs in such phrases as:
(a) gua punya ruma
$I$ punya house
my house
Hokkien: gúa ê chhù
I ê house
Malay: rumah saya
house I
(b) Sek Po punya kreta

Sek Po punya car
Sek Po's car

```
Hokkien: Sek Po ê chhia
    Sek Po ê car
Malay: kereta Sek Po
        car Sek Po
```


### 3.1.2.1.2 Punya as marker of temporal and locative modifier

Some examples of punya as marker of temporal and locative modifiers are the following:
(a) sini punya orang here punya people the people of this place
Hokkien: chit-tau ê lâng
here a people
Malay: orang yang disini people who here
(b) Pasir Panjang punya Methodist Church

Pasir Panjang punya Methodist Church
the Methodist Church of Pasir Panjang
Hokkien:'Pasir Panjang' $\hat{e}$ 'Methodist Church' Pasir Panjang ê Methodist Church

Malay: 'Methodist Church' yang di Pasir Panjang itu Methodist Church which in Pasir Panjang the
(c) tiga bulan punya holiday three months punya holiday the holiday of three months

Hokkien: sã-ko-gè ê pang-kè three months $\hat{e}$ holiday
Malay: cuti tiga bulan holiday three months
(d) dulu punya cakap past punya language
the language of the past
Hokkien: téng-pai $\hat{\text { è }} \overline{\text { oe }}$ past ê language
Malay: bahasa yang lama language which old
(e) belum kawin punya time
before marry punya time
the time before (I) was married
Hokkien: iá-bôe kiat-hun ê sí before marry e time

Malay: semasa belum berkawin time before marry

All the above are, as can be seen, structurally identical to their Hokkien equivalents but are totally foreign to Malay. The concept of 'possession' is in this instance less tangible and more abstract, but nevertheless still perceptible, as the gloss in English shows. Interestingly enough, (c) above may be glossed as three month's holiday, which would tally very precisely with the Baba Malay original. It is therefore possible to regard all the examples with punya here as genitive-type constructions related to the examples in 3.1.2.1.

### 3.1.2.1.3 Punya as relativiser

As a relativiser, punya occurs in the structure exemplified by the following:
(a) orang tarek punya cia
man pull punya vehicle
the vehicle which a man pulls (i.e. rickshaw)
Hokkien: lâng khiu ê chhia
man pull ê vehicle
Malay: kereta yang ditarek oleh seorang vehicle which is pulled by a man
(b) gua pukol punya itu orang
$I$ hit punya the man
the man whom I hit
Hokkien: gúa pha ê hit khô lâng $I \quad$ hit $\hat{e}$ the CLASSIFIER man

Malay orang yang saya pukul itu man whom $I$ hit the

The embedded sentence is realised as a subordinate clause preceding the head nominal and marked off by punya.

Similarly, with relativised adjectives:
(c) bèse punya ruma
big punya house
a house which is big
Hokkien: tòa keng ê chhù
big è house
Malay: rumah yang besar house which big
(d) kase punya orang
unrefined punya person
a person who is unrefined
Hokkien: chho $\hat{e}$ lang unrefined ê person
Malay: orang yang kasar person who unrefined

It will be seen that in Baba Malay, as in Hokkien, modifiers generally precede the head nominal within the noun-phrase. The relationship, to borrow a term
from the physical sciences, is a centripetal one because the modifiers tend to order towards the centre of the noun-phrase, which is the head nominal.

Baba Malay: gua punya kawan punya RUMA my friend's house
Hokkien: gúa ê pèng-iu ê CHHU̇
In Malay, the relationship between modifier and head nominal is a centrifugal one, i.e. the modifiers tend to order away from the head nominal.

Malay: RUMAH kawan saya
It can be seen from the above examples that the function of punya as a relativiser again corresponds semantically and syntactically to the function of $\hat{e}$ in Hokkien.

### 3.1.2.2 Kasi

Kasi (literally to give in Malay) is the counterpart of the Hokkien $h \bar{o}$, and in Baba Malay has all the grammatical functions of the latter. These functions are as follows:

### 3.1.2.2.1 Benefactive

An example of the Benefactive function of kasi is the following:
(a) dia béli itu baju kasi gua
he buy that dress kasi me
he bought that dress for me
Hokkien: i bóe hít- nîa sã hō gúa he buy that CLASSIFIER dress hō me
Malay: dia membeli baju itu bagi saya
he buy dress that for me
Kasi in this instance acts as a pure function word in Baba Malay, corresponding to the English preposition for.

## 3.i.2.2.2 Causative-benefactive

(b) dia-orang kasi gua tahu
they kasi me know
they let me know
Hokkien: in-lâng hō gúa chai
they hō me know
Malay: mereka memberitahu kepada saya they inform to me
(c) gua punya mak kasi gua pigi
my mother kasi me go
Hokkien: gúa ê lau-bú hō gúa khì my mother hō me go
Malay: ibu saya membiarkan saya pergi
mother my let me go
Kasi in these instances has the sense of to cause something to happen for someone's benefit or to someone's advantage.

### 3.1.2.2.3 Causative

Kasi also functions as a straightforward causative:
(d) dia pèkek-pékek kasi gua tapranjat
she scream kasi me startled
her screams startled me
Hokkien: i dzióng hō gúa chhua? she scream hō me startled
Malay: pekeknya memeranjatkan saya her scream startled me

### 3.1.2.2.4 Passive marker

Kasi functions as a Passive Marker in these instances:
(e) dia curi duit kasi gua tengok
he steal money kasi I see
his stealing of the money was seen by me
Hokkien: i thau lui hō gúa khừa tio? he steal money hō I see
Malay: kecurian wang oleh dia telah dilihat oleh saya theft money by him was seen by me
(f) dia kasi gua pukol
he kasi $I$ hit
he was hit by me
Hokkien: i hō gúa pha? he hō I hit
Malay: dia dipukul oleh saya he was hit by me
(See 4.6 for a fuller discussion of passives.)

### 3.1.2.3 Kéna

Kéna in Malay has the general sense of contact, but it is usually contact of an abstract kind, e.g. kena denda to incur a fine (to come into contact with a fine), kena sakit to fall ill (to come into contact with illness). In its general sense of contact, it has an almost exact Hokkien equivalent in the Hokkien tio?. Their respective semantic fields are not perfectly congruent with each other, but they do overlap at one point, and this point is exemplified by the following Hokkien and Malay sentences.

| Malay : | dia kena pukul he kena hit he got hit |
| :---: | :---: |
| Hokkien: | i tio? pha? <br> he tio? hit <br> he got hit |

In this specific instance, both the abstract and concrete senses of the notion of contact are in operation. The subject in both sentences are said to have incurred a blow, or come into contact with a blow. This use of the word kena is, not surprisingly, perfectly acceptable in Baba Malay.
There is, however, another sense of the word kena in Baba Malay which is quite alien to a native speaker of Malay, and which has quite clearly been derived from one of the senses of the Hokkien tio?. This other function of tio? is to denote the concept of obligation and/or non-volition. Thus:

```
gúa tio? khi
I tio? go
I had to go (i.e. I had no choice)
```

The corresponding Baba Malay sentence would be:
gua kéna pigi
$I$ kèna go
I had to go
The one difference between Baba Malay kena and Hokkien tio? is that while the latter may signify both the notions of obligation and non-volition, kena signifies only non-volition. The twin semantic components of tio? are split and distributed in Baba Malay between two lexemes, kena non-volition and misti obligation. Examples:
(a) kita kèna jalan sana we kèna walk there we had to walk there
(b) kita misti jalan sana we misti walk there we must walk there

The example of kena is an illustration of one interesting typological process of linguistic convergence in Baba Malay. That the semantic and syntactic functions of two lexemes from two distinct languages, Hokkien and Malay, should be so nearly similar is a surprise in itself, and this fact alone certainly ensured the survival of this specific semantic notion in Baba Malay. But the semantic features of the derivative Baba Malay kéna are, as we can see, a little different from their Hokkien and Malay prototypes. The semantic field of kena is in fact a composite of the prototypes, for the near-congruence of the semantic fields of Malay kena and Hokkien tio? permitted the grafting of specific semantic features of tio? onto Baba Malay kena with minimal obtrusion; it also permitted the weeding out of other semantic features which were originally components of the Hokkien and Malay prototypes but which have been 'deemed' unimportant in Baba Malay.

The semantic and syntactic coincidence of Malay kena and Hokkien tio? surely means that, where Baba Malay was concerned, there must have been a predisposition towards convergence in this area, for it is only reasonable to expect that shared features of this nature have priority of selection.
The example of kena differs from the other examples of convergence discussed thus far, because while the others cloak Hokkien function in Malay form, kena is a word that is semantically a selected composite of both Hokkien and Malay function in Malay form.

### 3.1.2.4 Mau

Mau, most often phonologically realised as [mo], is similar to the case of kena as it has an almost exact semantic and syntactic parallel in a Hokkien word; the Hokkien equivalent in this instance being be?. As is the case with kena, the close parallel between Malay mau and Hokkien be? clearly ensured the continued survival of this linguistic item in Baba Malay. The Malay mau is a modal auxiliary indicating 'intention', e.g.

Malay: saya mau pergi
I mau go
I want to go
The Hokkien be? is also a modal auxiliary indicating 'intention'.
Hokkien: $\quad \begin{aligned} & \text { gúa be? khi } \\ & \\ & \\ & I\end{aligned}$
I want to go
Syntactically and semantically, then, mau and be? parallel each other.
Examples from Baba Malay:
(a) orang tak mau pake kreta lagi
people not mau drive car anymore
people don't want to drive cars anymore
Hokkien: lâng mài hũa chhia liau
people not drive car anymore
Malay: orang tak mau memandu kereta lagi
people not drive car anymore
(Note: Hokkien mài is the negation of be?.)
(b) mau pigi sana susa
mau go there difficult
it's difficult (for me) to go there
Hokkien: be? khi hit-tau käng kó
be? go there difficult
Malay: susah mau pergi sana
difficult mau go there

### 3.1.2.5 Pigi/datang

Pigi (literally) to $g O$ is a member of the class of full verbs in Baba Malay as well as the minor class of function-words. Pigi in its guise as a functionword has a parallel in the Hokkien khi to go. Both pigi and khi indicate 'direction away from speaker' when juxtaposed with a verb of motion.
(a) gua pake parka pigi sekola

I wear parka pigi school
I wear a parka to school
Hokkien: gúa chhēng parka khi d?-tn̂g
I wear parka khi school
Malay: saya berpakai parka kesekolah
I wear parka to school

Pigi has as its complementary opposite the word datang (literally) to come, which is again paralleled by the Hokkien lâi. Datang and lâi have the semantic function of indicating 'direction towards the speaker' when preceded by a verb of motion. The same function is performed in Malay by the preposition ke- and dari(pada).

### 3.1.2.6 Nanti

Nanti (literally) to wait occurs in Baba Malay as a time-adjunct (or timeadverbial) and indicates 'near-futurity'. Its function as a sentential modifier finds a semantic and syntactic parallel in the Hokkien tan (also literally) to wait.
(a) dia nanti mau datang
he nanti want come
in the near future he wants to come
Hokkien: i tan be? lâi
he tan want come
Malay: nanti dia mau datang
nanti he want come
Nanti is also used in the same manner in Malay, and like kena and mau, it is an example of a linguistic item that coincidentally has semantic and syntactic parallels in Hokkien, and has therefore been readily preserved in Baba Malay.

### 3.1.2.7 -7a

-la is a particle that may occur in phrase-final or sentence-final positions. It is also to be found adjoined to single words, but these 'single words' function as full sentences in Baba Malay.
(a) mura- la
cheap la
it's cheap
(b) susa- la
difficult la
it's difficult
The - la particle in Baba Malay is clearly related to, and functions in much the same way as the -la particle in Hokkien, Bazaar Malay, Singapore English and Malaysian English. Richards and Tay (1977), in tracing the links between the - la particle in Singapore English, Hokkien and Malay, came to a tentative conclusion that the origin of the particle was in Hokkien. They are, I think, correct in their conclusion. My own investigation of Baba Malay supports the idea that Bazaar Malay, which is after all syntactically similar to Baba Malay, owes much of its structure to Hokkien, and that the influence of Hokkien on these linguistic varieties spoken in the Malay peninsula has been quite marked.

Richards and Tay suggest that the -la particle in Hokkien and Singapore English functions as a 'code label', which serves 'both to carry part of the message and to identify the style'. It is not a grammatical element but serves to identify the level of 'rapport, solidarity, familiarity and informality between the participants in the speech event'. However, although it is true that the -la particle is not a grammatical element in that its presence or absence does
not fundamentally alter the meaning of the message, it nevertheless needs to be stressed that the meaning of the message may be modified by the particle, and in ways that have little to do with the sociolinguistic factors of rapport, solidarity, familiarity or informality between the participants in the speech event. Curiously enough, the Hokkien examples that are given by Richards and Tay themselves bear testimony to this. They point out, for example, that the presence of the -la marks emphasis (which is one of its main functions) and that another function is to express a kind of cause-and-effect relationship between clauses in a sentence. These two functions at least, seem to be well within the domain of 'grammar', and would have little to do with the sociolinguistic concept of the speech event and the role-relationships of its participants.
The function of -la in expressing cause-and-effect relationships, or more accurately, in expressing the notion of 'consequentiality' is evident in Baba Malay. It expresses the idea that 'if you do $X$, then you must do $Y^{\prime}$.
(a) abi kalau dia cakap lu misti kawin, lu misti kawin-la so if she say you must marry you must marry-la so if she says you must marry, you must marry
(b) dia bila mau balek jantan punya ruma, dia kena angkat tébu he when want return the man's house he has to carry sugarcane
sama ayam- la
with chicken-la
when he wants to return to the man's house, then he must take some sugarcane and a chicken with him
(c) jadi, bila datang sini, orang tak ada bini carek bini-la so when come here people not have wife find wife-la so when people come without wives, then they looked for wives
(d) kalau winter datang ini, mati- la if winter come death-la if winter comes, then it's death!

Besides this function of marking 'consequentiality', -la in Baba Malay also has the sociolinguistic function of indicating solidarity and informality, of indicating the speaker's mental attitude (whether it be warm and friendly or otherwise) towards the addressee. It is interesting to point out that such matters are often indicated in English by the speaker's tone of voice and intonation pattern, rather than by the presence of any overt linguistic item. A sentence such as 'It's expensive' may be said in a self-mocking and pleading way and mean something like 'It's expensive, you know, don't say I'm stingy!', but this, of course, cannot be brought across orthographically.

It still needs to be said, however, that -la is a very semantically elusive linguistic element. Quite often, it seems to express varying degrees of the speaker's impatience with his interlocutor, and may simply be translated into English by a sigh! The following are further examples from Baba Malay.
(e) dia mau sayang-la, dia mau lu cium, ko-ko
he want love- la he want you kiss brother he wants love, he wants you to kiss (him), brother
(f) itu dulu punya cakap- la, tak sama sekarang that past punya language-la not same now
that is the language of the past, it's not the same now
(g) tengok-la
see- la
we shall see
(h) bole tahan- la sekola can tolerate-la school (I) can tolerate school
(i) nasib-la
fate- la
that's fate

### 3.1.2.8 Word order

The word order in Baba Malay has already been dealt with briefly (see 3.1.2.1.3). Word order in Baba Malay is patterned after Hokkien rather than Malay in that modifiers of all types may precede the head nominal. These modifiers may be locative phrases, adjectives, temporal phrases or full sentences. If they do precede the head nominal, they will have to occur with punya, which serves as a relativiser.
(a) Adjective + Nominal
bése punya ruma
big punya house
a house which is big
(b) Locative phrase + Nominal
sini punya orang
here punya people
the people who are here
(c) Temporal phrase + Nominal
tiga bulan punya holiday
three months punya holiday
the holiday which is of three months
(d) Full sentence + Nominal
orang tarek punya cia
man pull punya vehicle
the vehicle which is pulled by a man
None of the above patterns are permissible in Malay but they are fully permissible in Hokkien where the above examples may be regarded as nounphrases containing an embedded sentence.
Another area of word order in which Baba Malay differs from Malay because it is patterned after Hokkien word order is in the positioning of determiners in relation to the nominal. Thus:

$$
\begin{array}{rrr}
\text { Malay: } \begin{array}{c}
\text { orang itu } \\
\text { person the } \\
\text { the person }
\end{array} & \text { Baba Malay: itu orang } & \text { Hokkien: hit-ê lâng } \\
\text { the person } & \text { the person } \\
\text { the person } & \text { the person }
\end{array}
$$

In brief, then, the admixture of Hokkien linguistic elements in Baba Malay is strictly semantic-syntactic in nature. What is borrowed into Baba Malay is not the Hokkien forms of these elements but their meanings and syntactic functions. On occasion, it will be seen that the 'meanings' of some of these elements have
a ready semantic and syntactic parallel in Malay, and so the Malay forms of these elements are easily maintained. The process of convergence in Baba Malay therefore takes place with little disruption to the lexicon and to the phonological form of Baba Malay, which in these respects adheres to the form of the superstrate or target language, Malay.

### 3.1.3 Lexical convergence

The lexicon of Baba Malay is Malay in nature, except for quite a number of Hokkien loan words which deal predominantly with kinship and ceremonies and the customary practices of the Hokkien-Chinese. These are in the main associated with the rites of religion, of marriage, birth and death. In addition, Baba Malay has also borrowed words that denote certain Chinese moral and ethnical concepts. This is not surprising as the Baba Chinese have retained their 'Chinese-ness' where these things are concerned. Hokkien lexical items which have been adopted by the Babas and which occur in my transcripts are listed in Appendix 2, but there is, besides this body of loan words, another area which evinces the impact of Hokkien on Baba Malay and which is clearly more of a 'core area' linguistically than the corpus of loan words. This is the pronominal system of Baba Malay.

### 3.1.3.1 The pronominal system of Baba Malay

Curiously, the pronominal system of Baba Malay exemplifies quite different types of convergence. One type involves calquing, i.e. semantically Hokkien elements appear in Malay form (such as we have encountered in the preceding section on syntactic-semantic convergence), and this is obviously the case with the thirdperson plural form of the pronoun, dia orang (from Hokkien in-lâng). The other involves wholesale borrowing into the language of the Hokkien forms, albeit with phonological modification, and this is the case with the first and second-person singular forms of the pronoun, gua and lu (from Hokkien gúa and lú). Still another type of convergence involves a combination of these two processes and this is the case with the second-person plural form of the pronoun, lu-orang, the first element of which is Hokkien in form and the second element Malay, but clearly semantically calqued from the Hokkien lâng (literally, person) which is customarily attached to singular forms of pronouns to give their corresponding plural forms. The other pronouns, the third-person singular and the firstperson plural, however, retain their Malay forms. The following table displays the pronominal forms across the three languages.

|  | Baba Malay | Malay | Hokkien |
| :--- | :--- | :--- | :--- |
| $I$ | gua | saya/aku | gua |
| you | lu | kamu/awak/engkau | lú/lí |
| he/she | dia | dia | i |
| we | kita | kita (inclusive) <br> kami (exclusive) | gún-lâng (inn-lâng (excl) |
| you (pl) | lu-orang | kamu/awak/engkau | lín-lâng |
| they | dia-orang | mereka | ín-lâng |

It is curious to note that. the 'inclusive-exclusive' distinction in the firstperson plural pronoun which is observed by both Malay and Hokkien has been neutralised in Baba Malay. It would be expected in the examples of such items as kéna and mau, that the semantic parallel here between Hokkien and Malay would facilitate the incorporation of this semantic distinction into the Baba Malay pronominal system, but this has not occurred.

### 3.1.3.2 Conclusion

A survey of the processes of convergence in Baba Malay points quite clearly to the heavy reliance on Hokkien as a source for many semantic and syntactic structures. Most of these borrowed structures from Hokkien are direct substitutes for already-existing Malay equivalents rather than being structures incorporated into the language to 'plug' any gaps that are felt by Baba Malay speakers to exist in the superstrate language. These structures, Malay in form but really Hokkien in function, seem to have sometimes arisen as a consequence of the morphological simplification that took place in Baba Malay. In place of the verb affixation found in Malay to express the idea of 'causation', for instance, Baba Malay makes use of a single, free morpheme kasi (see 3.l.2.2) to perform the same function.
Other structures that have their source in Hokkien are not merely substitutes but actually have no direct equivalents in the superstrate language, Malay. The functions of the modal auxiliary kena and the -la particle in Baba Malay would come under this category.

The problem at this point is the difficulty in evaluating these semantic and syntactic structures, all of which are truly unique to Baba Malay and the Bazaar Malay continuum, in terms of Hymes' concept of 'expansion' and 'reduction'. How, after all, is the relative semantic and syntactic complexity between two languages to be determined? The relative complexity of the 'inner form' between any two languages, i.e. of their semantic-syntactic core, needs in reality to be quantified. However, even if a precise statistical quantification were possible, the results would mean little, as such a methodology would ignore the different areas of importance on which each language chooses to focus. Thus, a creole may remain a language with a tenseless system even though both its superstrate and substrate languages may well have sophisticated tense systems. Clearly it would be unfair to see our hypothetical creole as being 'lacking' in this respect. Such a recognition of linguistic relativity would certainly confound the notion of 'expansion' in a creole. Where semantics is concerned, one could not overlook the fact that each language might categorise the objective world differently. Thus, that Baba Malay has only the one word potong for the different ways of cutting that Malay recognises linguistically (as shown by the variety of words that have the same basic derotation, e.g. potong to cut, slice, belah to cut lengthwise, raut to pare, sabit to cut with sickle, tebang to cut down trees, tetak to slash) is not necessarily a significant fact within the Hymesian framework. Where Baba Malay is concerned, any 'losses' vis-a-vis its superstrate language, Malay, is made up for where necessary by calques from Hokkien.
However, Hymes' terms, 'reduction' and 'expansion', clearly should be seen to refer to diachronic changes that take place within each creole. For these terms to make sense in our context, a description of the early form of Baba Malay would be needed with which present-day Baba Malay could be compared. If Baba Malay did exist in some 'simpler' form initially, and we have assumed this to be so, then the term 'expansion' could certainly be used to describe the direction of Baba Malay's development up to the present time.

## 4. TOWARDS A SYNTACTIC DESCRIPTION OF BABA MALAY

### 4.1 Word classes

Word classes have always been a perplexing area in linguistics. Definitive and universal criteria for setting up word classes have not been forthcoming, and this problem has been readily acknowledged.

The criteria for the establishment of (word) classes are not yet known and their discussion is still a central theme in grammatical theory. (Lingua 17: Editorial Preface)

Yet, it is clear that the words in any language may be grouped according to their characteristics and functions, and that such groupings will be generally found to be intuitively 'correct' to native speakers. It would be hard to deny that terms such as 'nominals' and 'verbals' refer to quite universal and common characteristics and functions of words. All languages categorise words into those that denote 'things' and those that denote 'qualities' and 'actions'.

The following discussion, therefore, takes the notions 'nominals' ('things') and verbals ('qualities and actions') to be primitive notions, and other word classes will be defined with reference to them.

### 4.1.1 Nominals

The class 'Nominals' comprises nouns and pronouns.

### 4.1.2 Verbals

The class 'Verbals' includes both adjectives and verbs. Adjectives and verbs have often been considered to be subclasses of the same grammatical category because semantically, the typical function of both is that of predication. However, in languages where there are syntactic differences between the two (as in English, for instance) a distinction between verb and adjective has been made. In Baba Malay (as in Malay) there is no syntactic basis for distinguishing between verb and adjective. The adjective in Baba Malay, when it occurs in predicate position, occurs without a copula and hence is structurally similar to the verb.
(a) dia gémok
he fat
he is fat
(b) dia nyanyi
he sing
he sings
If both these words are placed in prenominal position, their syntactic resemblance will still be maintained:
(c) gedmok punya orang
people who are fat
(d) nyanyi punya orang
people who sing
As the distinction between verbs and adjectives in Baba Malay is a semantic one rather than a syntactic one (adjectives denote 'attributes' while verbs denote 'acts'), it would be more convenient to regard them as belonging to the same syntactic word class called 'Verbals', the only difference being that one
belongs to the subclass of 'Attributive Verbals' and the other to the subclass of 'Active Verbals'.

The designation 'Active' requires some explanation. It refers to 'acts' described by words such as tido to sleep, dudok to sit etc., which, although not referring to any overt physical activity, seem to have more in common with one another semantically than with words such as bése big, pande clever etc. In addition, Attributive and Active Verbals in Baba Malay are distinguishable from each other semantically by the different 'adjuncts of intensification' (see 4.l.4) they may occur with:
(e) dia bése sèkali
he big very he is very big
(f) dia nyanyi banyak
he sings a lot
he sings a lot
However, this difference can be neutralised if instead of the adjunct skali, the more indigenous Baba Malay adjunct banyak is used:
(g) dia banyak bése he is very big

The word banyak (literally, many) has in Baba Malay taken on the function of an intensifier, much as the word plenty has done in many English-based pidgins and creoles (and this seems to be a common occurrence in many pidgins and creoles). It is interesting to note that the ability of banyak to function as an intensifier for both Attributive and Active Verbals in Baba Malay may be taken as further evidence that both these verbals are subclasses of a common category. It is not at all surprising that this fact should manifest itself in a 'younger' language such as Baba Malay where perhaps finer distinctions have yet to emerge. Semantic neutralisation may therefore be indicative of deeper linguistic behaviour.

### 4.1.3 Auxiliaries

Auxiliaries are a closed set of words that occurs in an invariant position within a syntactic construction; they immediately precede the Verbal in the Verb-Phrase. There are two types of auxiliaries in Baba Malay, the Aspectual auxiliary and the Modal auxiliary.

### 4.1.3.1 Aspectual auxiliary

The Aspectual auxiliary marks the aspect of the Verbal:
(a) dia suda pig!
he suda go
he has gone/he went
There are four Aspectual auxiliaries in Baba Malay:
bélum action not yet completed/cormenced
lagi action in progress
suda action completed
baru action recently completed

These auxiliaries, which denote the perfective or imperfective nature of actions, naturally enough apply to Active Verbals. ${ }^{3}$ However, it is interesting to note that some of them may also be applied to Attributive Verbals:
(b) dia suda besع
he suda big
he is already grown up
This is further evidence of the syntactic similarities between Active and Attributive Verbals in Baba Malay. However, it appears that only the auxiliaries suda and belum may occur with Attributive Verbals, i.e. the state or quality denoted by the Attributive Verbal is deemed to have been either attained or yet-to-be-attained; no other aspectual statement is permissible.

### 4.1.3.2 Modal auxiliary

Whereas the function of the Aspectual auxiliary is to qualify a statement with respect to the Verbal, the function of the Modal Auxiliary is to specify the 'modal attitude' of the statement as a whole. The following are the Modal auxiliaries in Baba Malay:

```
kéna idea of non-volition i.e. compelled by circumstances
        not to one's liking, therefore unfavourable
misti idea of obligation/necessity; unlike kena, not
        unfavourable necessarily
bole (a) idea of capability
    (b) idea of permissibility
mau idea of volition or intention
```

Some of these Modal auxiliaries may co-occur in the same sentence subject to certain constraints. The first of these constraints is that if two Modal auxiliaries co-occur, the first auxiliary must be misti and the other must either be bole or mau. No other combinations are permissible. Semantically, misti mau seems not to be different from misti, but misti bole has the sense must be able to. The second constraint is that should two Modal auxiliaries co-occur, no Aspectual auxiliary is permitted in the same sentence. The third constraint is that their ordering with respect to each other is to be invariant; the Aspectual auxiliary must precede the Modal auxiliary in all instances.

The auxiliary is distinct from adjuncts (see 4.l.4) in that it has a fixed position within a construction. Confusion is possible because an adjunct may also be slotted into a normal auxiliary position. The adjunct nanti is a case in point. Nanti denotes near-futurity as well as having a verbal meaning, to wait) and dia nanti pigi he will go. However, nanti has no fixed positioning and does not invariably precede the verbal on all occasions. Thus, the sentences nanti dia pigi and dia pigi nanti are also acceptable.

### 4.1.4 Adjuncts

Adjuncts are words or phrases that are adjoined to a sentence in order to extend the meaning of the sentence. As the word 'extend' implies, such adjoined linguistic items are not essential to the 'grammaticalness' of the sentence: the sentence is grammatical even in the absence of these items. Thus, the locative phrase in the house is an adjunct in the sentence Mildred rebuked George in the house as even in its absence, Mildren rebuked George is a well-formed sentence.

The adjuncts in Baba Malay may be divided into two types, Verbal adjuncts and Sentence adjuncts.

### 4.1.4.1 Verbal adjuncts

Verbal adjuncts by and large have inflexible position within the Verb-Phrase and, unlike Sentence adjuncts, may not be shifted around the sentence:
(a) makan pélan-pélan (*pélan-pélan makan)
eat slowly
to eat slowly
(b) mahal sekali
expensive very (*sekali mahal)
very expensive
It will be noted that adjuncts that occur with Attributive Verbals form a subclass called Adjuncts of Intensification (see (b) above). Adjuncts of Intensification may, however, also be adjoined to another adjunct:
(c) makan PÉLAN-PÉLAN SĖKALI
to eat very slowly
Further examples of Verbal adjuncts:
(d) bole balek SÉNANG
can return easily
can ao back easily
(e) bole beli barang BANYAK-BANYAK
can buy things in large quantities
can buy things in large quantities
(f) tahu dia BĖTOL-BĖTOL
know him properly
to know him properly
(g) tahu dia SIKIT-SIKIT SAJA
know him slightly only
to know him only slightly
(h) baru datang TIGA BULAN
just come three months
(I've) only been here three months
(i) baru balek SATU KALI
just returm once
(I've) only returned once
(j) tak practise LAMA-LAMA
(I) haven't practised for a long time

### 4.1.4.2 Sentence adjuncts

The items of this class have freer position within the sentence (though there are some constraints) because they have no immediate relationship with any particular constituent of the sentence. Instead, their relationship is to the sentence as a whole. Sentence adjuncts may be of a locative type, a temporal type, or a modal tupe that states, for example, the definiteness or otherwise of the idea expressed by the sentence.
(a) bellaja KAK AUSTRALIA study in Australia to study in Australia
(b) SANA mahal
there expensive
it's expensive there
(c) SINI tak kéna baya school fees here not have to pay school fees one doesn't have to pay school fees here
(d) TADI Fong dapat surat, bukan just then Fong got letter didn't she Fong got the letter just then, didn't she?
(e) kalau NANTI mau pigi Australia
if in future want go Australia
if in future she wants to go to Australia
(f) TÉNTU tak bole drive sure not able drive (I'm) sure (I) can't drive
(g) BARANGKALI dia mau balek perhaps he want return perhaps he want to return

Although the position of the adjunct within the sentence is fairly flexible, the constraints are that the adjunct is not permitted to occur between the auxiliary and the verbal, nor between the verbal and its object noun-phrase:

```
*tak kéna SINI baya
    school fees
*tak kèna baya SINI
    school fees
```


### 4.1.5 Prepositions

The term 'preposition' denotes that closed set of invariable words or particles that have either a 'semantic-case'-type function or an 'orientational' function in a sentence. The words are 'prepositional' with respect to the nominal or the noun-phrase. Baba Malay has the following set of prepositions, which is a modified and much smaller set than the one found in Malay:

| sama with | sampe till |  |
| :--- | :--- | :--- |
| atas on, above | kak at |  |
| bawa | under | dalam in |
| bellakang behind | bari from |  |
| dépan | in front of | kasi for |

Of the set above, the two prepositions which are most specifically Baba Malay are kak and kasi. The former is invariably found where di is found in Malay, and is related morphologically and phonologically to the Malay dekat near, close by which is often used in place of di with locative phrases in colloquial Malay. This demonstrates again that the variety of Malay from which Baba Malay drew its resources is not the codified variety, but the colloquial variety. The historical contact between the two source languages of Baba Malay was clearly a contact of oral varieties.

The other preposition which is also nearly uniquely a property of Baba Malay is kasi. Kasi is also a verb in Baba Malay meaning to give. Its appearance as a preposition with a grammatical, semantic-case function is no doubt a reflection of Baba Malay's links with Hokkien in which the morpheme hō also performs this dual function (see 3.l.2.2). However, it is also worth noting that the use of a word meaning 'to give' in a purely functional, grammatical capacity to denote 'benefaction' is also widespread among many African contact-languages (see Hall 1966). This has given rise to the suggestion that this might be seen as one of a set of 'universal' pidgin or creole features, something by which a variety may be recognised instantly as pidgin or creole. However, the evidence here would suggest that it is a language-specific rather than necessarily a 'universal' or 'innate' feature of pidgins and creoles.

### 4.1.6 Conjunctions

The set of conjunctions in Baba Malay is also a very much reduced set as compared to the set of conjunctions in Malay.

| sama and | sébellum before | pasa because |
| :--- | :--- | :--- |
| tapi but | sélepas after | kalau if |
| bila when | asa as long as | abi consequently, subsequently |

Sama functions only to conjoin nominal phrases, and never units longer than the nominal phrase. In fact, it does not seem to be possible to link with conjunction two sentences of the same 'rank' or 'depth' to form compound structures (as opposed to complex, embedded structures) in Baba Malay (see 4.4).

### 4.1.7 Quantifiers

Quantifiers are of two types, numeral and non-numeral. Numeral quantifiers are morphologically the same as those in Malay. Non-numeral quantifiers consist of items such as semua $a l l$, banyak many and tiap-tiap every.

### 4.1.8 Particles

There is one important particle which occurs in phrase-final or sentence-final position in Baba Malay and that is the particle -la (see 3.1.2.7 for a fuller discussion).

### 4.1.9 Determiners

Determiners combine readily with nominals and have the effect of making the referent of the nominal definite. The two determiners are ini this and itu that, the.

### 4.2 Sentence structure: the simple sentence

### 4.2.1 The noun-phrase

The NP in Baba Malay has the following surface structure:

$$
N P \rightarrow \text { (Q) (Det) }\left(\left\{\begin{array}{ll}
1 . & \text { Verbal } \\
2 \cdot & \text { VP } \\
3 . & \text { Sent. Adjunct } \\
4 . & \text { Nominal }
\end{array}\right\}\right. \text { punya) Nominal (Verbal) (Sent. Adjunct) }
$$

The Sentence Adjunct of course, has flexible positioning, and if all the options within the braces were taken, the following NPs would be possible:
(1) sémua itu bèse punya ruma cantek kak Mèlaka Q Det Verbal $_{2}$ punya Nominal Verbal ${ }_{2}$ Adjct all the nice houses that are big in Malacca
(2) sèmua itu bélaja sana punya orang kaya Q Det VP punya Nominal Verbal ${ }_{2}$ all the rich people who study there
(3) sémua itu sana punya orang kaya Q Det Sentence Adjct punya Nominal Verbal ${ }_{2}$ all the rich people there
(4) sémua itu pokok punya daun kécik Q Det Nominal punya Nominal Verbal ${ }_{2}$ all the trees' small leaves

### 4.2.2 The verb-phrase

The VP in Baba Malay may be divided into three types:

### 4.2.2.1 VP-Simple

The VP-Simple is a VP that contains only one verbal, either a verb (Verbal ${ }_{1}$ ) or an adjective (Verbal ${ }_{2}$ ), or it may contain an NP without any verbal at all. This last permissible VP structure occurs in sentences of the type ' X is Y ', which in Baba Malay and Malay (but not Hokkien) simply consists of the two nominals X and Y located in apposition to each other. Hokkien, however, has a copula which is obligatorily present in such constructions. Both the Aspectual auxiliary (Aux ${ }_{A}$ ) and the Modal auxiliary ( $\mathrm{Aux}_{\mathrm{M}}$ ) are optional components of VP structure.

1. $\mathrm{VP} \rightarrow\left\{\begin{array}{l}\left(\operatorname{Aux}_{A}\right) \quad\left(\text { Aux }_{M}\right) \\ \left(\operatorname{Aux}_{M} \text { Aux }_{\mathrm{M}}\right)\end{array}\right\} \operatorname{Verbal}_{1} \quad(\mathrm{NP}) \quad$ (NP) (Adjunct) ${ }^{4}$
(a) bèlum bole bèli dia buku Aux $_{A} \quad A_{x_{M}}$ Verbal $_{1}$ NP NP not yet able to buy him a book
(b) misti mau béli dia buku Aux $_{M} \quad$ Aux $_{M}$ Verbal $_{1}$ NP NP
must buy him a book
2. $\mathrm{VP} \rightarrow\left(\mathrm{Aux}_{\mathrm{A}}\right)$ Verbal 2 (Adjunct)
suda pande already clever
3. $\mathrm{VP} \rightarrow \mathrm{NP}$ (Adjunct)
gua punya mak my mother

### 4.2.2.2 VP-Compound

The VP-Compound differs from the VP-Simple in that it has obligatorily at least two Verbal ${ }_{1}$ components in its structure. A third Verbal ${ }_{1}$ is permissible, but only if the middle Verbal ${ }_{1}$ is either the verb pigi to go or datang to come. These two verbs may function like the directional prepositions to and from in English respectively. Pigi expresses the notion 'direction away from speaker'
(see 3.1.2.5). It is in this function that these two verbs may each co-occur with two other verbs in the structure of the VP-Compound.

Some examples:
(a) belum bole ikut dia pigi carek ruma

AuxA AuxM Verbalı ${ }_{1}$ NP pigi Verbal ${ }_{1}$ NP not yet able to follous him to go to find a house
(b) mau ikut dia pigi Sydney

Aux $_{M}$ Verball NP Verball Adjct
want to follow him to Sydney
(c) mau pigi bérenang

Aux $_{M}$ Verbal $_{1}$ Verbal $_{1}$
want to go to swim
(d) sedalu balek makan

Adjct Verball Verbal ${ }_{1}$
One constraint that will be obvious from the above is that should one of the Verball be either pigi or datang, then the pigi/datang option within the braces cannot be chosen. Thus, although co-occurring Verball is a characteristic of VP-Compound structure, there are no examples of such co-occurrences as pigi pigi.

### 4.2.2.3 The VP-Complex

The VP-Complex differs from the VP-Compound in that it contains, in generativetransformational terms, an embedded sentence in its underlying structure. It is obvious that in the sentence gua pigi brenang $I$ go to swim, which contains a VP-Compound, the relationship of the two Verbal $l_{1}$ constituents is basically one of the simple conjunction $I$ go and $I$ swim; ${ }^{5}$ in the sentence gua suka brenang $I$ like to swim, which contains a VP-Complex, the relationship of the two Verball constituents is clearly not of the same level ${ }^{*} I$ like and $I$ swim. In the VP-Complex, one of the Verbal $l_{1}$ constituents would seem to be a higher level constituent than the other. The VP-Complex has the following structure:

$$
\begin{aligned}
& V P \rightarrow\left\{\begin{array}{l}
\left(\operatorname{Aux}_{A}\right) \quad\left(\operatorname{Aux}_{M}\right) \\
\left(\operatorname{Aux}_{M} \operatorname{Aux}_{M}\right)
\end{array}\right\} \text { Verbal }_{1} \text { (NP) Verbal } 1 \\
& \left(\left\{\begin{array}{ll}
(N P) & (N P) \\
(N P) & \left(\left\{\begin{array}{l}
\text { pigi } \\
\text { datang }
\end{array}\right\}\right) \text { Verbal (NP) }
\end{array}\right\}\right) \text { (Adjct) }
\end{aligned}
$$

The above in effect shows that the VP-Complex may have, as an embedded structure, either a VP-Simple (if the upper option within the braces is taken), or a VP-Compound (if the lower option within the braces is taken). The simplest VP-Complex would, of course, contain two Verbal $l_{1}$ constituents (e.g. suka pigi). The following are some examples of the above structure.
(a) bélum bole panggil dia béli gua buku

Aux $_{A}$ Aux $_{\text {M Verbal }}^{1}$ NP NP
not yet able to ask him to buy me a book
(b) misti bole panggil dia ikut gua pigi carek ruma

Aux $_{M} A^{\prime} x_{M}$ Verball $_{1} N P$ Verbalı NP pigi Verbalı NP

### 4.3 Sentence structure: the compound sentence

### 4.3.1 And-coordination

Sentences with 'and-coordination' in a language such as English actually cover a range of semantic relations that may be expressed by different specific co-ordinators in other languages. For example, in the sentence, she cooked the rice and she ate it, the two events expressed by the two sentences, despite the presence of the co-ordinator and, can obviously not be taking place simultaneously. The co-ordinator actually expresses a sequential relationship between the two sentences, and this kind of sequential relationship is denoted by either specific co-ordinators or grammatical cues in the three languages that we have been concerned with, Baba Malay, Malay and Hokkien.

```
Baba Malay: dia suda masak nasi, dia makan-la
    she Aux cook rice she eat la
Malay: dia masak nasi lalu dimakannya
    she cook rice then she eats it
Hokkien: i chú p\overline{ng liau chïu chía?}
    she cook rice Perfective Morpheme then eat
```

Likewise, where a simultaneous relationship between two sentences is being expressed, as in the English, he was speaking and weeping, specific co-ordinators are employed to convey this semantic information.

```
Baba Malay: dia cakap cakap sama nangis
    he speak and cry
Malay: dia bercakap sambil menangis
    he speak while cry
Hokkien: i na kóng na háu
    he na speak na cry
```


### 4.3.2 But-coordination

The Baba Malay 'but-coordination' is tapi and is the same lexeme as the Malay co-ordinator. Both function much like the Hokkien tān-sī and conjoin only sentences and not noun phrases.

Baba Malay: dia mau kèja tapi tak bole kèja
he want work but not can work
Malay: dia mau bekerja tapi tak boleh bekerja
he want work but not can work
Hokkien: $i$ be? chò kang tān-sT bōe sai chò kang
he want work but cannot work

### 4.3.3 Or-coordination

Although the 'or-coordinator' atau is sometimes found in Baba Malay, it is not common. Instead, or-coordination is frequently effected by the juxtaposition of the elements being co-ordinated and with each element carrying its own question intonation. Alternatively, the question particle -ka may also be present.

Baba Malay: lu suka cakap Mélayu-ka suka cakap English? you like speak Malay Question Particle like speak English
Malay: kamu suka bercakap bahasa Melayu atau suka bercakap you like speak Malay or like speak
bahasa Inggeris
EngZish
Hokkien: li ai kóng huan-ōésī ai kóng ang-mə-ōe you like speak Malay or like speak English

There are no restrictions on the level of elements being conjoined this way in Baba Malay; the elements conjoined may be words, phrases or clauses.

### 4.4 Sentence structure: the complex sentence

The complex sentence involves not co-ordination but subordination. The conjoined sentences in a complex sentence are of 'unequal rank' in that one of them will carry the 'primary message' of the whole sentence while the other serves to qualify or modify this primary message. They are of unequal rank, then, in their semantic functions.

Grammatically, subordination is effected by the presence in the sentence of at least one subordinating conjunction or by the presence of a relative pronoun, e.g.
(1) They were happy ALTHOUGH they were poor.
(sub. conj.)
(2) The man WHO was arrested was his father.
(rel. pron)
In Baba Malay, subordination is similarly effected by a small set of subordinating conjunctions (see 4.l.6) as well as by the process of relativisation (see 3.1.2.1.3). The process of relativisation, however, is a more restricted and much less frequent one than in English. The restriction appears to be on the length of the subordinate sentence. Anything more than a subject noun with its attendant verb would seem to be uncommon. Thus, the subordinate sentence, whose function is to qualify or modify the main sentence, rarely permits of further qualification or modification of itself in Baba Malay. A sentence such as tarek cia punya orang tak ada lagi the men who pulled the rickshaws are no longer around, with a single simple subordinate sentence embedded in it, is fairly common in Baba Malay; however, one such as the English the men who pulled the rickshaws slowly every day around the city, with its multiple qualifying adjuncts, is rare in Baba Malay. Such a sentence is not, strictly speaking, ungrammatical, but in normal discourse, the preference is for less complex structures.

The corpus of Baba Malay as used in daily discourse which has been collected for this investigation would suggest that it is quite common for sentences to be conjoined by merely having them strung together without the use of either subordinating conjunctions or relative pronouns.
(a) dia-orang mati, dia punya orang tak bole campo orang they die their people cannot mix (with other) people when there is a death, they are not allowed to mix socially with other people
(b) dulu, orang mati, coffin lama-lama in the past people die coffins for a long time
létak ruma are placed (in the) house in the past when people die, their coffins are left for a long time in the house

In sentences (a) and (b) above, the sense would seem to require a subordinating conjunction such as bila when or kalo if before each of the subordinate sentences, dia-orang mati and orang mati. The primary message is clearly carried by the second sentence in each of the examples above, and the first sentence in each merely provides 'background' qualifying information which specifies the conditions under which the information provided by the second sentence would hold true. Thus, even without the presence of subordinating conjunctions, it is clear that the relation between the two sentences in each example above is one of subordination rather than coordination.

### 4.5 Sentence structure: topic-comment as the basic form of the Baba Malay sentence

It has been suggested that the notion of 'subject and predicate' by which every grammatical or well-formed sentence of any Indo-European language is defined may not accurately define the grammaticalness of some non-Indo-European languages ( Li and Thompson 1976). Long acquaintance with Indo-European languages has led many linguists to assume the notion of subject and predicate to be a universal one, one that is necessarily applicable to all languages. By such a view, the majority of sentences produced by speakers of a language such as Baba Malay would appear to be ungrammatical, and therefore somehow 'inferior'. The belief that there is no order or 'grammar' in Baba Malay, that words are merely strung together unsystematically, is indeed a widespread one, and one that even many Baba Malay speakers hold.
However, the grammaticalness of Baba Malay, it is suggested here, can be better defined by another notion. Li and Thompson (1976) have convincingly argued that many Asian languages are more accurately characterised by the Topic-Comment structure of their sentences, and on examining the corpus of Baba Malay sentences and after having noted the frequent impossibility of assigning them a subject-predicate structure, I have also come to the conclusion that Baba Malay sentences are basically Topic-Comment in structure.

Although the notion of Topic and Comment covers a wide range of sentence-types, at its most basic it is not dissimilar semantically to the Argument-Predicate postulate of symbolic logic. Thus, in a sentence such as the student is intelligent, the Argument (Topic) is 'the student', and what is being predicated (the Predicate/Comment), i.e. stated as being true of or pertaining to 'the student', is that he is intelligent.



According to one explication of Topic-Comment, the Topic is 'the given information' and the Comment is 'the new information'. In terms of this explication, we have the given information that 'here is the student', and the new information that 'this student is intelligent'. It therefore follows that the main part of the message is contained in the comment because it is the Comment that carries the information that would expand on the information held by the Topic.

Given what is known about Topic and Comment, it will be seen that the notion of Subject and Predicate can in fact be characterised in terms of the TopicComment distinction. This should come as little surprise as the terms 'Subject' and 'Predicate' themselves literally mean 'topic' and 'that which is stated of the topic'. Thus, as an utterance in its most neutral form, unmarked by intonational emphasis in speech, the Subject of a sentence may be taken to be the given information, while the Predicate of the sentence may be seen to be providing new information.


Subject-Predicate constructions, therefore, are also Topic-Comment constructions, though of course, not all Topic-Comment constructions are necessarily SubjectPredicate constructions. Put another way, it can be said that Subject-Predicate structures are a subclass of Topic-Comment structures (other subclasses of Topic-Comment structures will be discussed below). The following simple sentences may be analysed in terms of Topic-Comment.
(a) mau turun city susa
-----TOPIC----- COMMENT
want to go city difficult
going to the city is difficult
(b) gua pigi Kuala Lumpur bèlaja lagi baik
-----------TOPIC-------------- COMMENT
I go Kuala Lumpur study better
for me to go to Kuala Lumpur to study, it's better
(c) pake socks pun sèjok
-----TOPIC---- COMMENT
wear socks even cold
even wearing socks, it is cold
(d) tengok saja cukop
----TOPIC---- COMMENT
to watch only enough
just to watch, it is enough
The pattern is clear enough. The Topic is a sentence (sometimes agentless) and the Comment is a predicate of some kind. It should be pointed out that under a Subject-Predicate analysis, these sentences would be considered non-normal as structures of this kind demand a nominalised form of the Subject rather than a full sentence. This is certainly the case for languages such as English and

Standard Malay (though not for Hokkien). The point to note is that although it is possible to regard the above examples as some kind of low-level or 'primitive' constructions which would have contained nominalised structures if only Baba Malay had the 'linguistic machinery' to turn them into nominalised structures, they do seem to belong in the same category as all the paratactic structures frequently produced by speakers of Baba Malay. Words, phrases and sentences are commonly juxtaposed rather than grammatically linked in the way that, for example, an English speaker is accustomed to. Even those complex sentences given in the previous section (section 4.4) can be analysed in terms of Topic and Comment.
(e) dia-orang mati, dia punya orang tak bole campo orang ---- TOPIC ---- -----------------COMMENT---------------they die, their people cannot mix socially with other people
(f) dulu, orang mati, coffin lama-lama létak ruma ----- TOPIC ----- ----------COMMENT---------in the past people die, the coffins are placed for a long time in the house

The pattern consists in the juxtaposition of two full sentences. They are regarded as complex sentences because, as it has been pointed out in the previous section, the first sentence of each pair is semantically subordinate to the second sentence. It merely provides a statement on which the second sentence will expand and develop. In other words, the first sentence provides the topic on which the second sentence will comment. Thus, Topic-Comment operates even on a higher, sentential level.
Here again, one could analyse (e) and (f) as being complex sentences that 'lack' subordinating conjunctions. However, to say that these complex sentences 'lack' subordinating conjunctions is to imply that they would have been fully well-formed had ellipsis not taken place. Such a view would be quite mistaken. The point is that these sentences should not in any way be regarded as malformed. They are in fact quite typical of that paratactic characteristic that is such a common feature of Baba Malay syntax. This being so, any imputation of a more 'complete' structure would be to view Baba Malay with a perspective that is foreign to the nature of the language. The need to guard against bringing pre-conceived linguistic notions to bear unnecessarily on an unfamiliar language should certainly be an important tenet of linguistic studies. In any case, sentences (e) and (f) can be quite adequately analysed (in terms of Topic-Comment) without recourse to the notion of structural ellipsis.
The analysis in terms of Topic-Comment seems to me to accord better with the actual corpus of Baba Malay speech amassed for this investigation. For what is frequently heard in Baba Malay speech are not stretches of grammaticallyconnected sentences, but chunks of juxtaposed phrases or clauses that are semantically-connected. On the larger sentential level, the semantic links are of this Topic-Comment nature, whereby one sentence (or a word or a phrase) announces a theme which is developed by another sentence, all within the same intonation contour. This, of course, indicates that the clauses are not two separate sentences but in fact constitute the one sentence. Topic-Comment certainly operates in Baba Malay over many levels, as will be seen from the following paradigm constructed with the examples discussed in this and the next section (section 4.6).

1. Subject as Topic
(a) ORANG mati
people die
people die
(b) NIKA PUNYA BARANG, sèmua ada sama lagi, tak wedding punya things all Emphatic some still Question morpheme marker are all the wedding things still the some?
2. Object as Topic
(a) CHINESE CUSTOMS, dia pake

Chinese customs he observes
the Chinese customs he observes
(b) LAIN-LAIN ADAT, semua ada ikut lagi, tak other customs all Emphatic follow still question morpheme marker the other customs, are they all still being followed?
3. Sentence as Topic
(a) GUA PIGI KUALA LUMPUR BĖLAJA lagi baik I go Kuala Lumpur study better for me to go to Kuala Lumpur to study, it is better
4. Subordinate Clause as Topic
(a) DIA ORANG MATI, die punya orang tak bole campo orang they die their people Negative marker can mix people when they die, their people cannot mix (socially) with other people
(b) DULU ORANG MATI, coffin lama-lama letak ruma in the past people die coffin a long time leave house in the past when people die, the coffins are left for a long time in the house

It will be seen from the examples given above that the Topic-Comment structure is a linguistic device that performs many functions. One of these is to focus on certain grammatical elements such as the grammatical subject of a sentence (example lb) or the grammatical object of a sentence (examples $2 a$ and $2 b$ ). This function is known as 'Topicalisation' and will be discussed in the next section (section 4.6). Another function of Topic-Comment structure is to facilitate communication by simplifying the need for complicated structural 'machinery' in a sentence. For example, Baba Malay has no need for nominalisations with their attendant morphological and/or syntactic re-structuring of elements; a predicate may simply follow a full sentence (example 3), and a complex sentence may simply have a Topic-Comment structure.

Baba Malay may have acquired its basically Topic-Comment nature from Hokkien, because Hokkien too, contains structures of precisely the same kinds as those listed for Baba Malay. Li and Thompson have in fact claimed that Mandarin is predominantly Topic-Comment in nature rather than Subject-Predicate. The same claim is also made for languages such as Lahu and Lisu (Lolo-Burmese), and in their discussion of Topic-Comment, they provide examples of other subtypes of Topic-Comment structure. For example:
(1) nèi-chang hŭo xingkui xiāofang-dùi lài de kuài that Classifier fire fortunate fire-brigade come Adverb quick particle the fire, fortunately the fire-brigade come quickly (Mandarin)
(2)
SAKANA-WA tai ga oisii
fish Topic marker red snapper Subject marker delicious
fish, red snapper is delicious (Japanese)
(3)

NEİKE SHU yèzi dà
that tree leaves big
that tree, the leaves are big (Mandarin)
(4) hō na- qhô yì ve yò
elephant Topic marker nose long Particle Declarative marker elephants, noses are long (Lahu)

In example (1), Topic-Comment seems to operate on a very 'high' level. Unlike the Baba Malay examples in which the grammatical link between Topic and Comment is still implicit, the Topic here, the fire, stands in relation to the Comment as a kind of discourse-heading. The link between Topic and Comment is no longer implicitly grammatical; it is purely semantic. Example (2) like example (1), has a Topic which is a discourse-heading: where fish is concerned, red snappers are very delicious fish. In examples (3) and (4), the Topic-Comment structure seem to be a substitute for a genitive construction (the leaves of the tree, the noses of the elephants are long). The relationship between Topic and Comment is an implicitly grammatical one, much like it is in the Baba Malay examples.
All these examples, however, do indicate that an alternative to a SubjectPredicate analysis of the languages concerned needs to be looked at, for although the linguistic phenomenon exemplified above may also be found to some extent in undoubtedly Subject-Predicate languages such as English, the point has to be made that this particular phenomenon is much more widespread and more an integral part of linguistic behaviour in languages such as Mandarin, Hokkien, Korean and Baba Malay.

Li and Thompson have proposed that languages be regarded as being either Subject-Prominent or Topic-Prominent, i.e. either as being basically SubjectPredicate in nature or Topic-Comment in nature. Such a classification would be a matter of degree as almost all languages fall somewhere between the two categories, and it could only be said of them that they were more oriented or less oriented towards one category. Li and Thompson suggest that two major characteristics of Topic-Prominent languages are: first, passive constructions either do not exist at all, or they appear as a marginal construction rarely used in speech, or carry a special meaning (e.g. the 'adversity' passive in Japanese); second, dummy subjects do not occur at all, in contrast to SubjectProminent languages where a subject is grammatically necessary whether or not it plays a semantic role. As defined by these two characteristics, Baba Malay would seem to qualify as a Topic-Prominent language, for not only are dummysubjects non-existent but grammatical subjects are frequently missing, and so too is the passive construction (see the following section for a discussion of passivisation in Baba Malay.

### 4.6 Sentence structure: passivisation and topicalisation

Baba Malay, like Hokkien but unlike Malay, has no 'Passive voice'. By this it is meant that there is no morphological marking of the verb in a sentence that would signal its status as either an 'active' verb, i.e. with its semantic subject acting as the grammatical subject of the sentence, or a 'passive' verb, i.e. one with its semantic object acting as the grammatical subject of the sentence. This distinction between an 'active' verb and a 'passive' verb is quite obvious in a language such as English or Malay.

> English (1) Active: he ATE the fish (2) Passive: the fish WAS EATEN by him Malay (3) Active: dia MAKAN ikan itu (4) Passive: ikan itu DIMAKANNYA

It has been pointed out (in the previous section) that the notions of 'Subject' and 'Predicate' could be more generally described in terms of the Topic-Comment distinction. That is to say that as an utterance in its most neutral form, unmarked by intonational emphasis in speech, the subject of a sentence may be taken as 'the given information', while the Predicate may be seen as providing 'new information'. 'The given' and 'the new' is precisely the way in which Topic and Comment have been characterised, and it can therefore be seen that in a general way, Subject-Predicate constructions are also Topic-Comment constructions (though of course, not all Topic-Comment structures are necessarily Subject-Predicate constructions).

In sentence (l) then, the Subject he is the Topic, whereas in sentence (2), because of the passivisation process, it is a different subject, the fish, that now serves as the Topic.

Passivisation, therefore, is one form of the very common process of topicalisation, but unlike the form of topicalisation that produces a sentence such as that man, I used to know him, passivisation is accompanied by morphological changes in the verb (as well as some structural changes such as, in English, the addition of the preposition by before the grammatical object).

In Baba Malay, such a topicalisation process is quite common. The semantic object is pre-posed to the front of the sentence, the semantic subject often does not appear, and the verb undergoes no change at all:
(l) coffin lama-lama letak ruma coffin for a long time leave house the coffin is left for a long time in the house
(2) lain-lain adat semua ada ikut lagi, tak other customs all Emphatic follow still question morpheme marker the other customs are all still followed, aren't they?

These sentences are semantically passive, and although they are examples of topicalisation, they differ in form from two other types of topicalisation exemplified by the sentences below, the types that produce the quite common 'Double-Subject' and 'Pre-posed Object' constructions.
(3) ORANG CINA, DIA-ORANG kaya (Double Subject) people Chinese they rich the Chinese, they are rich
(4) CINA PUNYA ADAT, dia pake (Pre-posed Object) Chinese customs he observes the Chinese customs, he observes

These three types of topicalisation are quite distinct although two of them might appear suspiciously similar. Sentences (l) and (4) appear similar except for the overt presence of the semantic subject dia in (4). However, I believe this difference to be crucial. Sentences (l) and (4) do exemplify two different types of topicalisation; it is not simply the case that (l) has an unspecified agent and that apart from this, (l) is not different from (4). In fact, the difference between them is exactly the difference reflected by their English glosses:
(5) the Chinese customs are observed
(6) the Chinese customs, he observes (them)

Sentence (2) above would seem to differ from sentence (1) in that it would seem to have undergone two types of topicalisation, which I will call 'pseudopassivisation' (in which the semantic object serves as grammatical subject without attendant morphological changes to the verb) and 'subject-doubling'. Pseudo-passivisation would have produced the following construction:

```
(7) sèmua lain-lain adat ada ikut lagi tak
    all other customs Emphatic follow still Question
                                    morpheme marker
all the other customs are still followed, aren't they?
```

Next, subject-doubling would have shifted part of the noun-phrase to the front of the sentence, leaving the quantifier semua as a trace of the second, duplicate subject. Thus, semua serves an anaphoric function, much as he in this man, he was walking down the road... serves to refer to its duplicate subject this man (double subjects of course must both have the same semantic referent) :
(8)
lain-lain adat sèmua ada ikut lagi tak
other customs all Emphatic follow still Question morpheme marker the other customs, all are still followed, aren't they?

Topicalisation, a process whereby information is arranged such that the part of the information that is given, or the part that is already familiar, is placed at the front of the sentence (and thereby highlighting it as well), is a common mode of language behaviour. In languages that do have a so-called 'passive voice', passivisation is a distinct linguistic process which is at least morphologically and/or grammatically identifiable in the verb (and this is the defining condition for the process), as well as grammatically identifiable elsewhere in the structure of the sentence (this latter is a frequent but not necessary condition for the definition of the process).

Passivisation, then, in a language such as English for example, is a specific formalised mode of topicalisation. Baba Malay has no 'passive voice' as sodefined (there is perhaps one restricted set of structures that could be exceptions, and this is discussed below), but the general process of topicalisation is quite common.

Besides the pseudo-passives of which sentences (1) and (2) above serve as examples, there is a restricted set of sentence structures in Baba Malay which
could satisfy the conditions that define the Passive Voice. These are the constructions which contain the free morpheme kasi in one of its grammatical functions (see 2.1.2.2.4):
(9) dia kasi gua pukol
he kasi $I$ hit
he was hit by me
There are a few things to note about sentence (9). First of all, as in all passive constructions, the semantic object dia is in grammatical subject position. Secondly, the sentence differs from (l0) below which is an example of object-preposing topicalisation.
(10) dia gua pukol
he I hit
him, I hit
Sentence (9) therefore represents a type of structure distinct from the examples of topicalisation we have encountered thus far. The free morpheme kasi serves to mark the verb as 'passive', and when a verb is marked 'passive', then it signals that the grammatical subject of the sentence is actually the semantic object, much as the form $B E$ eaten signals that its grammatical subject is no longer to be interpreted as the agent. Viewed in this way, then, it can be seen that kasi, though not a morphological marking on the verb, is a grammatical marking, and as such, the sentence satisfies the definition for a genuine 'Passive'.

However, it has to be noted that kasi may serve this function in only a very restricted set of cases. As does its Hokkien equivalent hō from whose function it probably derives, kasi may only serve as a passive marker with verbs that denote some kind of sense-contact such as touching (in its myriad forms, aggressive or otherwise), seeing, smelling and hearing, and with certain verbs that denote emotions, such as love and hate.

It can be seen, therefore, that the semantic function of the passive voice is served in the main by topicalisation in Baba Malay. In fact, it may even be argued that topicalisation is the general method of 'focussing' and that passive constructions, which exist in many languages, are a specifically formalised mode of topicalisation.

### 4.7 Variability in Baba Malay syntax

It should not be assumed from the foregoing discussion of the salient and defining syntactic characteristics of Baba Malay that Baba Malay is a syntactically invariant language, that every single identified Baba Malay feature is to be found in every single speaker of the language. Baba Malay, after all, is a natural language, and variability is very much a characteristic of natural languages.

Variability in Baba Malay syntax may be examined by taking a look at the occurrence of four very common and identifiable Baba Malay features.
These are:
(1) The pre-nominal position of the determiner: itu + Noun.
(2) The pre-nominal position of the adjective: Adjective + punya + Noun.
(3) The marking of possession with punya: Noun + punya + Noun.
(4) The lst person singular pronoun: gua.

These four features were selected not by any particular conscious process; rather, their variability attracted my attention in the course of the investigation, thereby making them natural candidates for closer scrutiny.

The intention was to find out which of the four features was the most variable and which the least variable among Baba Malay speakers as a whole. In order to make proper comparisons, those informants who could be used in this part of the investigation had to be those in whom all four features could be found in their individual recorded samples of speech. Following this principle, nine informants were used.

|  | Profile of participating informants |  |  |
| :---: | :---: | :--- | :--- |
| Informant | Age | Sex | Other languages known |
| A | 56 | F | - |
| B | 23 | F | English, Malay |
| C | 60 | M | English |
| D | 71 | F | - |
| E | 53 | F | English |
| F | 64 | M | English, Malay |
| G | 26 | F | English, Malay |
| H | 18 | F | English, Malay |
| I | 24 | M | English, Malay |
|  |  |  |  |


| Percentage of times the following Baba Malay features occur in each informant in $\frac{1}{2}$ hour stretch of speech |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | itu+Noun | Adj+punya+Noun | Noun+punya+Noun | gua |
| A | $\frac{1}{1}=100 \%$ | $\frac{2}{2}=100 \%$ | $\frac{2}{3}=66 \%$ | $\frac{13}{13}=100 \%$ |
| B | $\frac{2}{2}=100 \%$ | $\frac{1}{1}=100 \%$ | $\frac{2}{2}=100 \%$ | $\frac{0}{2}=0 \%$ |
| C | $\frac{19}{19}=100 \%$ | $\frac{13}{19}=68 \%$ | $\frac{41}{45}=91 \%$ | $\frac{48}{61}=78 \%$ |
| D | $\frac{3}{3}=100 \%$ | $\frac{1}{1}=100 \%$ | $\frac{9}{13}=69 \%$ | $\frac{1}{16}=6 \%$ |
| E | $\frac{1}{1}=100 \%$ | $\frac{0}{1}=0 \%$ | $\frac{0}{1}=0 \%$ | $\frac{9}{13}=69 \%$ |
| F | $\frac{10}{10}=100 \%$ | $\frac{0}{5}=0 \%$ | $\frac{11}{14}=78 \%$ | $\frac{13}{44}=29 \%$ |
| G | $\frac{1}{1}=100 \%$ | $\frac{3}{4}=75 \%$ | $\frac{2}{5}=40 \%$ | $\frac{1}{1}=100 \%$ |
| H | $\frac{3}{9}=33 \%$ | $\frac{4}{4}=100 \%$ | $\frac{17}{22}=77 \%$ | $\frac{26}{26}=100 \%$ |
| I | $\frac{1}{8}=12 \%$ | $\frac{1}{2}=50 \%$ | $\frac{0}{2}=0 \%$ | $\frac{7}{16}=43 \%$ |
| Average: | : 82.7\% | 65.8\% | 57.8\% | 58.3\% |

In each of the four columns, the Baba Malay feature is contrasted with its corresponding non-Baba Malay form. Thus, for example, for informant $H$, there were nine occasions in a half-hour stretch of speech in which the determiner itu co-occurred with a noun, but only on three of these nine occasions did the occurrence of determiner and noun take its accepted Baba Malay pattern, viz., itu + noun (the determiner preceding the noun). The remaining six occurrences took the Malay pattern, which is noun $+i t u$. Thus, for informant $H$, this particular Baba Malay feature occurred $33 \%$ of the the time in a particular half-hour.

The 'average' figure at the bottom of each column should be interpreted thus: out of nine informants, the Baba Malay feature occurs _\% of the time on the average. On the basis of this figure, it would appear that the least variable (most stable) of the four selected features is the positioning of the determiner itu (occurring $82.7 \%$ of the time on the average among the nine informants) and the most variable (least stable) is the use of punya as a possessive marker and the form of the lst person pronoun gua (occurring 57.8\% and $58.3 \%$ of the time on average respectively).

The table is, of course, only a general indication of the relative variability of the four features as the number of informants used was small and the occurrences of the features in individual informants in a half-hour stretch of speech were not as numerous as one might have hoped for or even expected. The determiner itu for example, occurred only once in the speech sample of informants $\mathrm{A}, \mathrm{E}$ and G .
What the table does clearly show, however, is that Baba Malay speakers do not behave linguistically as ideal speakers of their language; they do not use exclusively those linguistic forms which have been seen as being indigenously theirs. Quite often, Baba Malay speakers will use Malay linguistic forms to conform with their perceptions of 'correctness' or 'formality' (this being observable in the way Malay forms gradually and unconsciously give way to Baba Malay forms as the informants relax in the course of the conversation), but quite often too, there will be no predictable or explicable reason for linguistic variability.

It may seem strange that one needs to be reminded of the inherent variability in language at all; after all, much of the recent attention of linguists has been directed to just this issue. Inherent variability has become a linguistic axiom, and, paradoxically, needs no longer stand in the way of the kind of general, 'ideal-speaker' description of Baba Malay that has been attempted in this investigation. Thus, even while the salient syntactic features of Baba Malay are being described, cognisance is being taken of the fact that 'not all Baba Malay speakers talk that way all the time'.

## 5. BABA MALAY AND OTHER REDUCED MALAY-BASED VARIETIES IN MALACCA

An examination of Baba Malay on its own, as has been done thus far, provides only a partial picture of the significance of the language, because Baba Malay, like all creoles, emerged against a background of historical inter-cultural links. Consequently, its present standing has to be viewed in the context of other reduced Malay-based linguistic varieties that are such a noticeable feature of the language situation in Malacca. It is only by observing the inter-relationship between these varieties that Baba Malay can be seen in its proper perspective. The importance of doing precisely this has already been
dealt with in the brief discussion of the relationship between Baba Malay and its related pidgin Bazaar Malay (see 2.3). However, having familiarised ourselves with the main grammatical features of Baba Malay, we can now further clarify the actual linguistic significance of Baba Malay by taking a look at the linguistic continuum simply labelled 'Bazaar Malay' as well as at another creole called 'Chitty-Malay' and examine the relationship of both with Baba Malay.

### 5.1 Chitty-Malay

The fact that the Chinese exerted a great linguistic influence on the prepidgin continuum can be seen not only in certain linguistic features of Bazaar Malay, but also in the features of another Malay-based creole found in Malacca called 'Chitty-Malay'. ${ }^{6}$
Chitty-Malay is the native-tongue of the Chitty-Indian community of Malacca, a community of Dravidian (Tamil-speaking originally) Indians who are descended from the earliest Indian settlers in Malacca. The history of the Chitty-Indians in Malacca seems to parallel that of the Baba Chinese. It would seem that the community was an established (albeit small) one by the lith Century, ${ }^{7}$ so that the variety of Malay spoken by the Chitty-Indians would certainly not be any older than Baba Malay.

Chitty-Malay exhibits most of the syntactic features that have been identified as being indigenous to Baba Malay. Among these are: ${ }^{8}$
(1) The use of punya as a possessive marker e.g.
aku punya rumah my house
(2) The use of punya as a marker of temporal and locative nominal modifiers e.g.
sini punya orang the people of this place dulu punya orang the people of the past
(3) The use of kasi in its benefactive function e.g. dia belikan satu kain meja kasi aku he bought a shirt for me
(4) The use of kasi in its causative-benefactive function e.g. dia-orang kasi aku pergi sekolah they let me go to school
(5) The use of kasi in its causative function e.g. dia sorak-sorak kasi aku takut his screans made me frightened
(6) The use of kena in its modal function of expressing 'non-volition'e.g. kita kena jalan sana we had to walk there
(7) The pre-nominal position of the determiner itu orang the man
Phonologically, Chitty-Malay is distinguishable from Baba Malay, but the basic syntax and lexicon are similar (the latter of course taken from Malay). The similarity in syntax can probably be attributed to the fact that the general simplification and reduction processes applying to Malay work in general and predictable ways, such that the structures that actually result from these two processes are structures that one would expect to result if Malay had to undergo simplification and reduction. However, the significant observation here is that those syntactic features of Baba Malay which are demonstrably a consequence of its Chinese origin are also found in Chitty-Malay to some degree.

Unlike lexical items, such semantic-syntactic features are not likely to be late incorporations into the language. The linguistic evidence, therefore, would suggest that Chitty-Malay must have derived from a heavily Chineseinfluenced pre-pidgin continuum that existed in Malacca in the l7th Century.

### 5.2 Bazaar Malay

There is in reality no single autonomous variety called 'Bazaar Malay'. It exists only by virtue of having certain defining characteristics and these are that it is recognisably a linguistically reduced form of Malay with simplified syntax and no or little morphological inflection, and that it is not the native-tongue of any group in the speech community. It is this latter characteristic that chiefly distinguishes it from both Baba Malay and ChittyMalay. The lack of a community of speakers using Bazaar Malay as a first language means that there is no guarantee that it will exhibit a fairly high degree of consistency or stability of form each time it is encountered. Any foreigner attempting to communicate by stringing together isolated Malay words to a minimally-acceptable sentential pattern may be said to have produced a Bazaar Malay sentence. The continuum of competence ranges from such a low-level 'Me Tarzan, you Jane' type to a type that is as formally consistent and as functionally operative over the widest necessary domain as Baba Malay and Chitty-Malay, the two varieties that do claim native speakers. Thus, at one end of the continuum, there is the form of Bazaar Malay that resembles Baba Malay and Chitty-Malay syntactically even if phonologically it may be coloured by the specific speaker's own first language, and even if lexically there may be words in both Baba Malay and Chitty-Malay that are unfamiliar to him.

However, it is again significant that this high-level type of Bazaar Malay exhibits many of those demonstrably indigenous Baba Malay structural features. It is possible to examine the Bazaar Malay as spoken by an informant who is a member of another culturally interesting ethnic group in Malacca, the Portuguese-Eurasians, to see evidence of this.

### 5.2.1 Bazaar Malay of a Portuguese-Eurasian speaker (male, in his fifties) ${ }^{9}$

(A) Itu dulu kita sewa ... 1928, itu rumah sudah bikin. Itu Padre Francois, tahu, Padre Francois punya rumah ini-la. Tanah hutan semua. Dia sudah beli satu kebun sini. Belakang sudah bikin rumah. That, we once rented... in 1928 that house was built. That Padre Francois, you know, this was Padre Francois's house. It was all jungle. He bought a plot here. Then he built the house.
(B) Dua ringgit setengah itu jam tiga rumah satu jamban. Abi belakang, kita complain, complain, complain, government bikin kasi naik dua-puluh sen lagi. Jadi sudah bikin satu rumah satu jamban, dua ringgit tujuh-puluh lima. Abi government tak boleh tahan lagi, pasal rumah bocor-bocor, pecah sana pecah sini ... kasi free sekali ini rumah. Kita bayar ini tanah, satu tahun satu ringgit; satu tahun satu ringgit itu tanah punya. Juga pintu, juga jamban, kita kena bayar, itu macam.
Two dollars fifty then for three houses to one toilet. So in the end we complained and complained, and the government raised it another twenty cents. So they made it one house to one toilet, two dollars and seventyfive cents. Then the government couldn't stand it any longer because the house was run-down, broken here and there... this house was then given
free of charge. We paid for the land, a dollar a year, that was the cost of the land. Even the door, even the toilet, we had to pay for; that was the situation.

This informant's Bazaar Malay may be taken as a general documentation of the kind of high-level Bazaar Malay as spoken by the Portuguese Eurasians in Malacca. Syntactically, there is little discernible difference between his Bazaar Malay and Baba Malay, but what is significant is the presence of the following Baba Malay features:
(1) Gua/Lu: The presence of these pronoun forms in the Bazaar Malay spoken by a Portuguese-Eurasian (not in the transcripts of the selected extracts) is perhaps the strongest reflection of the influence exerted by Hokkien on the pidgin Bazaar Malay.
(2) Punya: Punya appears as a possessive marker, one of the main grammatical functions of the word in Baba Malay. It also appears as a marker of a locative modifier: kedai punya orang the people of the shop. This, too, is a grammatical function that the word has in Baba Malay.
(3) Kasi: Kasi appears in its causative function: kasi naik cause to rise, to raise.
(4) Kena: Kena appears as a modal auxiliary expressing 'non-volition': kena bayar (we) had to pay.
(5) Ini/itu: The determiner ini and itu precede the nominal as they do in Baba Malay.

These are the features that have been identified as being typical of Baba Malay and the above were all found in a half-hour stretch of speech sample. It is quite likely that other grammatical functions of such items as punya and kasi discussed in Section 4 would also be found in this particular idiolect of Bazaar Malay as well.

### 5.2.2 Bazaar Malay of a Hokkien-speaker (male, in his forties)

(A) Ini ikan, ah, macam bawang, ah, tak tetap itu harga, tahu? Kadang-kadang kalau ada, satu ringgit satu kati. Kadang-kadang tak ada, lima-belas ringgit. Dia kalau beli lima belas ringgit satu kati, se-ekor, dia mesti mau untung tiga ringgit...
This fish, ah, like onions, ah, the price is not fixed, you know. Sometimes if it's available it's a dollar a kati. Sometimes if it's not available, it's fifteen dollars. If he buys at fifteen dollars a kati, for each fish he (i.e. the seller) must want to make a profit of three dollars.
(B) Ah, rumah lu punya, anak lu punya, abi lu tak mau control dia, lu susah-
la. Nanti lu mati...
Ah, the house is yours, the child is yours and you don't want to control her, you are therefore in difficulties. When you're dead...
The most noticeable thing about the Bazaar Malay of this Hokkien-speaking informant on listening to him is that it stands out as being phonologically different from Baba Malay or any of the Malay-based varieties so far discussed. While the others have basically Malay phonology, the Bazaar Malay as spoken by this informant shows some obvious Hokkien phonological interference. [ $n$ ] and [r] in word-initial position become [1], and [d] becomes [l] in all positions.

Thus, nanti is [lanti], ringgit is [linget], dia is [lia], and kadang-kadang is [kalan kalan]. These differences immediately stamp the speaker as being a Chinese who has clearly not had much educational contact with English or Malay. The Malaysian Chinese who are English-educated encounter no difficulties with [ $n$ ], [r] and [d] in the above-specified positions when Bazaar Malay is spoken.

The half-hour sample of speech reveals the predictable presence of punya in its function as possessive marker, the pronoun forms gua and lu, the pre-nominal position of the determiners ini and itu, and the particle -la.

Having viewed some of the other reduced Malay-based varieties that are encountered in Malacca, we are in a better position to see the ways in which Baba Malay is similar to these varieties as well as the ways in which it is different from them. The similarities suggest that historically, the Chinese played quite a big part in the linguistic development of these varieties, perhaps a bigger part than has hitherto been recognised. Specific grammatical parallels between these varieties and Hokkien, and the quite obvious examples of semantic calques are too numerous and consistent to be mere coincidences. Shellabear's contention that it was the Chinese who created Bazaar Malay (see Section 2.3), which on first acquaintance seemed so sweeping a belief, would seem to be the truth.

The similarities between Baba Malay and the other reduced Malay-based varieties may also reflect more general linguistic processes that deal with the ways in which a specific language such as Malay is 'simplified' by learners who have either no inclination or no opportunity to learn it perfectly. The fact is that it would appear that the grammatical structures of these reduced Malaybased varieties are remarkably similar to one another. Coincidence is clearly too facile an explanation. On a close examination of the way the basic sentence is structured, one may quite easily be convinced of the 'minimal' nature of its pattern; it would simply be quite difficult to reduce the pattern to any other simpler form. This is not a claim that the basic sentence structure of these varieties reflects a universal, 'psychological' minimal structure, which would clearly be too sweeping a claim. What is suggested here, however, is that for a particular language (in this case, Malay), the processes of reduction may be quite predictable.

## 6. SOME CONCLUDING REMARKS

The stated purpose of this investigation was first, to examine where a 'mixed language' or a 'reduced language' such as Baba Malay stands in relation to the linguistic processes of pidginisation and creolisation, and secondly, to provide a sketch of the linguistic make-up of Baba Malay.

With regard to the first aim, the question whether there ever was a full-fledged, linguistically stable pidgin in Malacca out of which Baba Malay developed cannot be answered with certainty. What is certain is that there must have at least been a pre-pidgin continuum in Malacca in the 17 th and 18 th Centuries, $a$ continuum of 'reduced Malay'. A creole, then, would seem not to need a fullfledged pidgin as a prior stage in its development. Baba Malay could have emerged very quickly if we accept the reasonable assumption, from what we can gather of the particular lifestyle and attitudes of the Chinese in 17 th and l8th Century Malacca, that children of mixed Chinese-Malay parents would have spoken this 'reduced Malay' as a first language. What is also certain is that
the variety of reduced Malay spoken by the Chinese community must have exerted a strong influence on the 'reduced Malay continuum' during its development, for today we can see the distinctly Chinese linguistic features in the pidgin Malay spoken by other ethnic groups in the country. There probably were no neat and clearly-defined stages in the development of both Baba Malay and Bazaar Malay. It is of course, possible that present-day Bazaar Malay could have been a result of a process of re-pidginisation after Baba Malay had achieved stability, but given what we know of 'language behaviour', such clearly-defined developmental stages and links have more to do with theoretical models than with reality. It seems more realistic to assume that there was a 'reduced Malay' continuum and out of this emerged the stabilised variety called 'Baba Malay'. The 'reduced Malay continuum' may be evident even today in the loosely-labelled 'Bazaar Malay'. The creole Baba Malay, then, developed side by side with the 'pidgin' Bazaar Malay. In this case, the creole stands in a 'fraternal' relationship with the pidgin rather than a 'filial' one. Baba Malay's genealogy, therefore, would seem to be dissimilar to that of many other creoles.

The second purpose of this investigation was to provide a sketch of the linguistic make-up of Baba Malay. The structural zonsistency of Baba Malay should be clear from the foregoing pages, and its precise linguistic relationship with its substrate language, Hokkien, has been explicated. Even if this investigation accomplishes nothing else, it will have provided, I believe for the first time, a record of Baba Malay for the linguist.

## APPENDIX 1: SAMPLES OF BABA MALAY SPEECH

1. Male, 61 years old, educated in English.

Kita sini sémua cakap bahasa kèbangsaan dalam ruma, tapi itu bahasa kèbangsaan bukan macam pigi sékola punya, ini ruma punya. Jadi sini punya orang Mélayu bilang itu bahasa pasa. Ini macam punya cakap bukan kata Mèlaka bole èrti, Singapore bole èrti jugak. Banyak sènang...

Saya punya mak, bila mau kawin saya punya bapak, saya punya bapak sébéla pigi mintak saya punya kong mau kawin. Saya punya kong semua mau tahu, "Lu sèmua pake kain, lu punya laki siapa?" Jadi gua punya gua-kong mau tanya gua punya lai-kong. Jadi ini orang pigi mintak, mau kasi tahu-la. "Lu-orang kalau takut, lu pigi Mélaka tam-tia..."

We all speak the national language at home here, but this national language is not the school variety, it is the home variety. So the Malays here say it is the language of the marketplace. This type of speech is not one that (only) Malacca understands, it is understood in Singapore too. It's very easy...
My mother, when she wanted to marry my father, my father's side (of the family) went to ask my grandfather in order for her to be married. My grandfather wanted to know everything, "Do you all 'wear cloth' (i.e. of Baba stock), who is your boy?" So my maternal grandfather wanted to ask my patermal grandfather. So as this person went to ask all this, you want to tell him. "If you are afraid, go to Malacca and investigate..."

## Some observations

The sample here reveals many of the characteristic Baba Malay features discussed in this investigation. Note in particular the use of punya in genitive-type constructions:

```
pigi sèkola punya (bahasa)
the language of the schools
```

sini punya orang Mélayu
the Malays of this place
saya punya mak
my mother
The pronouns saya and gua appear to be freely variable in this extract, although in the course of the interview the tendency was towards gua as the informant became more relaxed (at the beginning of the interview he adhered resolutely to saya). Variation in pronoun usage among all my informants is restricted to the lst person singular form only; lu, for example, never alternates with the Malay awak or engkau.

Hokkien loan words are clearly evident, as is the use of banyak (a word semantically equivalent to the English many) as an adjectival intensifier.
2. Female, 36 years old, educated in English

Bèlakang ada orang kata orang mau kasi anak. Dia kata anak itu dua tahun, tapi pérèmpuan. Kasehan tak orang mau. Abi dia kata tak apa-la, kalau dia tahun macam bèse tak orang mau, "gua pigi amek". Dia pigi tengok, bukan dua tahun, dua minggu saja. Abi mak gua dukong kasehan budak itu dua minggu. Ingat tak mau, dua minggu susa jaga. Bi la mau tarok itu baby, baby nangis. Kènapa ini? Dia dukong, dia diam-diam. Suda-la, tak apa-la, dia kata, amek-amek-la. Mak dia kata, "Lu kasi-la gua ènam tin susu, lu kasi gua ang-pau." Mak gua kasi ang-pau lima-pulo ringgit. Abi kaki babi sè́-pasang, susu ènam tin, itu dia mintak. Itu-la adek kècik sèkali. Sèkarang umo dia dua-pulo-lima, suda kawin, suda tahun kawin...
Mak saya sunggo dia amek anak, tapi dia sayang tiga anak macam anak dia sèndiri, tak pèna pukol, tak pèna kotok.
Finally someone said that there was someone who wanted to give away a baby. He said that the baby was two years old, but it was a girl. It was a pity that no one wanted it. So she (i.e. informant's mother) said that it didn't matter, if the baby was so old and no one wanted it, "I will go and take her". She went to see it, and it wasn't two years old, it was two weeks old. Then my mother picked up the poor two-week-old child. She thought she didn't want it, a two-week-old child being hard to look after. When she put the baby down, the baby cried. Why is this? When she was carrying it, it was quiet. "All right, never mind", she said, "I will take $i t$ ". The baby's mother said, "You give me six tins of milk and you aive me an ang-pow". My mother gave her a fifty-dollar ang-pow. Then, she gave a pair of pig's legs and six tins of milk, this being what she asked for. And that was my youngest sister. She is now twenty-five years old and she is now married, married for a year now...
Although my mother adopted children, she loved the three children as if they were her own, never hitting them and never ill-treating them.

## Some observations

On the evidence of this extract, this informant seems to favour the more Malay form of the possessive construction:

| mak gua | mak dia umo dia | mak saya |  |
| :--- | :--- | :--- | :--- |
| $m y$ mother | her mother | her age | my mother |

There is inherent saya/gua variation, but the tendency is towards gua as the interview progresses. As was the case with informant $A$, informant $B$ began the interview with saya, which gave way to a mixture of saya and gua as she became less conscious of the tape-recorder.

Another noticeable feature is the preference for post-nominal positioning of ini and itu, which is less characteristic of Baba Malay in general. There is, however, an example in the extract of pre-nominal itu (itu baby). (The choice in this instance could have been governed by her choice of the English word baby; the pre-nominal determiner would conform with English patterning.)

| anak itu | budak itu |
| :--- | :--- |
| the baby | the child |

3. Female, 18 years old, educated in English, studied Malay at school

Kèmaren gua sama gua punya cousin pigi Singapore. Abi, kita mau pigi Johore-la, mau tinggal sama cousin punya ruma. Abi gua baru béli satu swimsuit, tahu, tapi gua takut kéna tax. Gua pake swimsuit, gua pake jeans sama T-shirt. Abi bila sampe custom, takut-takut, hati bèrdèbatbèrdèbu...

Gua ingatkalau dia tanya, gua cakap baru balek swimming. Baik tak nampak. Abi sampe dékat Johore, hujan, hujan. Cousin pun tak datang. Pigi telephone dia. Telephone dia kèna tunggu bèrjam-jam, pasa bila cousin gua telephone, ah, cakap dia lain tempat. Kita tunggu, dia carek lain tedmat. Kita tunggu, tunggu, tunggu. Baik dia pusing satu round, berjumpa kita. Kalautidak, kéna balek Singapore. Macam orang gila, tunggu.
Sometime ago, I and my cousin went to Singapore. We wanted to go to Johore, to stay in my cousin's house. I had just bought a swimsuit, you know, but I was afraid it would be taxed. I wore the swimsuit, I wore jeans and a T-shirt. So when I reached the Ciustoms, I was afraid, my heart was beating fast...

I thought if he asked, I would say that I had just been swimming. It was good he didn't notice it. So we got to Johore and it was raining. My cousin hadn't arrived and I went to telephone him. After telephoning him, we had to wait hours because when I rang him they said he was elsewhere. While we waited, he was looking somewhere else for us. We waited, waited and waited. It was good he made a round and saw us. Otherwise, we would have had to go back to Singapore. Like crazy people, we waited.
Some observations
Informant 3, although educated in Enqlish, studied Malay at school and this is probably most clearly revealed by her use of words with Malay affixation, e.g. bérdébat-bédébu, bèrjam-jam, berjumpa. English words are liberally used, but apart from all this, her speech is still recognisably Baba Malay.

APPENDIX 2: LEXICON OF HOKKIEN LOAN WORDS IN BABA MALAY FOUND IN CORPUS

| Baba Malay cap-cai | Hokkien chap-chhài pd-pĩ́a | English mixed vegetables spring-roll |
| :---: | :---: | :---: |
| tau-ge | tāu-gê | bean-shoots |
| kiam-cai | kiâm-chhài | salted vegetables |
| tau-yu | tāu-iû | soya sauce |
| lo-teng | lâu-téng | upstairs |
| tia | thĩa | living room |
| sin-kek | sin-khe? | new immigrant from China |
| ca-bo-gan | cha-bó-gan | maidservant |
| lang-kek | lâng-khe? | guest |
| to-cang | thâu-chang | queue |
| cia | chhia | vehicle |
| te-ko | tê-kó | kettle |
| teng | teng | I amp |
| tok | to? | altar table |
| bio | bio | temple |
| ting-kong | thĩ-kong | Heavenly Father |
| cio-tau | chio?-thâu | stone |
| hau-lam | hau-lam | mourner |
| minang | mui-lâng | matchmaker |
| kia-sai | kî́a-sài | son-in-low |
| kuan-si | kừai-si | accustomed |
| yau-kin | iàu-kín | important |
| cai-ki | chai-khi | luck |
| kek-sim | kek-sim | sad |
| cin-cai | chhin-chhai | easy-going |
| ho-mia | ho-mTa | a fortunate life |
| pai-mia | pai-mīa | an unfortunate life |
| u-hau | u-hàu | filial |
| kau-ce | kau-che | fussy |
| cia | chĩa | real |
| tai | tāi | generation |
| se | sì | surname |
| cut-si | chhut-si | birt |


| kai-siau | kai-siáu | recommend |
| :---: | :---: | :---: |
| tam-tia | tham-thía | investigate |
| tim | tTom | to steam |
| cat | chhat | paint |
| ngkong | án-kong | grandfather |
| nio | nïu | grandmother, mother-in-law |
| sun | sun | grandchild |
| taci | tua-chí | elder sister |
| ngko | á-ko | elder brother |
| ngso | á-só | elder brother's wife |
| ngtia | á-tia | father |
| kJ | k $\hat{}$ | paternal aunt |
| kJ-tio | kô-tíu | paternal aunt's husband |
| yi | $\hat{\imath}$ | maternal aunt |
| yi-tio | $\hat{\imath}$-tīu | maternal aunt's husband |
| m-pek | á-pe? | elder paternal uncle |
| cek | che? | younger paternal uncle |
| mak-m | á-m | elder paternal uncle's wife |
| ngcim | áchím | younger paternal uncle's wife |
| ngku | á-ku | matermal uncle |
| ngkim | á-kim | maternal uncle's wife |
| ta-kua | ta-kũa | father-in-law |
| ko-po | kô-po | great paternal aunt |

The loan words in the above list are, of course, not exhaustive, nor is each word equally familiar to every Baba Malay speaker. Some of the words have Malay equivalents and they may be used in preference to the Baba Malay forms by some Baba Malay speakers, e.g. bedranak may often replace the more archaic cut-si, and cucu frequently replaces sun. However, although not exhaustive, the list nevertheless gives an idea of the type of Hokkien loan word found in Baba Malay. Hokkien words have been borrowed by Baba Malay mainly to designate objects, concepts and relationships that are closely associated with the Chinese way of life.

## NOTES

${ }^{1}$ From Pires (1944) as quoted by K.T. Joseph, "Why was Malacca chosen as the site for a kingdom and how it became an emporium soon" in Illustrated historical guide to Malacca (1973:37-39).
${ }^{2}$ The Chinese have also left their mark on Jakarta Malay, a variety of Malay spoken in Jakarta. This can be traced in, for example, the Jakarta Malay pronouns gua and $l u$ and in the use of the word punya as a possessive marker, both of which items are a feature of Baba Malay.
${ }^{3}$ The only Active Verbal which seems to behave differently is tahu to know. It will not occur with Aspectual auxiliary lagi, nor will it occur in such a structure as tahu punya orang, and in these respects it stands apart from all the other verbals. Linguists have long noted the peculiarities of a small set of semantically 'stative' verbs of which know is a member, but except for tahu, these so-called semantically stative verbs behave normally in Baba Malay (in contrast to English in which, for example, stative verbs do not inflect in the same way as other verbs).
${ }^{4}$ Adjuncts vary in position depending on their type (see 4.1.4).
${ }^{5}$ Of course, I go to swim has a sense of purpose about it as well. It has the added sense of $I$ go in order to swim.
${ }^{6}$ The origin of the term 'Chitty' is in some doubt, but my Chitty-Indian informant, Mr B.S. Naiker sugqests that it means 'trader'.
${ }^{7}$ See Naiker (n.d.)
${ }^{8}$ The examples have been verified by Mr B.S. Naiker.
${ }^{9}$ The transcription in this and the next section has been rendered in standard Malay orthography.

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# SUBJECT-PREDICATE, FOCUS-PRESUPPOSITION, AND TOPIC-COMMENT 

 IN BAHASA INDONESIA AND JAVANESEMarmo Soemarmo

## 1. INTRODUCTION

Syntactical analysis of most Malayo-Polynesian languages has been the most neglected aspect of Malayo-Polynesian studies. Malayo-Polynesian linguists have generally been interested in either describing the morphological processes, i.e. derivations through affixations, or comparing the languages in terms of these processes.

The present work is a beginning of a systematic syntactical study of Bahasa Indonesia and Javanese. Since Bahasa Indonesia is a newly developed national language which is the second language for most Indonesians (second language in a sense that most Indonesians speak their regional languages like Javanese first and do not learn Bahasa Indonesia until they go to school), it may be necessary at this stage of the development of Bahasa Indonesia to state that my first language is Javanese, and thus the Bahasa Indonesia which I am using to support my claims is probably a Javanese dialect of Bahasa Indonesia. However, it should also be noted that claims which are made here are universal claims, in a sense that attempts to find support from other related languages like Tagalog, as well as unrelated languages like English, are made.
It should go without saying that the exact formulations of these claims are highly tentative, and they should be considered as merely strong indications about certain behaviour of certain parts of the language. To prove their correctness and generality, one must look into more data other than the small portion presented here, from Bahasa Indonesia and Javanese, as well as from other languages.

### 1.1 Objectives

The present work deals primarily with the relationships among three major constructions in Bahasa Indonesia and Javanese (henceforth, BI/JAV) represented by the following sentences:
(l) anak itu membeli sepatu kemarin
child ART buy shoe yesterday
The child bought shoes yesterday.
(2) anak itu, DIA membeli sepatu kemarin he/she
The child, he/she bought shoes yesterday.
(3) anak itu YANG membeli sepatu kemarin

It was the child who bought shoes yesterday. ${ }^{1}$
Sentence (l) is a neutral, declarative sentence with anak itu as its subject and the rest of the sentence its predicate. Sentence (2) consists of an NP, anak itu, followed by a sentence whose subject is a pronoun dia which refers to anak itu. The first NP, anak itu, is the topic, and the sentence following it, which describes or gives information about the focus, is generally referred to as the comment. Sentence (3) looks very much like (l) except that a word yang is added before the predicate. Sentence (3) presupposes that 'somebody bought shoes yesterday', while (1) and (2) do not have such presupposition.

Sentences like (4) and (5) show that the immediate constituents of (3) are [anak itu] [yang membeli sepatu kemarin] rather than $*[$ anak $i t u$ yang] [membeli sepatu kemarin]:
(4) yang membeli sepatu kemarin anak itu
(5) SEPATU ITU yang DIbeli ANAK ITU kemarin The shoes were bought by the child yesterday. (?It is the shoes which were bought by the child.)

Sentence (4) is the stylistic variant of (3), whose order of constituents is the reverse of (3), and (5) is the passive form of (3), whose NP's (anak itu and sepatu itu) are interchanged and whose verb marker me[tnasal] is replaced by di. Note that in the above cases, and any other cases, the first NP and yang never constitute a constituent to which certain rules may or may not apply. At this stage, let us call yang a marker which marks the phrase following it, and consider (3) as a sentence whose second constituent is marked by yang, and refer to this constituent as the yang-phrase.

The NP which precedes the yang-phrase in sentences like (3) is referred to as the focus of the sentence.

The following situations in which (1), (2), or (3) can be used should further clarify the different meanings of these three sentences. Sentence (l) can be uttered by a speaker to inform a listener in a situation when the speaker assumes that the listener has no prior knowledge about any information provided by (1). ${ }^{2}$ Sentence (2) is also used when the speaker assumes that the listener has no prior knowledge about the information conveyed by the sentence he is going to utter, but when he wants to get the listener's attention to the topic on which the information is centred. So, he first states the topic and then gives further information about this topic. In addition to using sentences like (2), a speaker can get the listener's attention to the topic of the information by using phrases like: 'Let me tell you about that child', 'By the way, concerning that child', etc. Sentence (3) is used only when the speaker assumes that the listener has already had some part of the information which the speaker is going to convey. In other words, both the speaker and the listener share some presupposition. When such a situation exists and the speaker wants to supply new information about what he and the listener presuppose, the speaker uses a sentence like (3) whose focus expresses the new information and the rest of the sentence restates the shared presupposition. An elaboration regarding what the 'new' information is about is necessary. New information may be supplementary information to the presupposition shared by the speaker and the listener. For example, when the shared presupposition is 'somebody bought shoes yesterday', a possible supplement to this presupposition is a specification about 'somebody'. If the new information specifies that
this 'somebody' is a particular child, then the speaker can use sentence (3) to convey this supplementary information. New information can also be a correction or contradiction to the shared presupposition. For example, when the shared presupposition is that 'somebody other than a particular child' bought shoes yesterday, and new information states that that particular child, and not somebody else, bought shoes yesterday, then the speaker expresses this new information about the shared presupposition by using sentence (3), or, to make it more explicit, an enclitic lah in BI and kok in JAV may be added to the focus.
(6) anak ituLAH yang membeli sepatu kemarin

It was THAT child who bought shoes yesterday. cf. (4)
The enclitic lah or kok can be used only when the focus contains new information which contradicts the shared presupposition. In English this seems to be expressed by stressing the focus, but the stress is ambiguous. In (3) 'the child' is also stressed, but to convey the meaning carried by (6), the stress is usually referred to as the 'contrastive stress'. Finally, new information can also be a confirmation of a certain part of the shared presupposition. For example, when the speaker and the listener presuppose that a particular child bought shoes yesterday and the speaker wants to state that that presupposition is in fact correct, then he can use either (3), or (3) with an additional enclitic memang in BI or ya in JAV.
(7) MEMANG anak itu yang membeli sepatu kemarin It WAS that child who bought shoes yesterday. cf. (5)
Note that English again utilises stress, this time in was, or probably both was and that child, to express (7) in BI/JAV. Sentence (3) is thus three-way ambiguous.

Throughout this work, I will call sentences with subject and predicate like (l) above Subject-Predicate Constructions (henceforth, SP-constructions), sentences with topic and comment like (2) above Topic-Comment constructions (henceforth, TC-constructions), and sentences with focus and presupposition like (3) above Focus-Presupposition constructions (henceforth, FP-constructions). ${ }^{3}$

### 1.2 Theoretical framework

The analysis presented in this work is done within the framework of transformational grammar. Familiarity with transformational theory and the current developments in this theory, particularly with regard to the basic assumptions underlying the interpretive theory (represented by the works of Chomsky (1970), Jackendoff (1968a, b) etc.), generative semantics (represented by the works of Lakoff (1968, 1971), Postal (1969) etc.), and case grammar (represented by the works of Fillmore (1968)), is assumed.

One of the crucial unsettled issues in transformational theory is whether transformational rules are meaning-preserving. Regarding this particular issue, Partee (1970) states that:

The position that transformational rules don't preserve meaning is of much less inherent interest than the contrary position, since it amounts simply to the position that a certain strong hypothesis is false. [p.10]

The present work utilises the hypothesis of meaning-preserving transformation as a working hypothesis, but the analysis is based solely on syntactical
evidence, meaning that the analysis aims to provide semantic information in the underlying forms of the sentences, but certain underlying forms are not posited simply to achieve such aim. Underlying forms are posited on the basis of syntactical evidence alone.

## 2. KATZ AND POSTAL'S QUESTION-PRESUPPOSITION

### 2.1 Interrogative and declarative sentences

Katz and Postal (1964) have shown convincingly that there are semantic as well as syntactic justifications to assume that there are close relationships between interrogative sentences and their corresponding declarative sentences containing the appropriate pro-forms like somebody, something, some reason, someplace, etc. The present work assumes that their semantic justifications are essentially correct. The following cases show that syntactical evidence similar to their evidence in English - to show that a question morpheme, abstractly represented as $Q$, occurs in the underlying form of the sentence can also be found in BI/JAV:
(a) Certain adverbials which occur in declarative sentences can not occur in interrogative sentences. For example:
(8) *tentu saja/*mungkin siapa yang membeli sepatu kemarin certainly probably
*Certainly/*Probably who bought shoes yesterday?
(9) tentu saja/mungkin anak itu membeli sepatu Certainly/Probably that child bought shoes yesterday.
(b) Certain modifiers can occur only in the interrogative sentences.

For example:
(10) siapa SAJA yang membeli sepatu kemarin (saja = wae in JAV) [Who in particular] bought shoes yesterday?4
(ll) *anak itu SAJA membeli sepatu kemarin ?That child in particular bought shoes yesterday.
(12) siapa LAGI yang membeli sepatu kemarin (lagi=meneh in JAV) Who else bought shoes yesterday?
(13) *anak itu LAGI membeli sepatu kemarin *That child else bought shoes yesterday. ${ }^{5}$
(c) There is a question morpheme kah in BI (but not in JAV) which can be optionally deleted if a pro-form apa (see below) is present. For example:
(14) anak itu membeli sepatuKAH

Did that child buy shoes?
(15) apa(KAH) anak itu membeli sepatu

Did the child buy shoes?
(16) siapa(KAH) yang membeli sepatu kemarin Who bought shoes yesterday?

Note that without $k a h(14)$ is a declarative sentence (1), and when apa is present, as in (15), kah can be optionally attached to the pro-form. Similarly, when siapa is present, as in (16), kah can also be optionally attached to this pro-form.
(d) It may be of interest to state that negative preverbs like hardly and scarcely, which Katz and Postal claim cannot occur in the interrogative sentences, can occur in the interrogative sentences in BI/JAV as evidenced from the grammaticalness of (17) as well as (18) below:
(17) anak itu JARANG membeli sepatu hardly
The child HARDLY bought shoes.
(18) anak itu JARANG membeli sepatuKAH ?Does/Did the child HARDLY buy shoes?

Stockwell, Schachter, and Partee (1968) claim that sentences like (18) 'for some speakers... appear to be grammatical in a suitable context' (p.628).

It seems clear that the presence of a question formative $Q$ in the underlying forms of the interrogative sentences is syntactically justified for BI/JAV as well as for English.

### 2.2 Some important details

### 2.2.1 The status of $W^{6}$

On the basis of the general contrast between two possible kinds of wh-questions, i.e. questions with what, who, etc., in contrast to questions with which, when (i.e. which time), where (i.e. which place), etc., - which suggests that these two types of questions be correlated with definite-indefinite article contrast - Katz and Postal assume that WH is attached to the article. Recently, however, Postal (1966) suggests that articles be represented in the deep structure as syntactical features on the head noun, which makes a node ART in the deep structure unnecessary, and so there is nothing to which the WH can be attached. It will be shown below that the description of nouns and nounphrases in $B I / J A V$ is simpler if nouns are characterised by features. WH is then assumed to be not attached to the ART. Furthermore, see 2.2.2 below.

### 2.2.2 $Q$ and WH

Katz and Postal consider sentences like (19) a paraphrase of (20) (see Katz and Postal 1964:86-87).
(19) Who saw someone?
(20) 1 request that you answer ' $X$ saw someone'.
and that $I$ request an answer is the meaning given to Q. In addition to $Q$, another formative, WH, is needed because to generate WH-questions the constituents which are questioned have to be marked in the deep structure, otherwise a string $\left[\ell[X, Y, Z]_{S}\right]$ will be multiply ambiguous. They thus argue that both $Q$ and $W H$ are needed in the deep structure. Malone (1967) argues that
one formative should be sufficient, because the difference between Yes/Noquestions and WH-questions depends on where $Q$ is attached. If $Q$ is attached directly under the topmost $S$, Yes/No-questions are generated, but if $Q$ is attached to the noun, WH-questions will result. Stockwell, Schachter, and Partee (1968) argue further that if $Q$ and $W H$ can be generated independently, strings containing $W H$ without $Q$ will not yield a surface structure, and so, although their analysis on WH-questions is different from Malone's, they agree with Malone that a single formative will do the job. The cases in BI/JAV clearly show that a single formative is sufficient to generate both Yes/Noquestions as well as WH-questions. First, the following 'paradigm' shows that apa is a pro-form of the root: ${ }^{7}$

## (21) SIapa who

SI John John (si is a person marker)
apaMU which of yours
sepatuMU your shoe (sepatu is a root)
MENGapa do what as in WHAT did you DO?
MEMbeli to buy (me[+nasal] is a verb marker; beli is a root)
Pro-forms like apa will be entered in the lexicon as a pro-form root. In addition, the morpheme kah (which is a question morpheme) will generate different interrogatives, depending on where it is attached. Consider the following:
(22) [anak itu membeli sepatu]+KAH Did the child buy shoes?
(23) $\left[[\text { siapa+KAH }]_{N P} \text { [yang membeli sepatu] }\right]_{S}$ Who bought the shoes?
(24) [anak itu [mengapa] $\left.\mathrm{VP}^{+k a h}\right]_{\mathrm{S}}$ What did the child do?
(25)
[anak itu [membeli[[apa] ${ }_{N P}+k$ ah $\left.]\right]_{S}$ What did the child buy?

Sentence (22) has kah attached to $S$ and it is a Yes/No-question. Sentences (23), (24), and (25) each contain a pro-form apa to which kah is attached. The result is $W H$-questions which ask about different parts of the sentence. Note that to generate WH-questions, kah is attached to a pro-form. In addition, kah can also be attached to non-proform roots. When this happens, interrogative sentences, which $I$ will call semi-Yes/No-questions, are generated. Such interrogative sentences are parallel to interrogative sentences with stressed constituents in English, such as: 'Did JOHN buy shoes?' or 'I want to know whether John or Mary bought shoes', or 'Is it JOHN who bought shoes?' etc. Observe the following:
(26)
$\left[[\text { anak itu] }+k a h]_{N P}[\text { yano membeli sepatu }]_{S}\right.$ Is it the child who bought shoes?
(27) [anak itu [membeli sepatu]+kah] $\left.]_{V P}\right]_{S}$ Did the child BUY SHOES?

So, because of the availability or pro-forms in BI/JAV, and also because different types of interrogative sentences are generated depending on the placement of $Q$, it seems clear that for $B I / J A V$ a single formative $Q$ is sufficient.

Note that $Q$ in $B I / J A V$ has the function of converting a sentence containing apa into a interrogative sentence with a WH-question-word. Thus, it corresponds with AUX-attraction in English, and not with the derivation of wh-questionwords.

### 2.3 The application of Katz-Postal's analysis to BI/JAV

Sentences like (28), (29), and (30) below seem to indicate that wH-questions in $B I / J A V$ can be generated from strings which contain a node which dominates a pro-form apa and Q:
(28) anak itu membeli APA
child buy what
What did the child buy?
(29) anak itu mengAPA

What did the child do?
(30) anak itu mengAPAkan ali

What did the child do to Ali?
The rules to generate (28)-(30) above seem to be much simpler than their corresponding English rules to generate the English sentences (28)-(30), since fronting and AUX-movement are not needed for BI/JAV. Such rules are simple until we come to the peculiar behaviour of wh-questions in which the subject of the sentence is questioned. Compare sentences (31) and (32) below with (33)
and (34) respectively:
(31) anak itu membeli sepatu

The child bought shoes. cf. (1)
(32) anak itu YANG membeli sepatu

It is the child who bought shoes. cf. (3)
(33) *siapa membeli sepatu
who
Who bought shoes?
(34) siapa YANG membeli sepatu

Who is it who bought shoes?
Notice that (31) is an SP-construction, and when the subject is questioned, the sentence (which is (33) above) is ungrammatical, but for sentence (32), which is an FP-construction, it is permissible to question its topic, since (34) is grammatical. Notice that an analysis which simply states that a subject of a sentence in BI/JAV should not be a question-word seems ad hoc. A less ad hoc analysis is the one which states the restriction (33) in terms of a restriction which is applicable for other cases, besides subject, as well. It will be shown that the restriction which disallows (33) is a very general constraint which disallows the generation of some other ungrammatical sentences. To be able to arrive at such an analysis, we need first of all to observe the behaviour of the subject, topic, and focus of a sentence, and more generally, the behaviour of nouns in these languages compared to a language like English.

## 3. ON THE NOTION [ $\pm$ specific]

### 3.1 Simple nouns

A simple noun in BI/JAV can have one of the following forms: ${ }^{8}$
(a) Root by itself: such as rumah house, mobil car, anak child.
(b) Root + nya: such as rumahnya, mobilnya, anaknya.
(c) Root + nya + itu: such rumahnya itu, mobilnya itu, anaknya itu.
(d) Root + itu: such as rumah itu, mobil itu, anak itu.

The meaning of each can be illustrated by their uses in sentences like (35)-(38) below:

Amat ingin membeli RUMAH
want buy house
Amat wants to buy A HOUSE.
(36)
rumahNYA apa sudah kamu kunci
already locked by you
Have you locked THE HOUSE.
rumahNYA ITU sampai sekarang belum ada yang membeli
until now not yet buy
Up to now, nobody has bought THE HOUSE.
(38) rumah ITU akan dipakai untuk menampung anak piatu will be used for receive orphans THE HOUSE will be used to house orphans.
In (35) rumah refers to any house; rumahnya in (36) refers to a specific house the speaker assumes the hearer knows; rumahnya itu in (37) also refers to a specific house the speaker assumes the hearer knows, but it also indicates that that specific house has been mentioned before. In other words, (37) can be used only when a sentence like (39) below has been said previous to (37) within a discourse:
(39) ayah telah memutuskan bahwa rumahN‘A harus dijual
father has decided that must be sold
Father has decided that THE HOUSE has to be sold.

Because (39) contains rumahnya, the second mention of this noun requires the addition of $i t u$, so rumahnya $i t u$ is used in (37). Sentence (38), which contains rumah $i t u,{ }^{9}$ can be a continuation of (35), which contains rumah. In this case, rumah itu is used in (38) because the noun rumah is mentioned in (35). Note that rumah is used when the speaker has no particular referent in mind and he assumes that the hearer does not either. The second mention of rumah in (38) still does not provide the hearer or the speaker with a particular referent. In other words, rumah itu in (38) refers to whatever house Amat buys, assuming that he will eventually succeed in buying one.

The forms of the nouns in (35)-(39) indicate that nya is a marker of a specific noun, and $i$ tu is added as a result of a process of anaphora. We can characterise these nouns in terms of feature notations as follows:
(40)

JAV

| $N$ | $N$ |
| :--- | :--- |
| $N+n y a$ | $N+e$ |
| $N+n y a+i t u$ | $N+e+$ kuw $i$ |
| $N+i t u$ | $N+$ kuwi |

Feature Specifications
[-anaphoric;-spec]
[-anaphoric;+spec]
[+anaphoric;+spec]
[+anaphoric;-spec]

Since a root does not have to be a noun, I will use $N$ to denote a noun root from now on. The difference between the features [anaphoric] and [specific] used to characterise nouns in $B I / J A V$ and the features [definite] and [specific] used by some linguists to characterise nouns in English is discussed in section 3.2.

In sentences like (41), an $N$ can also refer to a specific noun whose referent is assumed known to the hearer by the speaker:
(41) anak kecil itu belum dapat membedakan antara BULAN dan child small not yet can distinguish between moon and

MATA-HARI
sun
The little child can not distinguish between THE MOON and THE SUN.
Roots like bulan and mata-hari can be conceived as N+nya with nya deleted, since there are sentences like (42) as well:
(42) bulanNYA penuh malam ini full tonight
THE MOON is fuzl tonight.
The [+spec]-marker nya can also be deleted in cases where (44) below is used as a continuation of (43):
(43) ayah telah memutuskan bahwa rumahNYA harus dijual Father has decided that the house has to be sold. Cf. (39)
(44) rumah ITU terlalu kecil
too smazl
The house is too small.
Rumah itu in (44) and rumahnya in (43) refer to the same specific house the speaker assumes the hearer knows. Itu is added since the noun is mentioned for the second time.

### 3.1.1 Proper nouns

Proper nouns in BI/JAV have exactly the same forms as regular nouns. Observe the following:

| (45) | BI | JAV | Feature specifications |
| :--- | :--- | :--- | :--- |
|  | English |  |  |
| Amat | Amat | [-anaphoric;-spec $]$ | Amat |
| AmatNYA | AmatE | [-anaphoric;+spec] | Amat |
| AmatNYA ITU | AmatE KUWI | [+anaphoric;+spec $]$ | Amat |
| Amat ITU | Amat KUWI | [+anaphoric;-spec $]$ | Amat |

As is the case with regular nouns, a root by itself refers to any noun having a particular name, and Amatnya refers to a specific person the speaker assumes the hearer knows, and nya can be deleted if Amat refers to a specific person. When the speaker assumes that the hearer knows who Amat is and it turns out
that the speaker's assumption is wrong, the hearer may ask Amat yang mana which Amat?, siapa Amat itu who is Amat? Note that itu has to be added in the second question since Amat has been mentioned before. The form Amatnya $i$ tu is used when a sentence containing Amatnya precedes it, and nya in Amatnya itu can also be deleted when the speaker assumes that the hearer knows who Amat is.

### 3.1.2 Relativised nouns

The following sentences show that a noun with a restrictive relative clause ${ }^{10}$ which contains a [+spec]-morpheme always gets a [+spec] interpretation, and a noun with a restrictive relative clause containing no [+spec]-morpheme always gets a [-spec] interpretation.
(46) Amat ingin menangkap ULAR [yang lewat KEMARIN], want catch snake which passed by yesterday
tetapi ularNYA ITU beratcun but poisonous Amat wants to catch the snake which passed by yesterday, but the snake is poisonous.
(47) [JAV] Amat kepingin nyekel ulanE [sing lewat WINGI], nanging ulanE KUWI duwe racun (the same meaning as (46))
(48) *Amat ingin menangkap ULAR [yang lewat], tetapi ularNYA ITU beracun ?Amat wants to catch a snake which passed by but the snake is poisonous.

The relative clause in (46) contains kemarin yesterday, referring to a specific time, and the second mention of the noun is expressed by N-nya-itu, which is [+anaph;+spec], so ular yang lewat KEMARIN has to be [-anaph;+spec]. In BI, there seems to be an obligatory rule which deletes nya when the relative clause contains [+spec], but in Javanese the deletion is optional, since e, which corresponds to nya in BI, can occur with a relative clause containing [+spec], as in (47). In (48), the second-mentioned ular in ular [yang lewat] can not be expressed by N-nya-itu, which means that ular [yang lewat] is [-anaph;-spec]. Compare (48) with (49) and (50) below, where the second-mentioned ular is expressed by N -itu, which is [+anaph;-spec]:
(49) Amat ingin menangkap ULAR, meskipun ular ITU beracun Amat wants to catch a snake, although the snake is poisonous.
(50) Amat ingin menangkap ULAR [yang lewat], meskipun ular ITU beracun Amat wants to catch a snake which passed by although the snake is poisonous.
I will refer to a relative clause containing [+spec] as Specific-Relative Clause (abbreviated as SpecREL) and the one which contains no [+spec] as Non-specific Relative Clause (abbreviated as NonspecREL). In (46), instead of ularnya itu, ular [yang lewat kemarin] itu can be used; in (47), instead of ulane kuwi, ulane [sing lewat wingi] kuwi can be used; and in (50), instead of ular itu, ular [yang lewat] itu can be used. So, relativised nouns can have the following forms:

| (51) | BI | JAV | Features |
| :---: | :---: | :---: | :---: |
|  | $\mathrm{N}+$ NonspecREL | N + NonspecreL | [-anaph;-spec] |
|  | $\mathrm{N}+$ NonspecREL + itu | $\mathrm{N}+$ Nonspecrel + kuwi | [+anaph; -spec] |
|  | N + SpecREL | $\left\{\begin{array}{l}\mathrm{N}+\text { SpecREL } \\ \mathrm{N}+\mathrm{e}+\text { SpecREL }\end{array}\right\}$ | [-anaph; +spec] |
|  | N + SpecREL + itu | $\left\{\begin{array}{l}\mathrm{N}+\text { SpecREL + kuwi } \\ \mathrm{N}+\mathrm{e}+\text { SpecREL }+ \text { kuwi }\end{array}\right\}$ | [+anaph; +spec ] |

### 3.1.3 Pronouns and pronominalisations

The pronouns in BI/JAV can have one of the following forms:

| (52) | BI | JAV | ENGLISH |
| :--- | :--- | :--- | :--- |
|  | - | dewe | self |
|  | dia | dewekE. | he/she |
|  | dia ITU | dewekE KUWI | he/she |

Observe the cases in JAV which clearly show that deweke comes from dewe (the $k$ is a glottal stop inserted between geminate vowels), and e, which corresponds to nya in $B I$, is a [+spec]-marker, which means that the pronouns deweke and dia are [-anaph;+spec]. Dia in BI is already [+spec], which explains why *dianya does not occur, and that a pronoun has to be [+spec] is also evidenced from the ungrammaticalness of *dewe kuwi in JAV, since *dewe kuwi is [tanaph;-spec]. Cases in (52) indicate that there is a lexical rule which states that a pronoun has to be [+spec]. In other words, when we use [+PRON] to mark a pronoun, the rule can be stated as follows:
(53) [-spec; PRON] $\rightarrow$ [+spec; +PRON]

Let us consider how the above pronouns are used by observing the following sentences:
(54) Amat memukul ORANG, padahal DIA tidak bersalah
hit person despite he not guilty
Amat hit A PERSON despite the fact that $H E$ is not guizty.
(55) Amat memukul ORANG, padahal DIA ITU tidak bersalah
(the same meaning as (54))
(56) $\binom{$ AMAT memukul orang, kemudian DIA lari }{ AMAT memukul orang, kemudian DIA ITU lari } then run
AMAT hit a person, then $H E$ ran away.
(58) $\binom{$ Amat memukul ORANG ITU, padahal DIA tidak bersalah }{ Amat memukul ORANG ITU, padahal DIA ITU tidak bersalah }

Amat hit THE PERSON, despite the fact that $H E$ is not guilty.
(60) (AMAT ITU memukul orang, kemudian DIA lari
(61) (AMAT ITU memukul orang, kemudian DIA ITU lari)
(THAT) AMAT hit a person, then $H E$ ran away.
$\binom{$ DIA memukul orang, kemudian DIA ITU lari }{ DIA ITU memukul orang, kemudian DIA ITU lari }
$H E$ hit a person and then $H E$ ran away.

The relationships between the pronouns and their antecedents in (54) through (63) in terms of feature notations are as follows:

Antecedent

$$
\begin{aligned}
& \text { [-anaph;-spec;-PRON] [-anaph;+spec;+PRON] } \\
& \text { [-anaph;-spec;-PRON] [+anaph;+spec;+PRON] } \\
& \text { [-anaph;+spec;-PRON] [-anaph;+spec;+PRON] } \\
& \text { [-anaph;+spec;-PRON] [+anaph;+spec;+PRON] } \\
& \text { [+anaph;-spec;-PRON] [-anaph;+spec;+PRON] } \\
& \text { [+anaph;-spec;-PRON] [+anaph;+spec; }+ \text { PRON] } \\
& \text { [+anaph;+spec;-PRON] [-anaph;+spec;+PRON] } \\
& \text { [+anaph; +spec;-PRON] [+anaph; +spec; +PRON] } \\
& \begin{array}{ll}
{[\text {-anaph; +spec } ;+ \text { PRON }]} & {[\text { tanaph;+spec } ;+ \text { PRON }]} \\
{[\text { tanaph; +spec } ;+ \text { PRON }]}
\end{array} \begin{array}{l}
\text { +anaph; +spec } ;+ \text { PRON }]
\end{array}
\end{aligned}
$$

Each of the sentences (54)-(63) above is ambiguous because each pronoun can have either the subject or the object of the sentence as its antecedent. For simplicity of exposition, only the relationships between the capitalised nouns and pronouns are discussed, and since the feature changes shown in (54)-(63) above are all the possible changes, the relationships between a pronoun and the non-capitalised noun in each sentence should involve either one of the possible changes shown in (54)-(63).

In addition to the lexical rule (53) above, (54)-(63) seem to involve 'pronominalisation proper' and 'anaphora'. For the features in (54)-(63) we can see that when pronominalisation proper is applied, [-PRON] is converted into [+PRON], and rule (53) gives the [+spec]. Usually, anaphora should be applied when a noun is 'afore-mentioned', but cases like (54), (56), etc., indicate that anaphora does not apply, and moreover, in (58) and (60), [tanaph] is converted into [-anaph]. How can we account for these cases? what is happening is that 'pronominalisation proper' and 'anaphora' are applied conjunctively, and lexical rule (53) is applied after pronominalisation proper. If we abbreviate 'pronominalisation proper' as PP and 'anaphora' ANAPH, and lexical rule (53) LEX, the pronominalisation rules to generate (54)-(63) can be stated as follows:
(64)

Pronominalisation:
(a) $\left\{\begin{array}{l}\text { PP: }[-\mathrm{PRON}] \rightarrow[+\mathrm{PRON}] \\ \text { ANAPH: }[- \text { anaph }] \rightarrow[\text { +anaph }]\end{array}\right\}(\div *)$
(b) LEX: [-spec;+PRON] $\rightarrow$ [+spec; +PRON $]$

Condition: the noun is 'afore-mentioned'
I put ( $\because \%$ ) after (a) to indicate that in the second application of (64), (a) may or may not be applied. In other words, the following are the possible applications of (64):
(1) First applıcation of (64):
(a) Apply PP
(b) Apply LEX

Second application of (64):
(a) Apply ANAPH
(b) LEX does not apply
(2) First application of (64):

Second application of (64):
Apply ANAPH
(b) LEX does not apply
(a) Apply PP
(b) Apply LEX
(a) Apply PP
(b) Apply LEX

Second application of (64): Does not have to be done
(4) First application of (64): (a) Apply ANAPH
(b) LEX does not apply Second application of (64): Does not have to be done

The following are sample derivations:

| [..1st noun. $]_{\text {S }}$ [..2nd noun.........3rd noun. $]_{S}$ |  |  |
| :---: | :---: | :---: |
| Base: $\varnothing$ [-an;-spec;-P] [-an;-spec; |  |  |
| PP ...................................... [-an;-spec ${ }^{+}+\mathrm{P}$ |  |  |
| LEX ...................................... [-an; +spec |  |  |
| Result: ....... (54) : N ------------- dia |  |  |
| 2nd application of (64): <br> ANAPH $\qquad$ [+an;+spec; +P ] <br> Result: <br> ........ <br> (55) : <br> N $\qquad$ dia itu |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| 2nd application of (64): <br> ANAPH $\qquad$ [+an;+spec; +P] <br> Result: $\qquad$ (57) : <br> N+(nya) $\qquad$ dia itu |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| 2nd application of (64): <br> PP .....................[+an;-spec; + P]...[+an;-spec; + P] |  |  |
|  |  |  |
|  |  |  |
| Result: ..... (63): dia+itu -------- dia+itu |  |  |

(60) and (61) are generated in the same manner as (59) and (60) except that the base has to be [+spec]. To get (62), only ANAPH is applied, and the application of (64) to (63) does not change any features.

Notice that in the first row (between the first double solid lines and the first single line ANAPH can be applied instead of PP, and the result will be: $N \leftrightarrow N+i t u$ as in (65):
(65) Amat memukul ORANG, padahal ORANG ITU tidak bersalah Amat hit A MAN, despite the fact that THE MAN was not guilty. cf.(54)

And in the second application of (64), PP can be applied, which gives us the same (55): $N \leftrightarrow$ dia itu. A similar application of the rule can also be applied in the second row (between the second and the third double lines). When ANAPH is applied first instead of PP, the result will be $N+(n y a) \leftrightarrow N+(n y a)+i t u$, as in (66):
(66) AMAT memukul orang, kemudian AMAT ITU lari
?AMAT hit a man then (THAT) AMAT ran away. cf. (56)
and to get (57), i.e. $N+(n y a) \leftrightarrow$ dia $i t u, P P$ can be applied in the second application of (64). In the third row, when ANAPH only is applied, we will get: $N+i t u \leftrightarrow N+i t u$ as in (67):
(67) Amat memukul ORANG ITU, padahal ORANG ITU tidak bersalah cf. (58) Amat hit THE MAN, despite the fact that THE MAN was not guilty.
and when PP is applied in the second application of (64), (59) is the result. So, a slight modification of (64) will give us both pronominalisation and simple anaphora as in (65) and (66). Rule (64) can be modified into (68):
(68) PRONOMINALISATION AND ANAPHORA
(a) $\left\{\begin{array}{lll}\mathrm{PP}:[-\mathrm{PRON}] & \rightarrow+\mathrm{PRON}] \\ \text { ANAPH: }[\text {-anaph }] & \rightarrow & {[\text { + anaph }]}\end{array}\right\}$
(b) LEX: [-spec;+PRON] $\rightarrow$ [+spec;+PRON]

Conditions: (1) the noun is 'afore-mentioned'
(2) the second application of the rule is optional

### 3.2 Comparison between [anaph], [spec], and pronouns in BI/JAV and [def], [spec], and pronouns in English

Recent works in English grammar, such as Baker (1966a,b), Fillmore (1968), Karttunen (1968), Dean (1968), and Stockwell, Schachter and Partee (1968) have indicated that an indefinite noun like a piano in (69) and (70) below have different meanings:
(69) John tried to find A PIANO
(70) John lifted A PIANO

In (69) a piano is [-spec], meaning that a piano may be roughly paraphrased with any piano, and a piano in (70) is [+spec] meaning that a piano may be roughly paraphrased with a certain piano. Karttunen (1968:7-8) gives the
following explanation of the meaning of [+spec] and [-spec] for English (the additional underlinings are mine):

Assume that a speaker of (20) spent some time in the morning talking to his friend Rudolf Carnap and later refers to this event by uttering (20):
(20) I talked with a logician.
(21) I talked with Rudolf.
(22) I talked with the author of Meaning and Necessity.
(23) I talked with a famous philosopher.

In the specific serse, i.e. 'a certain logician' the utterance is replaceable by (21)-(23), which in this case would all constitute an equally honest answer to the question 'Who did you talk with this morning?'. The speaker has a certain referent in his mind; and, in his knowledge, there also are some properties associated with that particular individual. Any of these properties could presumably be used to describe the individual, in a sense, the speaker has a choice of how informative he wants to be. As far as the speaker is concerned, it is not clear how (20)-(23) could be claimed to be anything but paraphrases of each other.

In the non-specific sense, (20) could be an answer to the question 'What kind of person did you talk with this morning?'. This version of (20) could not be paraphrased by (21)-(23), since it is not the particular individual that matters, but rather the class to which he belongs.

Comparing such use of [spec] for English with the use of [spec] for BI/JAV illustrated in the previous sections of this chapter, we have the following:
[+spec] in English is used when the speaker has a certain referent in his mind.
[+spec] in BI/JAV is used when the speaker assumes that the hearer knows the referent the speaker has in mind.
[-spec] in English is used when the speaker does not have any particular referent in mind.
[-spec] in BI/JAV is used when the speaker assumes that the hearer does not know the referent which the speaker may or may not have in mind. Karttunen (1968:6) also pointed out that 'it is something about the meaning of the verb lift which suggests that a piano describes some specific object'. In BI/JAV, however, sentences corresponding to (69) and (70) above each can contain [-spec] or [+spec]:
(69) (a) John berusaha mencari PIANO
(b) John berusaha mencari PIANONYA
try find
(70)
(a) John mengangkat PIANO
(b) John mengangkat PIANONYA Zift

In (69a) piano is [-spec], because the speaker assumes that the hearer does not know which particular piano John tried to find, and the speaker may not either: pianonja in (69b) is [+spec], the speaker assumes that the hearer knows which piano the speaker has in his mind. The meaning of the verb find $=$ mentjari changes, since (69b) assumes that a piano which both the speaker and the hearer know had been lost. In JAV, the verb to translate mencari in (69a) is nggolek and the verb to translate mencari in (69b) is nggoleki, so nggolek can only be used when the object is [-spec] and nggoleki can only be used when the object is [+spec]. Such selectional restriction is applicable to certain verbs only, since the translation of (70a) which has [-spec] object and the translation of (70b) which has [+spec] object into JAV use the same verb ngangkat. Again, piano in (70a) is [-spec] because the speaker assumes that the hearer does not know the referent, but the speaker may or may not know the referent. (The situation where the speaker does not know the referent is when, for instance, someone else told the speaker (70a) and the speaker is retelling (70a) to the hearer.) In (70b) pianonya is [+spec] because the speaker assumes that the hearer knows the referent which the speaker has in mind. In English, a definite article the is used when the speaker assumes that the hearer knows the referent the speaker has in mind:
(69) (c) John tried to find THE piano
(c) John lifted THE piano

In (69c) and (70c) the piano is [+def;+spec]. Then (69a) is the proper translation for (69), but (70a) is not the exact translation of (70) because in (70a) the speaker may or may not know the referent, while in (70) the speaker knows the referent (at least according to Baker and Karttunen).

Another case which demonstrates the difference between [+spec] in BI/JAV and [+spec] in English clearly is the form of the 'non-linguistic anaphoric' nouns like the moon, the sun, etc., which is [+def;+spec] in English but in BI/JAV the form is N+nya (bulanNYA, matahariNYA, etc.) which is [-anaph;+spec]. In English, the nouns are [+def] because the speaker assumes that the hearer knows the referent, and [+spec] because the speaker has a specific referent in mind. In $B I / J A V$, the nouns are [+spec] because the speaker assumes that the hearer knows the referent, but there is no overt morpheme which indicates that the speaker has a specific referent in mind.
The difference between [+spec] in BI/JAV and [+spec] and [+def] in English can be summarised as follows:
(71)

Speaker:
(a) knows referent
(b) does not know the referent
(c) knows the referent
(d) does not know referent

| Speaker assumes | Features: |  |
| :---: | :---: | :---: |
| that the hearer: | ENGLISH | BI/JAV |
| knows referent | [ +def] | +spec |
| does not know the referent | -spec] | [-spec |
| does not know the referent | [+spec] | [-spec |
| knows the referent | $[- \text { spec }]$ | +s |

Note that the value of the feature [spec] in English is consistent from the point of view of the speaker's knowledge about the referent, and the value of [spec] in $B I / J A V$ is consistent from the point of view of the speaker's
assumptions about the hearer's knowledge about the referent. Situation (d) in English is [+def] in cases like: Did you find the house you were looking for?, but at the same time the house seems to be [-spec] as well.
The anaphoric use of [+def] in English corresponds to [+anaph] in BI/JAV, but [+def] in English is always assumed to be [+spec] (but see below), while [-anaph] in BI/JAV can be either [+spec] or [-spec]. In other words, a process of anaphora in English always converts [-spec] into [+spec], but a process of anaphora in $B I / J A V$ does not. In BI/JAV, [-spec] is converted to [+spec] when pronominalisation is applied.

Kuroda (1965, 1966) and Postal (1966) claim that in English pronominalisation is always preceded by definitisation, which means that (74) is derived from (72) through an intermediate step (73):
(72) John hit A MAN [-def;+spec;-PRON]
(73) John hit THE MAN [+def;+spec;-PRON]

John hit HIM [+def;+spec;+PRON]
A pronoun in English, then, is always [+def;+spec]. The [+def] in (73) corresponds to [tanaph] in BI/JAV, but BI/JAV have [+anaph;+spec;+PRON] as well as [-anaph;+spec;+PRON]. In other words, corresponding to (72)-(74), BI/JAV have the following:
(a) John memukul ORANG(NYA) [-anaph;+spec;-PRON]
(a) John memukul ORANG (NYA) ITU [+anaph;+spec;-PRON]
(a) John memukul DIA [-anaph;+spec;+PRON]
(b) John memukul DIA ITU [+anaph;+spec;+PRON]

The derivations of the pronominalisation in $B I / J A V$ can be either $(72 a) \rightarrow(74 a)$, $(72 a) \rightarrow(73 a) \rightarrow(74 a) \rightarrow(74 b)$, or $(72 a) \rightarrow(74 a) \rightarrow(74 b)$.

Gleitman (1961), unlike Postal and Kuroda, allows the derivation of (72) $\rightarrow$ (74) as well as (73) $\rightarrow(74)$.

The difference between [anaph] and Pronouns in BI/JAV and [def] and Pronouns in English can be summarised as follows:

(75) | BI/JAV |  |
| ---: | :--- |
| $[$ +anaph $;+$ spec $;-$ PRON $]$ | $=\mathrm{N}($ nya $) i t u$ |
| $[$-anaph $;+$ spec $;-$ PRON $]$ | $=\mathrm{N}$ nya |
| $[$ +anaph $;+$ spec $;+$ PRON $]$ | $=$ dia $i t u$ |
| $[$-anaph $;+$ spec $;+$ PRON $]$ | $=$ dia |

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[+def;+spec;-PRON] = the $N$
[-def;+spec;-PRON] $=a(n) N$
$[$ +def;+spec $;+$ PRON $]=$ he/she
does not exist

### 3.3 Extended specifier nya or e

It has been shown that nya in BI, and $e$ in JAV, are used when the noun is [+spec]. Notice that, in a sense, a [+spec]-noun refers to a particular member or a class or set, i.e. when one says I want to catch a fish and uses a fish [+spec]-ly, he is referring to a particular member of all the members of a set whose members are fish. This notion is extended in sentences like (76) and (77) below:
(76) Amat akan membeli JAM dan RADIO
will buy clock
Amat will buy a clock and a radio.

$$
\begin{aligned}
& \left\{\begin{array}{l}
\text { radioNYA } \\
\because \text { radio ITU } \\
\text { radioNYA ITU }
\end{array}\right\} \text { bagus } \\
& \text { beautiful } \\
& \text { The radio is beautiful. }
\end{aligned}
$$

$$
\left\{\begin{array}{l}
\text { *radioNYA } \\
\text { rradio ITU } \\
\text { radioNYA ITU }
\end{array}\right\} \text { bagus }
$$

Amat will buy the clock and the radio. The radio is beautiful.
In (76), jam and radio each can be either [-anaph;-spec] or [-anaph;+spec], so (76) is four-way ambiguous. In (77), jam and radio each can be either [+anaph; -spec] or [+anaph;+spec]. Note that in (76) radio ITU is not allowed, and yet according to what we have learned so far an anaphoric process should be allowed to get [+anaph;-spec] from [-anaph;-spec]. Similarly, radio ITU is not allowed either in (77) to repeat [+anaph;+spec] radio ITU. (Radionya is not allowed according to a general rule, radio in the first sentence is [tanaph; +spec], so it can not be made into [-anaph;+spec].) It is interesting to note that the English sentence in (76) does not allow pronominalisation either and neither does it in (77). This phenomenon is also observed by Stockwell, Schachter, and Partee (1968:227-228), but they 'have no explanation to offer to this curious fact'. They cite the following cases: sentence SSP(148) can be followed by any of SSP (149), but can not be followed by any of SSP (150):

> SSP (l48) (a) A women walked into a restaurant carrying a little girl in one arm and a parcel in the other. SSP (149) (a) Suddenly she stumbled and dropped them. (b) Suddenly she stumbled and dropped both of (c) Suddenly she stumbled and dropped one of (d) Suddenly she stumbled and dropped the little (e) girl. (esp (150) (a) *Suddenly she stumbled and dropped the parcel. (b) *Suddenly she stumbled and dropped her. (c) *Suddenly she stumbled and dropped it. and it.

What is happening in $B I / J A V$ is that conjoined nouns constitute a set whose members are the different nouns being conjoined. A reference to any one of them is a reference to a particular member of a set having more than one member, which makes that particular member a [+spec] noun, and a set is always considered [-anaph;-spec]. So for BI/JAV, only nya can be used.

Such extended specification is applicable to proper nouns as well. Observe the following:

Stockwell, Schachter, dan Partee menulis buku
Stockwell, Schachter, and Partee wrote a book.
(79)

Stockwell-NYA menulis bagian-1, Schachter-NYA ke-2, dan Partee-NYA ke-3
part-1
the 2 nd
or (80) [Stockwell dan Schachter]-NYA menulis bagian-1 dan Partee-NYA ke-2 and so on.

## 4. WH-SUBJECT QUESTIONS AND EXISTENTIAL SENTENCES

We have observed in section 2 that when the subject of a sentence is questioned, the sentence has to be in FP-construction, as shown in (81) and (82) below:
(81) *siapa membeli sepatu
who
Who bought shoes? cf. (33)
(82) siapa YANG membeli sepatu

Who was it who bought shoes? cf. (34)
Sentence (81) is an SP-construction like (83), and (82) is an FP-construction like (84):
(83) Amat membeli sepatu

Amat bought shoes. cf. (l)
(84) Amat YANG membeli sepatu

It was Amat who bought shoes cf. (3)
It has also been pointed out that if the ungrammaticalness of (8l) is accounted for by stating that there is a rule which changes an SP-construction into an FP-construction when the subject of the SP-construction is questioned, it has to be shown that the rejection of siapa in (81) follows a general constraint on subjects, semantic and/or syntactic, otherwise the rule is very ad hoc. To discover the constraints on subjects, we can start by observing the forms of the nouns in subject positions.

### 4.1 Constraints on subjects

It is well known that sentences like (85) are ungrammatical in BI/JAV:
(85) *ANAK membeli sepatu kemarin
*Any child bought shoes yesterday.
Sentence (85) is like (l) except that the subject of (l) is anak ITU and the subject of (85) is anak. This fact has been accounted for by Indonesian linguists by stating that the subject of a sentence must be definite. Further observations show that the definite requirement for a subject is not entirely true. Observe the following:
(86) *Anak membeli sepatu kemarin *Any child bought shoes yesterday.
(87) anakNYA membeli sepatu kemarin
anakNYA ITU membeli sepatu kemarin
anak ITU membeli sepatu kemarin )
The child bought shoes yesterday.
(90) *anak [yang lewat] membeli sepatu kemarin pass by
*Any child who passed by bought shoes yesterday.
(91) anak [yang lewat TADI PAGI] membeli sepatu kemarin this morning
The child who passed by THIS MORNING bought shoes yesterday.
(92) anak [yang lewat] ITU membeli sepatu kemarin The child who passed by bought shoes yesterday.
(93) anak [yang lewat TADI PAGI] ITU membeli sepatu kemarin The child who passed by this morning bought shoes yesterday.
(94) dia membeli sepatu kemarin

He/she bought shoes yesterday.
(95) dia ITU membeli sepatu kemarin
(That) he bought shoes yesterday.
Translating the forms of the nouns in the subject positions in (86)-(95) above into feature notations, we get the following:

Nouns
(86) $\div \mathrm{N}$
[-anaph;-spec;-PRON]
(87) $\mathrm{N}+$ nya
[-anaph; +spec;-PRON]
(88) $\quad \mathrm{N}+$ nya + itu
[+anaph; +spec;-PRON]
(89) $\mathrm{N}+\mathrm{itu} \quad[$ +anaph;-spec;-PRON]
(90) $*_{N}+$ NonspecREL [-anaph;-spec;-PRON]
(91) $\mathrm{N}+$ SpecREL [+anaph;+spec;-PRON]
(92) $\mathrm{N}+$ NonspecREL + itu [+anaph;-spec;-PRON]
(93) $\mathrm{N}+$ SpecREL + itu [+anaph; +spec;-PRON]
dia [-anaph;+spec;+PRON]
dia+itu [+anaph; +spec;+PRON]
Note that (86) and (90) are ungrammatical because the subjects are [-anaph; -spec]. Notice also that (89) and (92) have [-spec] subject and the sentences are grammatical, but the subject of (89) and (92) is [tanaph]. The restriction on the subject is thus a restriction in terms of a conjunction of [-anaph] and [-spec]. Constraint on subjects: 'a subject must not be [-anaph;-spec]'.

### 4.2 Existential sentences

It seems that semantically there is nothing wrong with a sentence with [-anaph; -spec] subject since it is fairly easy to give an interpretation to such a sentence. Usually, a language utilises another construction to express semantically well-formed sentences which are syntactically ill-formed. In BI/ JAV, existential sentences are used to express a sentence with [-anaph;-spec] subject.

Before going any further, let us recall the difference between [-spec] in English and [-spec] in BI/JAV. According to Professor Partee (personal communication), anak in (86) can not be interpreted as [-spec] in English, because of cases like the following:
(96) *Any child bought shoes.
(97) Any child can buy shoes in that store.

If any is [-def;-spec], the ungrammaticalness of (96) is relevant, since there is no grammatical sentence in English which would be equivalent to (96), which means that (96) is semantically ill-formed. We must look back at the diagram
(71), repeated here as (98), which shows the overlapping use of the feature [spec] in BI/JAV and in English to provide the English speakers with a better
'feel' of the [-spec]-ness of anak in (85), and the non-equivalence of (86) and (96).
(98)

Speaker:
(a) knows referent

| Speaker assumes | Features: |  |
| :---: | :---: | :---: |
| that the hearer: | ENGLISH | BI/JAV |
| knows referent | [+def] | [+spec] |
| does not know the referent | [-spec] | [-spec] |
| does not know the referent | [+spec] | [-spec] |
| knows the referent | $\left\{\begin{array}{l} {[+ \text { def }] ?} \\ {[- \text { spec }] ?} \end{array}\right\}$ | [ + spec ] |

Notice that in English [-spec] interpretation is given when the speaker has no specific referent in mind. Any in (96) and (97) seem both to get [-spec] interpretation, i.e. the situation is (98b) in the diagram. Anak in (85), however, gets [-spec] interpretation in a sense that the speaker assumes that the hearer does not know the referent the speaker may or may not have in mind. Note that when the speaker has a specific referent in mind the English interpretation is [+spec], i.e. situation (98c) above, where [-spec] in BI/JAV corresponds to [+spec] in English. In BI/JAV the corresponding morpheme for any is setiap (in JAV: angger) and setiap can be used only when the noun is [-spec] but in a sense of (98b), so the proper translation for (96) is not (85) but (99):
(99) *setiap anak membeli sepatu kemarin *Any child bought shoes yesterday.

Setiap and any followed by a noun make the NP generic, i.e. (97) has a generic subject. The proper translation for (85) is not (96) but (100):
(100) ?A CHILD bought shoes yesterday.

$$
[+ \text { spec }]
$$

(Note: [+spec;-def] in English = [-spec] in BI/JAV.)
Note, by the way, that the reason why [-spec] -nouns in English and [-spec]-nouns in BI/JAV are very difficult to distinguish from generic nouns becomes clear. In English [-spec] in (98b) is generic, and [-spec] in (98d) is non-generic, but since in English (98b) and (98d) overlap, i.e. because [-spec] interpretation in (98d) is given when the speaker does not know the referent, and no assumption about the hearer's knowledge is made, meaning that the hearer may or may not know the referent, while [-spec] in (98b), which is generic, has to be used in a situation where the speaker and the hearer have no specific referent in mind. A similar situation occurs in $B I / J A V$. The [-spec] in (98b) is generic, but the [-spec] in (98c) is not. The [-spec] in (98c) is used when the speaker assumes that the hearer does not know the referent, but the speaker may or may not have a specific referent in his mind, while the generic [-spec] in (98b) has to be used in a situation where both the speaker and the hearer have no specific referent in mind. Let us modify (98) to clarify the point just made, and to include generic interpretation of [-spec] nouns in BI/JAV and in English:
(101) English:

The speaker:
(a) knows the referent
(b) does not know the referent
(c) knows the referent
(d) does not know the referent

BI/JAV:
The speaker:
(a) knows the referent
(b) does not know the referent
(c) may or may not know the referent
(d) may or may not know the referent

The speaker assumes
that the hearer:
knows the referent $=[+$ def]
does not know $=[$-spec $]$-GENERIC the referent
may or may not $=[+$ spec $]$ know the referent
may or may not $=$ [-spec] know the referent

The speaker assumes that the hearer:
knows the referent $=[+$ spec $]$
does not know $=[$-spec $]$-GENERIC
the referent
does not know $=[$-spec $]$
the referent
knows the referent $=$ [+spec]

Note:Every time the semantic interpretation contains may or may not the noun is syntactically unmarked.
Going back to (85), (96), and (100), it is now clear that the difference between English and BI/JAV is that in English (100) a child bought shoes is the paraphrase of an existential there was a child who bought shoes (at least according to Baker (1966a, b), where a child in both sentences are [+spec]. In BI/JAV, (85) *anak membeli sepatu is the paraphrase of the existential ada anak membeli sepatu and anak in both sentences is [-spec].

The surface structure of existential sentences in BI/JAV can be represented by a tree diagram (102) below, where $\sum$ stands for existential sentence, $C$ stands for a constituent to be specified later, and ada is the existential verb in BI (in JAV the verb is ana):


The questions as to whether $\Sigma$ is subjectless or not is not crucial at the moment. First, let us observe the characteristics of $\Sigma$. Another interesting fact about BI/JAV is that they have two kinds of existential sentences. The distinction is not equivalent to stressed and unstressed there is English. The two kinds of $\Sigma$ in $\mathrm{BI} / J A V$ can be represented by the following tree diagrams:
(103)

(104)

(103) consists of ada followed by a relativised NP and (l04) consists of ada followed by a nominalised $S$. (105) below is $\Sigma_{1}$ and (106) is $\Sigma_{2}$ :
(105) ada [anak [yang membeli sepatu]]

There was a child who bought shoes.
(106) ada [anak membeli sepatu]

There was a child buying shoes.
I will use the English sentence with gerund to translate $\sum_{2}$ simply because it has similar surface structure. The appropriate translation for (106) is probably There was an event. The event was 'a child bought shoes'. The surface difference between (105) and (106) is that (105) has yang and (106) does not.

The constraints on $\Sigma$ can be illustrated by the following sentences:
(107) ada anak (yang) membeli sepatu There was a child buying/who bought shoes.
(108) *ada anakNYA (yang) membeli sepatu *There was THE child buying/who bought shoes.
(109) *ada anakNYA ITU (yang) membeli sepatu
*There was THE child buying/who bought shoes/
(ll0) *ada anak ITU (yang) membeli sepatu
*There was THE child buying/who bought shoes.
(lll) ada anak [yang lewat] (yang) membeli sepatu ?There was a child who passed by buying/who bought shoes.
(112) *ada anak [yang lewat] ITU (yang) membeli sepatu
*There was the child who passed by buying/who bought shoes.
(113) *ada anak [yang lewat kemarin] ITU (yang) membeli sepatu
*There was the child who passed by yesterday buying/who bought shoes.
(ll4) *ada DIA (yang) membeli sepatu
*There was him buying/who bought shoes.
(115) *ada dia ITU (yang) membeli sepatu
*There was (that) him buying/who bought shoes.
Note that only (107) and (lll) are grammatical, and the restriction on $\Sigma_{l}$ and $\Sigma_{2}$ is the same: constraints on $\Sigma$ : 'The head noun of $\Sigma_{1}$ and the subject of $S$ in $\Sigma_{2}$ have to be [-anaph;-spec;-PRON].

### 4.3 Interrogative and existential sentences

In the previous sections of this chapter the following facts were observed:
(a) Interrogative sentences are related to their corresponding declarative sentences with the appropriate proforms.
(b) The subject and the focus of a sentence can not be [-anaph;-spec].
(c) Existential sentences can contain only [-anaph;-spec].
(d) There are two types of existential sentences in BI/JAV, one with a relativised NP and the other containing a nominalised sentence.

### 4.3.1 Pro-forms

There are words in BI whose meanings are equivalent to something, someone, etc. For example: sesuatu something, seseorang somebody, suatu tempat someplace, suatu waktu sometime, etc. However, the absence of such words in JAV (and in Tagalog, if $I$ am not mistaken) makes it a little suspicious for these words to be considered the pro-forms of wh-questions. In addition to that, there is another morpheme whose phonological shape is the same as the question-words which also occur in JAV. This morpheme is apa. Apa is a root which can be lexically derived into siapa where $s i$ is a person marker, mengAPA (me[+nasal] is a verb marker), etc.

### 4.3.2 The underlying structure of WH-subject interrogatives

Recall that we have rejected the analysis which assumes a declarative SP-construction as the underlying form of an interrogative sentence which questions the subject, on the ground that the requirement for WH-subject interrogatives to be in FP-constructions can not be naturally explained, i.e. ad hoc.

Since siapa is a lexical item, the grammar will generate $\sum$ with siapa, and we get the following:

(117)


Relativisation can be applied to (116) and we get:
(118)

(ll8) looks like the structure from which we want to derive WH-subject interrogatives. The question is why is it that $Q$ can be attached to or occur with only $\Sigma_{1}$ but not $\Sigma_{2}$. We immediately notice that the difference between (116) and (117) is that siapa as the head noun of the relativised NP is a constituent of $\sum$ while siapa in (ll7) is a constituent of an embedded sentence S, and there is a need for a general constraint which disallows interrogative sentences in the imbedded sentences to block the generation of sentences like:
(ll9) *anak itu menyatakan bahwa siapa yang datang state that who come
*The child stated that who came?
(120) *saya mengharapkan kalau siapa yang datang expect that
*I expect that who come?
(119) and (120) are grammatical if they are echo-questions. I assume at the moment that echo-questions are different from WH-questions. For initial treatments of echo-questions in English, see Malone (1968) and Stockwell, Schachter, and Partee (1968:650-651).

This constraint is applicable to the occurrence of $Q$ in relative clauses as well, since the following sentences are ungrammatical:
(121) *anak [yang APANYA patah] datang *The child whose WHAT BROKE came?
(122) *siapa [SIAPA yang membeli sepatu] yang datang *Who WHO BOUGHT SHOES come?

It seems that indirect questions like (123) and (124) below are exceptions, but recall that the constraint is not on the $W H$ placement, i.e. for BI/JAV the constraint is not on the derivation of siapa in the embedded sentence, but on the occurrence of SUBJECT.AUX inversion. In BI/JAV, Q triggers the rising intonation. The constraint is equivalent to the blocking of sentences like (125) :
(123) John wanted to know who was going.
(124) He told me what time it was.
(125) $:$ John told me what time was $i t$ ?

Q-constraint can roughly be stated as follows: $Q$-constraint: ' $Q$ can not occur in the embedded sentence'.

Applying this constraint to (ll8) and (ll7) above, we now reduce the possible candidate for WH-subject questions to (ll8) only. When $Q$ occurs in (ll8), we have (126):
(126)


Now that we have (126), what we need is a justification for fronting the head noun. The following sentences show that a question word siapakah is [-anaph;+spec]:
(127) *anak yang membeli sepatu
*It was any child who bought shoes.
(128) siapakah yang membeli sepatu Who was it who bought shoes?
(129) sepatuNYA yang mahal The shoes are expensive.
(130) apaNYA ẏang mahal Which is expensive?
(131) anak ITU yang membeli sepatu It was the child who bought shoes.
(132) *siapa itu yang membeli sepatu
*(The) who bought shoes?

Sentence (127) is ungrammatical because the focus is [-anaph;-spec], but (128) is grammatical, so siapakah is not [-anaph;-spec]. Sentences (130) and (129) are grammatical because the focus is [-anaph;+spec] (recall that nya is a [+spec] marker), so the question word in (130) is [-anaph;+spec], and (131) is grammatical because the focus is [tanaph;-spec], but (132) is ungrammatical, so the focus must not be [+anaph;-spec]. A question word is [-anaph;+spec], not [-anaph;-spec], nor [+anaph;-spec].
Looking back at (126) above, siapakah in (126) is [-anaph; +spec], and it has been known that $\sum$ must not contain [+spec], so siapakah has to be fronted. The fronting of [+spec] is not a unique rule, since when two existential sentences occur in a discourse and both contain the same noun in the head nouns, the second head noun is pronominalised, which makes the noun [+spec], and when the second existential contains [+spec] the second existential has to be expressed in a non-existential sentence. For example:
(133) ada ANAK membeli sepatu. kemudian ada ANAK membeli jam buy shoes then watch
There was a child who bought shoes. Then, there was a child who bought a watc:h.

When anak in the first existential is identical with anak in the second existential, pronominalisation applies, and anak in the second existential becomes dia he/she. The paraphrase of (133) with identical anak is (134) below:
(134) ada anak membeli sepatu. KEMUDIAN DIA MEMBELI JAM

There was a child who bought shoes. THEN HE BOUGHT A WATCH.
So, fronting of [+spec] in existentials seems to be a general rule. When siapakah in (126) has been fronted, to get the appropriate surface structure we simply delete ada. There are justifications for the existence of ada in the underlying forms and the derivation of the yang-phrase from the relative clause. These justifications will be given later in a more appropriate context. What needs to be stated now is that ada deletion is obligatory in interrogative sentences.

Let us recapitulate what we have discovered so far in this sub-section:
(a) The grammar will generate two kinds of existential sentences $\Sigma_{1}$ and $\Sigma_{2}$ whose formatives may be proforms.
(b) Since siapa is a lexical item, the grammar will generate existentials with siapa, and we get the following:


(c) There is a general constraint which disallows $Q$ in the embedded sentence, which automatically disallows $Q$ in $\Sigma_{2}$, so we get $\Sigma_{1}$ which contains $Q$. The $Q$ should be after the pro-form because this $Q$ is realised as $k a h$ in $B I$, and we have siapaKAH. This kah, however, can later be optionally deleted provided that the rising intonation has been assigned. We now have the following:

where yang is a relative pronoun as a result of relativisation rule.
(d) Since existential can not contain [+spec], and siapakah is [+spec], siapakah is fronted. This gives us:

(e) ada can then be deleted, and we get:


## 5. FOCUS AND PRESUPPOSITION CONSTRUCTIONS

### 5.1 General characteristics of FP-constructions

The general characteristics which distinguish SP from FP-constructions in terms of their different surface structures and usage, have been presented in Chapter l. It might help to understand the difference between these two constructions if we compare the use of the terms focus and presupposition in this work with those of other linguists, like Chomsky, Lakoff, and Halliday.

### 5.1.1 Chomsky's focus and presupposition

Chomsky (1968) cites the following sentences:
CH(38) (a) Is it JOHN who writes poetry?
(b) It isn't JOHN who writes poetry.

CH(39) No, it is BILL who writes poetry.
He then states that:
under normal intonation the capitalised word receives main stress and serves as the point of maximal inflection of the pitch contour. A natural response to (38) might be, for example, (39). The sentence (39) is a possible answer to (38a) and corroboration of (38b). The semantic representation of (38) must indicate, in some manner, that John is the focus of the sentence and that the sentence expresses the presupposition that 'someone writes poetry'. In the natural response, (39), the presupposition of (38) is again expressed, and only the focus differs. On the other hand, a response such as (40) does not express the presupposition of (38). [p.30]

CH(40) No, John writes only short STORIES.
Comparing Chomsky's notion of focus and presupposition with mine, presented in section l, we can immediately see that the terms are used in a very similar, if not exactly the same, manner. To express $\mathrm{CH}(38 \mathrm{a})$, (38b), and (39) in BI, we have to use FP-constructions (135), (136), and (137) respectively:
(135) apa John YANG menulis pantun

Is it John who writes poetry?
(136) BUKAN John YANG menulis pantun not It isn't John who writes poetry.
(137) bukan, Bill YANG menulis pantun No, it is Bill who writes poetry.

Sentences (135)-(137) have the structure:
$\left.\left[\begin{array}{c}Q \\ \mathrm{NEG}\end{array}\right\}\left[\mathrm{NP}[\text { yang-VP }]_{\text {yang-phrase }}\right]_{S}\right]_{S}$
and the focus of (135) and (136) is John, while the focus of (137) is Bill, and all three sentences presuppose that 'someone writes poetry'.

### 5.1.2 Lakoff's focus and presupposition

Lakoff (l97l) says the following about focus:
'Focus' is another traditional notion in grammar. Halliday (1967) describes the information focus as the constituent containing new rather than assumed information. The information focus often has heavy stress. Thus in JOHN washed the car yesterday, the speaker is assuming that the car was washed yesterday and telling the addressee that the person who did it was John. [p.4]

Lakoff seems to use the terms assume and presuppose interchangeably. And his use of the word assuming in the quoted passage above corresponds to Chomsky's presupposition. Furthermore Lakoff states that 'Halliday's account of focus has been adopted by Chomsky (1968)' (p.29). So, it seems clear that my use of the terms focus and presupposition corresponds to the ones used by Halliday and Chomsky, as well as Lakoff.

### 5.2 Constraints on Focus

It was shown in Section 4.4.1 that the subject of an SP-construction must not be [-anaph;-spec]. The following sentences show that the constraint on subject is also applicable to focus:
(138) *anak yang membeli sepatu ?It was any child who bought shoes.
(139) anakNYA yang membeli sepatu It was the child who bought shoes.
(140) anakNYA ITU yang membeli sepatu

It was the child who bought shoes.
(141) anak ITU yang membeli sepatu

It was the child who bought shoes.
(142) *anak [yang lewat] yang membeli sepatu ?It was any child who passed by who bought shoes.
(143) anak [yang lewat TADI PAGI] yang membeli sepatu It was the child who passed by THIS MORNING who bought shoes.
(144) anak [yang lewat] ITU yang membeli sepatu It was the child who passed by who bought shoes.
(145) anak [yang lewat tadi pagi] ITU yang membeli sepatu It was the child who passed by this morning who bought shoes.
(146) DIA yang membeli sepatu It was $H E$ who bought shoes.
(l47) dia ITU yang membeli sepatu ?It was (THAT) HE who bought shoes.
Sentences (138) and (142) are ungrammatical because anak in (138) is [-anaph; -spec], and so is anak in (142), because the relative clause is a non-specific relative clause. Focus constraint: 'The focus of an FP-construction must not be [-anaph;-spec]'.

Note again that the constraint should be stated in terms of the conjunction of the feature [-anaph] and [-spec], because an [-anaph]-noun can be a focus, as in (139), (143), and (146), and so can a [-spec]-noun, as in (141) and (147).

### 5.3 The underlying forms of FP-constructions

Recall that WH-questions have been shown to be derived from existential sentences of the following type:


Since siapakah (kah=Q) is [-anaph;+spec], siapakah is fronted, and after ada is deleted, WH-subject questions - which are in FP-construction like (l49) are generated:
siapakah yang membeli sepatu kemarin
Who was it who bought shoes yesterday?
The following arguments seem to give justifications for deriving FPconstructions from existential sentences like (148) above:
(a) In addition to generating (148) with pro-forms like apa, siapa, etc., the grammar will also generate (148) with regular non-proform nouns as the head noun and the subject of the relative clause. When the head noun and the subject of the relative clause are [-anaph;-spec], existential sentences like (l50) are generated:
(150) ada mahasiswa yang tertembak

There was a student who was shot.
When the head noun and the subject of the relative clause are [-anaph; +spec], ungrammatical existential sentences like (15l) are generated:
> (151) *ada mahasiswa [yang kamu tegur KEMARIN]SpecREL yang tertembak yesterday
> *There was the student who was addressed by you yesterday who was shot.

If (15l) is allowed to be generated and the fronting rule for $N+Q$ which is [-anaph; +spec] is obligatorily applied to (l5l), a grammatical FP-construction is generated:
(152) mahasiswa [yang kamu tegur kemarin] yang tertembak It was the student who was addressed by you who was shot.
However, if (152) were to be generated from an underlying form other than (15l), the grammar would have to have a device to block the generation of (15l) and consider (151) and (149) two distinct constructions.

It seems that the grammar will be simpler if the fronting rule is applied to sentences like (15l) as well, which increases the generality of the fronting rule.
(b) There is a semantic argument which supports the derivation of (152) from (l5l), namely that the ungrammatical sentence (l5l) can be easily given the interpretation whose meaning is the same as (152). The complementary distributions of [-spec] and [+spec] charted below support such a claim:

Focus of FP Head noun in $\Sigma$
$\begin{array}{rr}*[\text {-spec }] & {[\text {-spec }]} \\ {[+ \text { spec }]} & \star[+ \text { spec }]\end{array}$
(c) That the underlying structures of FP -constructions contain ada is evidenced from the presence of ada in the sentences like (153) and (154).
(153) muridmu ada yang sakit student-your sick Some/one of your students are/is sick.
(154) pekerjaan yang kamu tawarkan kemarin ADA yang mengingini job offered by you yesterday wanted The job you offered yesterday is wanted.

In sentences like (153), ada can not be deleted if the focus contains an implied partitive, since (153) without ada will become (155) and the meaning of (155) does not indicate that the focus contains an implied partitive.
(155) muridmu yang sakit

It is your student(s) who are/is sick
In (154) ada can not be deleted, otherwise the sentence is ungrammatical. Sentence (154) is the paraphrase of the existential sentence (156):
(156) ada orang yang mengingini pekerjaan yang kamu tawarkan kemarin person want job offered by you There was somebody who wanted the job you offered yesterday.

Again, since sentences like (153) and (154) are FP-constructions, the grammar will be simpler if the underlying forms of (153), (152), and (150) are in the same construction, i.e. the existential sentences having the structure (148) above.
(d) The derivation of FP -constructions from existential sentences containing a relativised noun implies that the yang-phrase is derived from a relative clause. There is a syntactical argument which suggests that that should be the case.

There is a constraint in BI/JAV (and Tagalog as well) which disallows relative clauses of the following type:
(157) [*anak [yang Amat melihat] ${ }_{\text {Rel }}$ itu $]_{\mathrm{NP}}$ The child Amat saw

Sentence (157) has the following structure:


The constraint is that the head noun has to be identical with the subject of the embedded sentence for relativisation to apply. (157) has a head noun anak which is identical with object of the embedded sentence, so relativisation is disallowed. This kind of constraint apparently does not exist in English, since the English NP in (157) is well-formed. In other words, both (157) and (158) below are well-formed in English, but only (158) is well-formed in BI/JAV and Tagalog.
(158)

[anak [yang melihat Amat] itu]
The same constraint has to be imposed on yang-phrases as well, as shown from the following contrast:
(159) [anak itu] Focus $^{\text {[yang MELIHAT AMAT] }}$ y ang-P

It is the child WHO SAW AMAT.
(160) $*[$ anak itu] [yang AMAT MELIHAT]

It is the child WHO AMAT SAW.

Cases (157)-(160) constitute a strong indication for the appropriateness of deriving yang-phrase from the underlying relative clause.
As a result of deriving FP -constructions from existential sentences, the surface structure of FP -constructions is (161):
(161)


We shall see if this is the proper surface structure. There is an optional rule in BI/JAV which allows the order of certain constituents to be reversed. These are the subject-predicate and focus-presupposition. Since the rule is to derive stylistic variants, nothing is changed, including the intonation. We thus allow the following variants:
(162) [anak itu] [melihat Amat] = [melihat Amat] [anak itu] The child saw Amat.
(163) [anak itu] [yang melihat Amat] = [yang melihat Amat] [anak itu] It is the child who saw Amat.
Given the surface structure (161) and [NP+VP] ${ }_{S P}$ the rule can simply be stated as: [NP, VP] $\rightarrow$ [VP, NP] (Optional) which is more general than having separate structural descriptions for SP and FP-constructions. In addition, it is appropriate to not consider the yang-phrase a relative clause any more in the surface, because a head noun and a relative clause can not undergo this stylistic variant rule. In other words, $[\mathrm{N}[\mathrm{Rel}]]$ can not be reversed into *[ [ Rel $] \mathrm{N}]$.
(e) Recall that to block wH-subject questions in SP-constructions we use a constraint which allows only the constituents of $\Sigma$, and not the constituents of the embedded sentence $S$, to be fronted. Such a constraint is also needed to block the generation of other ill-formed sentences below. The grammar will generate strings like (164):
(164)


The constraint states that only the head noun of the relativised noun above can be fronted, otherwise the subject of $S$ can be fronted and we get an ungrammatical sentence (165):
(165) *Amat [anak melihat anak] cf. (163)
and similarly, the fronting of the object of $S$ will also derive an ungrammatical sentence (166):
(166) *anak [anak Amat melihat]

Recall also that there is a constraint on relativisation, i.e. that the head noun has to be identical with the subject of the embedded sentence. Sentence (162) does not satisfy this constraint. But, if a passive rule is applied first, the subject and object of $S$ will be interchanged, in addition to changing the active verb-marker me[+nasal] with the passive verb-marker di. As a result anak becomes the subject of $S$, and it is identical with the head noun anak, thus relativisation applies. When the head noun anak is fronted, and ada is deleted, we get the appropriate sentence (l67):
(167) anak itu [yang DIlihat Amat]

It is the child who was seen by Amat.
It thus seems safe to conclude that the underlying forms of FP-constructions are existential sentences containing a relative noun like (148).

### 5.4 The derivation of FP-constructions from

 the underlying existential sentencesThe grammar will generate existential sentences like (168):
(168) cf. (148)


When the lexical items attached to the head noun and the subject of the relative clause in (168) are [-anaph;-spec;-PRON], existential sentences like (107) and (lll) are generated. When the lexical items are [-anaph;+spec;-PRON] the head noun should be fronted, after relativisation which deletes the subject of $S$ and adds yang, has been applied. Then ada can be deleted when certain presently unspecified conditions are met. The result is the generation of FPconstructions like (139) and (143).

Note that the anaphoric process may convert [-anaph;-spec;-PRON] and [-anaph; +spec;-PRON] into [tanaph;-spec;-PRON] and [+anaph;+spec;-PRON] respectively, and when (148) contains these items, ungrammatical existential sentences like
(109), (110), (112), and (113) will be generated. But if after relativisation the [ +anaph] head noun is fronted, the result is the generation of FP-constructions like (140) and (145). So, the fronting rule should roughly be stated as follows: Fronting: 'when the head noun of existential sentence contains a noun which is not [-anaph;-spec;-PRON], the noun has to be fronted'.
Pronominalisation will convert [-anaph;-spec;-PRON] into [-anaph;+spec; +PRON], and when the latter is fronted, the result is FP-constructions like (146).
When pronominalisation and anaphora are applied, [-anaph;-spec;-PRON] is converted into [+anaph;+spec;+PRON], and the fronting of the latter will result in the generation of FP -constructions like (147).

### 5.5 The semantic interpretation of focus and presupposition

It has been stated before that FP -constructions have some presuppositions. For example, in sentences like:
(169) anak itu yang membeli sepatu

It is the child who bought shoes. cf. (3)
the sentence presupposes that a [-anaph;-spec]-child bought shoes, and the focus simply specifies the child which is presupposed to buy shoes. The analysis of FP -constructions presented in this section seems to come very close to giving such meaning to FP-constructions. The presupposition is the embedded sentence $S$, and the new information is supplied by the feature [spec] in the head noun.

In section 1 we learn that BI/JAV have some markers which indicate that focus may either supplement the information given by a presupposition, contradict the presupposition, or confirm the presupposition. Notice that this may be explainable in terms of the values of [spec] in the head noun and the subject of the relative clause. Since roots can be either [-spec] or [+spec], we can have the following situations:

|  | Head noun | Subject of Rel |
| :--- | :--- | :--- |
| (a) | $[+$ spec $]$ | $[$-spec $]$ |
| (b) | $[+$ spec $]$ | $[+$ spec $]$ |
| (c) | $[-$ spec $]$ | $[-$ spec $]$ |
| (d) | $[$-spec $]$ | $[+$ spec $]$ |

(a) seems to be a situation in which the focus specifies the presupposition, (b) seems to be a situation in which the focus confirms the presupposition, (c) is the existential sentence, and (d) seems to be a situation where the focus contradicts the presupposition. In other words, situation (a) gives the meaning of (169) as: a child who you presuppose bought shoes is that specific child, and situation (b) gives the meaning of (169) as: I confirm that the specific child who you presuppose bought shoes is this specific child, situation (c) is probably the meaning of the existential sentence, and situation (d) generates sentences like: I don't know who it is who bought shoes, but not that particular child.
All these are still speculations which need further confirmation from observation of much more data.

What I want to say in this section is that the derivation of both SP as well as FP-constructions from their corresponding existential sentences seems to have semantic justifications as well. Of course this is only valid when the association of presupposition and the features [spec] can be accounted for in a more general way. Such an account is beyond the scope of the present work.

## 6. SUBJECT-PREDICATE CONSTRUCTIONS

### 6.1 SP-constructions and existential sentences

In section 2.3, we noticed that WH-subject questions have to be in FPconstruction. After observing the characteristics of nouns in general in section 3, we concluded in section 4 that, on the basis of the constraints on the subject of a sentence, the requirement of $F P$-construction in WH-subjectquestions can be syntactically explained by the use of a general constraint on the occurrence of $Q$. This constraint disallows the attachment of $Q$ to the subject of $S$ which is embedded in $\sum$. Let us look at the two types of $\sum$ 's again, since it is crucial at this stage:



In order to generate WH-subject questions in FP-construction, and not in SPconstruction, the Q-constraint only allows the attachment of $Q$ to $N$ in $\Sigma_{1}$, which I underlined. This is the crucial part: Q can not occur in the subject of $S$ in $\Sigma_{1}$ by the fact that $S$ is embedded in $\Sigma$. This means that $S P-c o n s t r u c t i o n s$ have to be derived from this $\sum$, since if $S$ is the initial, topmost $S$, it is no longer embedded, and $Q$ can occur, and WH-subject questions in SP-construction are generated. We thus have no choice, unless of course, we can suggest another underlying form for SP-constructions where $S$ is an embedded sentence.

The following arguments, similar to the ones which support the derivation of FP-constructions from existential sentences of type $\Sigma_{1}$, seem to support the derivation of $S P-c o n s t r u c t i o n s$ from existential sentences of type $\Sigma_{2}$ :
(a) The SP-construction with [-spec] (170) below is the paraphrase of the existential sentence with [-spec] (171), and the SP-construction with [+spec]
(172) is the paraphrase of the existential sentence with [+spec] (173):
(170) *anak membeli sepatu A child bought shoes.
(171) ada anak membeli sepatu

There was a child buying shoes.
(172) anakNYA membeli sepatu The child bought shoes.
(173) *ada anakNYA membeli sepatu
*There was the child buying shoes.
Note that [+spec] and [-spec] are in complementary distribution:
Subject of $S P$ Subject of $S$ in $\Sigma_{2}$
$\begin{array}{rr}\star[\text {-spec }] & {[\text {-spec }]} \\ {[\text { +spec }]} & \star[\text { +spec }]\end{array}$
(b) There is a dialect of BI which allows ada in SP-constructions.

For example, compare the following:
(a) anak itu membuat pakaian
(b) anak itu ADA membuat pakaian

The child made a dress.
(a) muridmu membeli radio
(b) muridmu ADA membeli radio

Your student bought a radio.
Even if sentences like (174b) and (l75b) are non-standard BI, such a variant would be impossible to explain unless we assume that ada is present in the underlying forms of (174a) and (175a).

### 6.1.1 The derivation of SP-constructions from $\Sigma_{2}$

It has been shown in section 5.5.2 that the subject of FP-constructions must not be [-anaph;-spec], and the subject of $S$ in $\Sigma_{l}$ must be [-anaph;-spec]. This means that when the subject of $S$ is either [+anaph;-spec], [+anaph; +spec] or [-anaph;+spec], it has to be fronted, and after ada has been deleted, FPconstructions are generated.

It was also stated in section 5 that only certain constituents which meet certain conditions can be fronted to derive the appropriate FP-constructions. At that stage, we simply used the same requirement for the presence of $Q$ for a constituent to be qualified for fronting, i.e. that the constituent must not be the constituent of an embedded sentence. Actually, as far as fronting is concerned, what we want is to allow only the underlined $N$ in $\Sigma_{l}$ to be fronted. Instead of using the $Q$-constraint which is stated in terms of embedded sentence, we can change the requirement by stating that only the leftmost node which is not [-anaph;-spec] can be fronted. Remember, this is only for fronting, not Q-constraint, so Q-constraint is stated in terms of embedding and frontingconstraint is in terms of leftmost node.

Given the above fronting-constraint, when the subject of $S$ in $\Sigma_{2}$ is not [-anaph;-spec] it is qualified for fronting, and after the deletion of ada, we get SP-constructions, whose derivations are the same as when we derive FP-constructions. The only difference is that the underlying forms of SPconstructions are $\Sigma_{2}$ and the underlying forms of FP -constructions are $\Sigma_{1}$.

Notice that the fronting-constraint will block the fronting of the object of $S$, if it is not [-anaph;-spec] since unless passive rule is applied first, so that the object is moved to the subject position, the object will not be the leftmost constituent. Without the fronting-constraint above, ungrammatical sentences like (176) and (177) will be generated, but with this constraint only sentences like (178) and (179) will be derived:
(176) *muridmu orang lelaki memukul your student man hit
*Your student a man hit.
(177) *orang lelaki itu muridmu dipukul
*The man your student was hit.
(178) muridmu dipukul orang lelaki Your student was hit by a man.
(179) orang lelaki itu memukul muridmu The man hit your student.

### 6.2 Summary

So far, we have the following situations:
(a) The grammar generates two kinds of $\sum$ 's, one with a relativised roun and the other with a complement structure.
(b) A subject or a focus must not be [-anaph;-spec], but the head noun in $\sum_{1}$ and the subject of $S$ in $\sum_{2}$ must be [-anaph;-spec].
(c) There is a constraint on the occurrence of $Q$, which can be stated as follows:
$Q$-constraint: $Q$ should not occur in the embedded sentence.
This constraint allows only the occurrence of $Q$ in the $F P-c o n s t r u c t i o n s$. $\mathrm{N}+Q$ is [-anaph;+spec].
(d) There is a constraint on fronting, which can be stated as follows: Fronting constraint: A noun can be fronted if this noun is the leftmost constituent which is not [-anaph;-spec].
(e) When a $\sum$ contains a noun other than [-anaph;-spec] and this noun is the leftmost constituent, one of the following can be generated:
(1) WH-subject questions in FP-constructions, which should now be called WH-focus questions. If passive rule is applied, the focus can also be the object of $S$, or more generally, the surface focus can be the deep subject or the deep object.
(2) FP-constructions whose focus can be either the deep subject or the deep object, depending on whether the passive rule is applied or not.
(3) SP-constructions whose surface subject can be either the deep subject or the deep object, depending on whether the passive rule is applied.
(f) Sentences whose focus or subject is [tanaph] acquire [tanaph] from anaphoric processes.
(g) Sentences generated so far only involved the deep subject and object. It will be shown later that sentences involving other constituents, like verbs, can be generated without any special rules.
(h) SP and FP-constructions have different underlying forms, but the rules to generate these constructions are exactly the same.
(i) There is no need to have a special node Focus, Subject, Presupposition, or Predicate.
(j) The rules to generate these two constructions are meaning-preserving transformations.

## 7. TOPIC-COMMENT INSTRUCTIONS

### 7.1 Terminology

TC-constructions in BI/JAV are represented by sentence (180):
(180) anak itu, dia membeli sepatu
child he/she buy shoes child he/she buy shoes The child, he/she bought shoes. cf. (2)
Sentence (180) consists of an NP followed by a sentence whose subject is dia which refers to the first NP. In (180) anak itu is called the topic and the sentence following the topic is called the comment. Let us first compare my use of these labels with those used by other linguists, for example Hockett (1958) and Lakoff (1971).

### 7.1.1 Hockett's topic and comment

In talking about Predicative Constructions Hockett (1958:201) states that 'The most general characterization of predicative constructions is suggested by the terms "topic" and "comment" for their IC's: the speaker announces the topic and then says something about it'. He then gives the following sentences:
(181) John ran away.
(182) That new book by Thomas Guernsey, I haven't read it yet.
and says further that 'in English and the familiar languages of Europe, topics are usually also subjects, and comments are predicates, as in John ran away. But this identification fails sometimes in colloquial English, regularly in certain special situations in formal English and more generally in some nonEuropean languages' (p.201). Hockett further states that the that new book by Thomas Guernsey in (182) above 'is spoken first because it specifies what the speaker is going to talk about: it is the topic of the sentence'.
Hockett distinguishes (181), which is SP-construction in this work, and (182), which is considered TC-construction in this work, but he also assumes that (181) and (182) share something in common. We can suspect that Hockett would treat FP -constructions the same way. In a sense he is right that all three constructions have a lot in common, which agrees with the analysis given in this
work. The difference is that this work formally spells out their syntactical and semantic differences, as well as their similarities. The striking similarities among these three constructions are the set of transformational rules which they all share.

### 7.1.2 Lakoff's topic

Lakoff (1971) has the following to say about topic: 'The notion of "topic" is an ancient one in the history of grammatical investigation. Grammarians have long recognised that sentences have special devices for indicating what is under discussion' (p.4). He then cites the following sentences:
(183) John, Mary hates him.
(184) Mary, she hates John.

He calls John in (183) and Mary in (184) the topics, but does not label the constituents following the topics. He also discusses sentences like the following, which he cites from Klima, without specific reference (pp.30-31):

L(39) a. It is easy to play sonatas on this violin.
b. This violin is easy to play sonatas on.
c. Sonatas are easy to play on this violin.

He considers (a) is neutral with respect to topic, (b) has this violin as its topic, and (c) has sonatas as its topic. He further cites the following sentences (underlinings are mine):

L(41) a. Concerning sonatas, it is easy to play them on this violin.
b. Concerning sonatas, they are easy to play on this violin.
c. Sonatas are easy to play on this violin.

L(42) a. About this violin, it is easy to play sonatas on it.
b. About this violin, it is easy to play sonatas on.
c. This violin is easy to play sonatas on.

He states that 'predicates "be about" and "concern" are two-place relations, whose arguments are a description of a proposition or discourse and the item which is the topic of that proposition or discourse'. Conflicts in topics will result in the following ill-formed sentences:

L(43) ?*About sonatas, this violin is easy to play them on
L(44) ? *About this violin, sonatas are easy to play on it.
He notices that (43) and (44) are grammatical for those speakers who admit more than one topic in such sentences.

My notion of topic is very close to, if not the same as, that of Lakoff. Sentence (180) can be elaborated to mean:
(185) Concerning the child (I assume you know which one I am referring to), I have the following comment: he bought shoes.

### 7.2 Constraints on topics

Let us observe the following sentences to discover the types of nouns which can constitute a topic. As is the case with SP and FP-constructions, we shall limit our observation to topics which correspond to the subjects of the comments first. In the next section, more cases will be discussed.
(186) *anak, dia membeli sepatu
*A child, he bought shoes.
(187) *anakNYA, dia membeli sepatu
*The child, he bought shoes.
(188) anakNYA ITU, dia membeli sepatu The child, he bought shoes.
(189) anak ITU, dia membeli sepatu The child, he bought shoes.
(190) *anak [yang lewat], dia membeli sepatu ?A child who passed by, he bought shoes.
(191) *anak [yang lewat tadi pagi], dia membeli sepatu ?The child who passed by this morning, he bought shoes.
(192) anak [yang lewat] ITU, dia membeli sepatu
?The child who passed by, he bought shoes.
(193) anak [yang lewat tadi pagi] ITU, dia membeli sepatu ?The child who passed by this morning, he bought shoes.
(194) *dia, dia membeli sepatu He, he bought shoes.
(195) ?dia itu, dia membeli sepatu
*(That) he, he bought shoes.
(196) $*[\text { siapa membeli sepatu }]_{\text {SP }}$ Who bought shoes?
(197) [siapa yang membeli sepatu] ${ }_{\text {FP }}$ Who was it who bought shoes?
(198) $*[\text { siapa, dia membeli sepatu }]_{\text {TC }}$
*Who, he bought shoes?
(199) $*[\text { siapa, siapa membeli sepatu }]_{T C}$
*Who, who bought shoes?
Sentences (186)-(199) show that only [+anaph]-nouns can be the topic of a sentence. Sentence (195) is definitely grammatical when a phrase like saya kira I think is in between the topic and its comment. For example:
(200) dia itu, SAYA KIRA dia membeli sepatu ?He, I think he bought shoes. cf. (195)
As a matter of fact TC -constructions are generally used with short phrases like 'I think' between the topic and its comment. In other words, the addition of phrases like saya kira increase the acceptability of TC -sentences, although the grammaticality of sentences like (188) seem unquestionable.

The following is a comparison between the constraint in topic of TC-constructions and the subject of $S P$-constructions and the focus of FP-constructions:

Topic

Subject/Focus

$$
\begin{aligned}
& \text { *[-anaph;-spec] } \\
& \text { [-anaph; +spec] } \\
& \text { [-anaph; +spec; +PRON] } \\
& \text { [+anaph; +spec;+PRON] } \\
& \text { [tanaph;-spec] } \\
& \text { [+anaph; +spec }] \\
& \begin{array}{c}
*[[\text {-anaph; }+ \text { spec }]+Q]_{\text {Subject }} \\
{[[\text {-anaph; }+ \text { spec }]+Q]_{\text {Focus }}}
\end{array}
\end{aligned}
$$

Note that a topic must be [+anaph]-noun and a subject or a topic must not be [-anaph;-spec]. The topic is different from subject and focus in that (2) and (3) are not allowed to be topics, but they are allowed to be subjects or foci, and that only a focus can be questioned.

### 7.3 The properties of comments

The comment of a TC-construction is a full sentence, and so far we have distinguished two types of sentences: SP and FP-constructions. The following sentences show that the comment of a TC-construction can be either SP-construction or FP-construction:
> (201) anak itu, $\left\{\begin{array}{l}\text { dia membeli sepatu } \\ \text { That child, he bought shoes. } \\ \text { dia yang membeli sepatu } \\ \text { That child, it was he who bought shoes. }\end{array}\right.$
> (202) *anak, $\left\{\begin{array}{l}\text { dia membeli sepatu } \\ { }^{*} A \text { child, he bought shoes. } \\ \text { dia yang membeli sepatu } \\ { }^{*} A \text { child, it is he who bought shoes. }\end{array}\right.$

Notice also that the type of comment in a TC-construction does not affect its topic; the requirement for a topic remains the same: a topic has to be [tanaph]. The following sentences show that the subject or the focus of a comment must be [-anaph;+spec;+PRON]:
(203) (a) *anak itu, dia ITU membeli sepatu *That child, (that) he bought shoes.
(b) *anak itu, dia ITU yang membeli sepatu *That child, it was (that) he/him who bought shoes.
(204)
(a) *anak itu, anak (yang) membeli sepatu *That child, $\left\{\begin{array}{l}\text { a child bought shoes. } \\ i t\end{array}\right.$ *That child, $\{$ it was a child who bought shoes.
(b) *anak itu, anaknya (yang) membeli sepatu ?That child, $\left\{\begin{array}{l}\text { the child bought shoes. } \\ \text { it was the child who bought shoes. }\end{array}\right.$
(c) *anak itu anakNYA ITU (yang) membeli sepatu ?That child, $\left\{\begin{array}{l}\text { the child bought shoes. }\end{array}\right.$ it was the child who bought shoes.
The subject of the comment in (203a) is dia itu which is [+anaph;+spec;+PRON], and so is the focus of the comment in (203b). The subject and the focus of the comment in (204a) is anak, which is [-anaph;-spec;-PRON], the subject and the focus of the comment in (204b) is anaknya, which is [-anaph;+spec;-PRON], and the subject and the focus of the comment in (204c) is anaknya $i t u$, which is [+anaph;+spec;-PRON], and (203a,b) and (204a,b,c) are all ungrammatical.
Notice that the grammatical sentences in (186)-(199) are the ones whose subject of the comment is [-anaph;+spec;+PRON].

### 7.4 The derivation of TC-constructions

Let us first of all observe more carefully the possible nouns which can be a topic and the nouns which can be a subject or a focus of the comment:

A topic must be either:
(a) [tanaph;-spec;-PRON] as in (189) and (192),
(b) $[$ tanaph; +spec;-PRON $]$ as in (188) and (193), or
(c) $[$ tanaph;+spec;+PRON $]$ as in (195).

A subject or a focus of a comment must be:
(d) [-anaph;+spec;+PRON].

It is obvious that the topic and the subject or the focus of the comment have to have the same referent, which means that (c) is the anaphoric form of (d), or that (d) is the antecedent of (c). Furthermore, (d) must be a result of a pronominalisation, which means that the underlying form of (d) must be either:
(e) [-anaph;-spec;-PRON], or
(f) $[$-anaph;+spec;-PRON $]$.

Note that (e) is the antecedent of (a) and (f) is the antecedent of (b). The relationship between (a), (b), (c) and (d), (e), and (f) clearly shows that the topic is the anaphoric form of the subject or focus in the comment, which means that the underlying form of a TC-construction is not something like (205):
(205)


Given (205) there is no way to get (a)-(e), (b)-(f), and (c)-(d) relationships, where (e), (f) and (d) are the antecedents of (a), (b), and (c) respectively. The only way that I know of, which intuitively seems correct, is to consider the first NP in (205) the copy of the second NP, which means that the underlying forms of TC-constructions are SP- and FP-constructions. Since it will be simpler to derive TC -constructions from the underlying existential sentences rather than from the surface SP - and FP -constructions, i.e. the latter will require an intermediate step while the former does not, I will assume that

TC-constructions are directly derived from the existential sentences which underlie SP- and FP-constructions. To acquire the appropriate forms and surface structures anaphoric rules, pronominalisation, copying, and fronting should be applied in a certain order, and two different domains have to be distinguished: E-domain and VP-domain. If a rule is to be applied within the VP-domain, then the rule must not be applied to constituents outside VP. If a rule is to be applied within $\sum$-domain, then anything under $\sum$ is affected by the rule. Given the $\Sigma_{1}$ which underlies SP-constructions and $\sum_{2}$ which underlies FP-constructions, the rules to generate TC -constructions consist of the following, in the order given:

TC-RULES :

$$
\begin{aligned}
& \text { TC-1: Copying: }[\ldots N P \ldots]_{\mathrm{VP}} \rightarrow[\ldots \mathrm{NP}-\mathrm{NP} \ldots]_{\mathrm{VP}} \\
& \text { TC-2: Anaph: }[\ldots N P-N P \ldots]_{V P} \rightarrow[\ldots N P-N P+i t u \ldots]_{V P} \\
& T C-3:\left\{\begin{array}{l}
\text { Fronting: }[\ldots . \text { ada, NP-NP+itu] } \rightarrow[\ldots N P+i t u, \text { ada, NP....] } \\
V P-P r o n o m:[\ldots N P-N P+i t u . . .]_{V P} \rightarrow[\ldots N P-d i a+i t u . . .]_{V P}
\end{array}\right\} \\
& \text { TC-4: } \sum \text {-Pronom: [...NP+itu, ada, NP...] } \rightarrow \text { [...NP+itu, ada, dia...] } \\
& \text { TC-5: Fronting: [...ada, NP, } \left.\left\{\begin{array}{l}
\text { NP-itu } \\
\text { dia-itu }
\end{array}\right\} \ldots\right] \rightarrow\left[\ldots\left\{\begin{array}{l}
\text { NP-itu } \\
d i a-i t u
\end{array}\right\}\right. \text {, ada, NP....] }
\end{aligned}
$$

Note that $\mathrm{TC}-3$ is a conjunctive rule, and $\mathrm{TC}-5$ will not apply if Fronting is selected in TC-3, but TC-5 will apply if VP-Pronom is applied for TC-3.

## APPLICATION:

(l) To get (a)-(d) combination, the rules to be applied are:

| Base: |  | -an;-spec;-P] |
| :---: | :---: | :---: |
| TC-1: | Copying: | [-an;-spec;-P] [-an;-spec;-P] |
| TC-2: | Anaph: | [-an;-spec;-P] [ +an;-spec;-P] |
| TC-3: | Fronting: | [ +an;-spec;-P] [-an;-spec; -P] |
| TC-4: | S-Pronom: | [ +an;-spec;-P] [-an; +spec; +P ] |
| TC-5: | Fronting: | does not apply |
| Result: | (163) | N - itu . . dia |

(2) To get (b)-(d) combination, the rules to be applied are:

| Base: |  | $n ;+$ spec $;-\mathrm{P}]$ |  |
| :---: | :---: | :---: | :---: |
| TC-1: | Copying: | -an; +spec;-P] | ; +spec; -P |
| TC-2: | Anaph: | [-an;+spec;-P] | +an; +spec; -P |
| TC-3: | Fronting: | [+an; +spec; -P] | -an; +spec; -P |
| TC-4 : | E-Pronom: | [ +an; +spec; -P] | -an;+spec; +P$]$ |
| TC-5 : | Fronting: | does not apply |  |
| Result: | (188) | N - nya - it | U ... dia |

(3) To get (c)-(d) combination, the rules to be applied are:


```
Second application of TC-rules:
TC-1, TC-2, TC-3 do not apply
TC-4: \sum-Pronom [+an;+spec;+P][-an;+spec;+P]
TC-5: Fronting: does not apply
Result: (195) dia itu ... dia ...
```


### 7.4.1 Sample derivations



ada-deletion:

(206) anak itu, dia yang membeli sepatu That child, it was he who bought shoes. cf. (201)

### 7.5 The implication of copying transformation to the hypothesis of meaning-preserving transformations

From purely syntactical evidence, we are forced to assume that TC-constructions are derived from the underlying forms of $S P$ - and FP-constructions by applying a copying transformation. The copying transformation is optional and non-meaningpreserving.

There is a way to maintain the hypothesis of meaning-preserving transformations by positing a formative like TOP in the underlying forms whose function is like Q, i.e. to trigger a transformation. For TOP, it triggers copying transformation. To do that, however, we have to look for semantic as well as syntactical justifications for the assumption that TOP is present in the underlying forms of TC-constructions. Lakoff (1968) seems to imply that the presence of sentences like: concerning that child, he bought shoes, or about that violin, it is easy to play a sonata on, etc., may indicate that the presence of TOP in the underlying forms is justified. At the moment, I have not been able to find any syntactical or semantic evidence to support such an assumption, and so I will assume that the generation of TC-constructions has to make use of a non-meaning-preserring transformation, i.e. copying transformation.

## 8. EXISTENTIAL ANALYSIS OF BAHASA INDONESIA AND JAVANESE

Our observation of the behaviour of WH-focus questions, subject, focus, and topic of a sentence has provided us with strong indications that the underlying forms for all three major constructions in BI/JAV, i.e. SP, FP, and TCconstructions, are existential sentences. Let me refer to this analysis as an existential analysis. The evidence for such an analysis presented in previous sections has been based solely on subject and later also object of the sentence embedded in the existential sentence. In this section we will observe the other parts of the sentence and find out if the analysis presented in the previous sections can handle other cases without extra ad hoc rules.

### 8.1 Interrogative sentences

8.1.1 WH-subject, WH-focus, and WH-topic

It has been shown that among the subject, focus, and topic of a sentence, only the focus can be questioned. Let us briefly review how the existential analysis generates one and blocks the other two:
(a) The base rules generate two kinds of existential sentences; one is ada followed by a relativised noun and the other is ada followed by a sentence complement. The generation of wh-subject is blocked by a general constraint which disallows the presence of $Q$ in the embedded sentence. The requirement for fronting is that an element should be the leftmost node which is not [-anaph;-spec], and since $N+Q$ is [-anaph;+spec], they can be fronted if they are in the head noun of the relativised NP, since the head noun is the leftmost constituent. The result is the proper generation of wh-focus questions. Because a passive rule can be applied (the rule is optional), the element which is fronted can also be the object of the embedded sentence. So we can generate both WH-subject-focus questions as well as WH-object-focus questions.
(b) To generate TC-constructions, the requirement is that the leftmost node has to be a node which is not [-anaph;-spec]. Depending on which existential sentence is generated, a TC-construction may have an SP-comment or FP-comment. After copying, an anaphoric rule which makes the copy [tanaph] is obligatory. Recall that $Q$ can occur only with [-anaph]-noun, and when the anaphoric rule makes the N of $\mathrm{N}+\mathrm{Q}$ into [tanaph], this [tanaph]-noun is no longer compatible with the strict-subcategorisation feature of $Q$, and so the [+anaph]+Q are marked ill-formed by the general rule.

So, general constraints of $Q$, fronting, and copying allow the generation of WH-focus questions (both subject and object) and prevent the questioning of a subject and a topic.

### 8.1.2 Yang mana (which) questions

The following sentences show that only yang mana-focus occurs in BI/JAV and not yang mana-subject or yang mana-topic:
(207) :ANAK YANG MANA membeli sepatu child which
*Which child bought shoes?
(208) ANAK YANG MANA YANG membeli sepatu WHICH CHILD bought shoes?
(209) *anak yang mana, dia membeli sepatu
*Which child, he bought shoes?
Yang mana is only allowed in (208), which is an FP-construction, i.e. the focus is anak yang mana. Let us see if we can generate the appropriate sentence and block the ill-formed ones.
(a) To get yang mana questions we have to have a relativised focus, so we should start with the following:


The $Q$-constraint disallows the realisation of pro-form+Q into a question-word, since the only pro-form is in the embedded sentence. (VP is actually a phrase consisting of one or more pro-forms.) But if we apply the relativisation rule which attaches yang to the main VP and apply the pruning of $S$, the pro-form will come out from an embedded sentence. Let us look at the relativised NP only:


## Pruning



Let me first show how this Q-constraint ought to be formally stated. Recall that question-words such as siapakah, apakah, etc., are [-anaph;+spec], but apa, which is a root, is always [-anaph;-spec]. This means that o has the same effect on the noun as SpecREL: Q converts [-spec] into [+spec]. The constraint can be viewed as the condition which should be met for the conversion of [-spec] into [+spec] as follows:

Q-constraint:
$\left[\left[\begin{array}{l}\text { +pro-form } \\ \text {-anaph } \\ - \text { spec }\end{array}\right]+Q\right]_{W H} \rightarrow\left[\left[\begin{array}{l}\text { +pro-form } \\ \text {-anaph } \\ + \text { spec }\end{array}\right]+Q\right]_{W H}$
Condition: WH is not an element of an embedded sentence.
This means that $Q$ is already attached to pro-form in the underlying form, since semantic interpretation is given to this underlying form, but the 'spreading' transformation which converts [-spec] into [+spec] can not be applied until pro-form $+Q$ comes out from the embedded sentence. This can be accomplished by the application of relativisation and pruning. The result of the application of these two rules is as follows:

[anak yang [pro-form]+Q] ${ }_{N P}$ is now the leftmost [+spec] constituent which qualifies the NP to be fronted, and we get the following, after ada deletion:

and the VP-NP-VP string of dominance in the yang-phrase cancels the NP, and the final surface structure is as follows:


The pro-form mana is a phonetic realisation of a string of apa's, i.e. the details should be:

where [pro][pro] becomes mana. Mana is also used in di mana where, which comes from di + Locative + apa, where Locative can be dalam inside, luar outside, etc.

Compare: di dal am apa inside what?, di mana where?, but *di dal am mana, which shows that Loc + apa $\rightarrow$ mana.

Let us now see how yang mana-questions in SP-constructions are blocked. We start with SP-existential below:


Note that there is no way to prune S-1, and [+pro-form] will still be in an embedded $S-1$, even after the relativisation rule is applied. So, the general $Q$-constraint disallows the derivation of the ungrammatical sentence (207) above.

Will yang mana in topic be blocked too? The answer is yes. When yang mana occurs in FP-existential, as in $\sum$ on the previous page, although VP is no longer under an embedded sentence as a result of relativisation, after copying is applied [-anaph;-spec;-pro-form] is made [tanaph] by anaphoric rule which disallows $Q$ to occur with it. When yang mana occurs in SP-existential above, it can never be copied because the VP will never become the leftmost constituent.

The derivation of the proper yang mana-questions as well as the blocking of the improper yang mana-questions are taken care of by the same constraints on $Q$, requirements for fronting, and requirements for copying. The only addition is the application of Ross's tree pruning stated in Ross (1963).

### 8.1.3 WH-verbs

The verb phrase in $B I / J A V$ can also be questioned, and all three constructions can contain WH-verbs, as shown from the following sentences:
(210) anak itu MENGAPA What did the child do?
(2ll) anak itu YANG MENGAPA
What did THE CHILD do?
(212) anak itu, dia MENGAPA

That child, what did he do?
(213) anak itu, dia YANG MENGAPA

That child, what did $H E$ do?
Note that (210) is an SP-construction, (211) is an FP-construction, (2l2) is a TC-construction with SP-comment, and (213) is a TC with FP-comment. We shall see why all four of them can be generated, or how the present analysis can generate all four.

Let us start with an SP-existential sentence below:


The Q-constraint prevents the realisation of pro-form $+Q$ into a question-word because VP is in the embedded sentence. So, how are we going to get the VP out? Let us take another look at WH-verb questions above. Note that anak itu in (210)-(213) is either a subject, focus, or topic, and each of them can not be [-anaph;-spec], which means that in order to get (210)-(213), anak in the existential sentences must not be [-anaph;-spec]. Now, if anak is not [-anaph;-spec], it is qualified to be fronted, so we get:


After the fronting, ada can be deleted. The nodes between the topmost VP and the lowest VP, and the lowest VP can be deleted, since VP dominates NP which dominates $S$ which in turn dominates VP. The pro-form $+Q$ can now be realised as a question-word, and we get:


Let us now look at an FP-existential sentence, and see whether WH-verb in FPconstruction can be generated:


Q-constraint disallows the realisation of pro-form $+Q$, because VP is in the embedded S. But anak can be [tanaph], and after relativisation is applied we get:


Anak itu can be fronted, ada is deleted, $N P$ and $S$ under VP are deleted, and we get:

and pro-form $+Q$ can now be realised, because VP is no longer under an embedded sentence and we get:
(214) anak itu yang mengapa cf. (211)

We come now to TC-constructions. Note that even after copying and fronting of anak itu, VP can never get out of $S$. This suggests that the surface structure for $T C$-constructions given before is not exactly correct; as is the case with relativised NP, the rule should also front the original NP rather than letting it remain under $S$. Observe the following after copying is applied, and ada is deleted.


Instead of the above structure, the structure should be:


Given the second surface structure, tree pruning can now be applied and the lowest VP will no longer be in the embedded $S$.

Let us pause and justify the modifications for the surface structures of NP-Rel and TC-constructions. Notice that there is nothing wrong to modify the surface this way. In fact it has to be done, since the surface structures given before are given without justification, i.e. before there was no reason given for NP
to remain under S. Actually, the modification on the surface structure of TC-constructions can be accomplished by allowing the fronting rule to be applied first before copying. This means that our simplicity argument in section 7 is wrong. An intermediate step is necessary to acquire the appropriate surface structure of TC-constructions.

From the above SP-existential sentence we thus get sentences like:
(215) anak itu, dia mengapa

That child, what did he do? cf. (212)
and the surface structure of (215) is:


Exactly the same modification has to be done to generate TC with FP-comment. There seems to be no need to go through the derivations in detail. The surface structure for (213) is as follows:


### 8.1.4 Summary

Before looking at other cases, it is helpful to recapitulate what we have considered so far:
(a) Two types of existential sentences can be generated: SP-existential sentence and FP-existential sentence.
(b) When the leftmost constituent is not [-an;-spec], this constituent can be fronted. If this constituent is in SP-existential sentence, we generate SP-sentences. For FP-existential, however, relativisation has to be applied first. A relativisation rule transforms (b.1) into (b.2):


After relativisation, the head noun is fronted, and the 'unnecessary' nodes can be deleted, we get an FP-sentence with the following surface structure:

(c) When the leftmost constituent is not [-anaph;-spec] and it is in an SPexistential, this constituent is fronted first, then copying transformation is applied. After anaphoric rule, pronominalisation, and ada deletion have been applied, we get the following surface structure:

TC with SP-comment:


When the leftmost constituent is in an FP-existential, relativisation applies first, then fronting and copying apply, and we get the following surface structure:

TC with FP-comment:

(d) When a pro-form $+Q$ occurs in the head noun of an FP-existential sentence, that head noun is [-anaph; +spec], and pro-form $+Q$ can be realised into a question-word, because the head noun is not the embedded sentence, which satisfies the Q -constraint.

Q-constraint: $\left[[- \text { spec }]_{Q}\right]_{\mathrm{WH}} \rightarrow[[+ \text { spec }] k a h]_{\mathrm{WH}}$
Condition: WH is not in the embedded sentence.
Since this head noun is [+spec] and the leftmost constituent, it is qualified for fronting. WH-focus is thus generated.
But when the pro-form $+Q$ is in the subject of $S$ of an SP-existential sentence, the condition on $Q$-constraint is not met, and WH-subject can not be generated.
Regardless of whether pro-form $+Q$ is attached to the head noun of FP-existential or the subject of the SP-existential, WH-topic can never be generated, because $Q$ can only occur with [-anaph] and anaphoric rule (TC-2) after copying makes [-anaph]-proform into [tanaph].
(e) In an SP-existential, when the subject of $S$ is not [-anaph;-spec] and the verb is a pro-form $+Q$, the condition on $Q$-constraint can not be met until the fronting is done and VP is out from $S$. But once the VP is out of $S$, WH-verb in SP can be generated. Similarly, when the object is a pro-form $+Q$ and the passive is not applied, then after fronting we generate sentences like (216):
(216) anak itu membeli APA

What did the child buy?
Note, however, than when the passive is applied, the object of $S$ which becomes the subject can not be fronted, because the condition on $Q$-constraint can not be met, so we prevent the generation of ungrammatical sentences like (217):
(217) *apa dibeli anak itu What was bought by the child?
(f) In an FP-existential, when the head noun is not [-anaph;-spec] and the verb under $S$ is pro-form $+Q$, the condition on $Q$-constraint can not be met until the head noun is fronted, i.e. after relativisation, so that the verb is out from S, i.e. S is deleted. When this verb is no longer in the embedded sentence, the condition on $Q$-constraint is met and we get sentences like (2l4) above. Similarly, when the object of $S$ is a pro-form $+Q$, and the head noun is not [-anaph;-spec], Q-constraint can not be applied until relativisation and fronting have been applied. When fronting has applied, the object of $S$ is out from $S$, since $S$ is deleted, and now the condition on $Q$-constraint can be met, which gives us sentences like:
(218) anak itu yang membeli APA

What did THAT CHILD buy?
Note that when the head noun and the object of $S$ are pro-form $+Q$, the Q-constraint applies to the head noun first, then once the object is out from S, Q-constraint applies to the object as well, so we get sentences like:
(219) SIAPA yang membeli APA

Who is it who bought what?
But in SP-existential, the subject can never be fronted if it is pro-form $+Q$, since the condition on Q-constraint is never met, which prevents the derivation of the ungrammatical sentences like:
(220)
*siapa membeli apa Who bought what?
Now, if the head noun, the subject, the verb, and the object are all Pro-form $+Q$, after the fronting of the head noun, all pro-form $+Q$ meet the condition on Q-constraint, which makes them question words, and we get sentences like:
(221) SIAPA yang mengAPAkan APA Who did what to what?
and (222) is still properly prevented - which is what we want - since it is an SP-construction:
(222) *siapa mengapakan apa
(g) In an SP-existential, when the subject of $S$ is not [-anaph;-spec] and the verb is a pro-form $+Q$, the condition on $Q$-constraint will be met after fronting transformation which deletes the $S$, and the verb will no longer be under an embedded sentence, and we get sentences like (215) above. By the same procedure, we can also get $T C$ whose object of the comment is questioned, as in:
(223) anak itu, dia membeli APA

That child, what did he buy?
and if the verb is also pro-form $+Q$, we get:
(224) anak itu, dia mengAPAkan APA That child, HE did what to what?

But note that the topic and the subject of the comment can never be questioned, because they are [tanaph], while the pro-form $+Q$ is always [-anaph].
(h) In an FP-existential, when the head noun is not [-anaph;-spec], and the verb phrase is pro-form $+Q$, the condition on $Q$-constraint is met after fronting and sentences like (216) are generated. When the object of $S$ is pro-form+Q, we get :
(225) anak itu, dia yang membeli APA That child, what did $H E$ buy?
and when both verb and object are pro-form $+Q$, we get:
(226) anak itu, dia mengAPAkan APA

That child, HE did what to what?
We have now discussed the generations of the majority of interrogative sentences by simply using the same key operations. This seems to support very strongly the correctness of the existential analysis given so far.

### 8.2 Focused constituents other than the deep subject

In this section $I$ will show how other focused constituents can be generated using practically no new rule.

### 8.2.1 VP-focus

The following sentences show that VP-focus occurs only in the form of $S P-$ construction, and not in FP-construction:
(227) [membeli sepatu] [anak itu] The child BOUGHT SHOES.
(228) [yang membeli sepatu] [anak itu] The CHILD bought shoes.
(229) $\quad \therefore$ [membeli sepatu] [anak itu] [yang]
(230) [anak itu] Top $[$ [membeli sepatu] [dia]] Comm That child, ?buying shoes is what HE did
(231) [anak itu] Top $[\text { [yang membeli sepatu] [dia] }]_{\text {Comm }}$ That child, HE bought shoes.
(232) $*[\text { anak itu }]_{\text {Top }}[$ [membeli sepatu] [dia] [yang] Comm

Compare the above sentences with the constructions we have observed before:
(233) anak itu membeli sepatu The child bought shoes. cf. (l)
(234) anak itu yang membeli sepatu The CHILD bought shoes. = It is THE CHILD who bought shoes. cf. (2)
(235) anak itu, dia membeli sepatu That child, he bought shoes. cf. (3)

Note that at its surface (227) looks like (233) with different order of IC's. In fact, (227) is ambiguous, depending on the intonation. One of them has been mentioned before, namely the stylistic variant of (233), but the intonation should remain the same. The VP in (227) is the focus when it is spoken with the same intonation when the IC's are not reversed. In addition, there are those morphemes I mentioned in section 1 which can only be attached to a focus, which disambiguate the ambiguities of a focus. Thus, compare the following:
(236) [membeli sepatu SAJA] [anak itu]
(Contrary to your assumption,) the child BOUGHT SHOES. cf. (227)
(237) [MEMANG membeli sepatu] [anak itu] (I confirm that) the child BOUGHT SHOES. = The child DID buy shoes.
(238) [membeli sepatu] [anak itu]
?It is buying shoes that the child did.
Sentences (236), (237), (238) all have a VP-focus. Sentence (228), however, can not be interpreted as having yang-phrase-focus, only the variant of (234). ${ }^{11}$

Sentence (229) is ungrammatical, because yang-phrase or part of it can never become focus; the comment of (230) has VP-focus; (231) is grammatical but the yang-phrase in the comment is not a focus; (232) is ungrammatical because jangphrase or part of it can not be focus.
Now let us see how the existential analysis generates the proper forms and blocks the ill-formed sentences:

Let us start with FP-construction. First we generate an FP-existential as follows:


Relativisation is applied, we get:


The head noun is the leftmost [+spec], so it can be fronted. When the head noun has been fronted, we have the following:


Then, NP, S, and ada can be deleted, and we get:


Note that membeli sepatu is not the leftmost constituent, since yang is more left than $V-N P=$ membeli sepatu, and yang can never meet the condition for fronting, i.e. yang is not a root. So, the generation of sentences like (229) is blocked, properly.

Now, let us see what happens when we start with an SP-existential:


The subject of $S$ is the leftmost [+spec] so it is fronted, and we get:


Now, VP is the leftmost [+spec], and it can be fronted, and after ada deletion, we get the appropriate (238).

### 8.2.2 Special triggered VP-focus

Some words like saja even and pun even too trigger VP-focus. The presence of these words with a verb requires the verb to be focused. Consider the following sentences:
(239) anak itu tidak dapat menari
not can dance
The child can not dance
(240) *anak itu tidak dapat MENARI SAJA
anak itu MENARI SAJA tidak dapat The child can't even dance.
*anak itu tidak dapat menariPUN
anak itu menariPUN tidak dapat
The child can't even dance either.
Words like these seem to dominate the verbs only rather than the entire sentence, so these words should be attached to VP in $S$ rather than the VP under $\sum$. These words then have to be marked [+spec], and when they occur with [-spec] verb under $S$ the [-spec]-verb is changed to [+spec] and thus fronting is obligatory. Horn (1969) and Fillmore (1965) discuss the presupposition of a sentence with even. Further comparison between the behaviour of even in English and BI/JAV may be fruitful, but such a task is beyond the scope of the present work. What is being demonstrated in this section is simply that constraints like $Q$-constraint, Fronting-constraint, Copying-constraint, etc. seem to be needed to derive the different types of foci.

### 8.3 Other topicalised constituents

In section 7, the derivation of $T C$-constructions whose topic is the deep subject or object has been presented. We shall now discuss other types of topics.

### 8.3.1 Topicalised VP

Topicalised VP is always in the form of nominalised VP, and this nominalised VP is used as a subject of SP-construction or the focus of FP-construction. The derivation of topicalised VP then is the same as the topicalisation of subject or topic. Instead of the head noun in the FP-existential, what we have to have is a head nominal, and similarly, instead of a noun as the subject of $S$, we have a nominal. Using the same rules to get $T C$ with FP-comment and $T C$ with SP-comment, we will get TC with nominalised VP as topic.

### 8.3.2 Topicalised possessive nouns

TC-constructions with possessive nouns as topic are the constructions which have the highest frequency of usage in BI/JAV. This kind of $T C$ can occur in SP as well as in FP-constructions. For example:
(244) anak itu, IEUNYA membeli sepatu
mother-poss
That child, his mother bought shoes.
(245)
anak itu, IBUNYA YANG membeli sepatu
That chizd, HIS MOTHER bought shoes.
Before we look at the derivation of (244) and (245) let us look at the structure of NP with possessives. The possessive nouns in BI/JAV behave like modifiers and relative clauses. Consider the following possible constructions:

```
(246) (a) [[ibu] [anak]]
    mother child
    a mother of a child
(b) [[ibu][anak itu]]
    a mother of the child
(c) [[[ibu][anak]] itu]
    (I do not know how to translate this:)
        ?The child's mother
(d) \(*[[\) ibu itu] [anak]]
    the mother of a child
(e) \(\quad *[[i b u ~ i t u][a n a k ~ i t u]] ~\)
    the mother of the child
(f) \(*[[[\) ibu itu] [anak itu]] itu]
    ?the mother of the child
```

Note that the structure of NP-possessives is not [NP] [NP], because the first NP, the possessed, can not take an Art, as evidenced from (246) d, e, and f. The structure then has to be the one like N -Rel:


As shown from the above configuration, we can stack possessives indefinitely, since NP can be $N$ - NP again. We can have something like:
[medja [ibu [anak [ajah [...]]]]]
a table of a mother of a child of a father ...
However, since (246f) is also ill-formed, in contrast with (c) we also have a structure:


There are two important phenomena which should be kept in mind about these two structures of NP-possessive:
(a) When ART is present, it can only 'modify' either the second noun (i.e. the possessor) or the entire NP, never the first noun alone (i.e. the possessed noun).
(b) When the second noun contains ART, i.e. when the structure of NP-possessive is the one shown in the middle of this page, the second noun is always [-anaph]. Let us look at the derivation of TC with SP-comment first:


Note that ibu is [-anaph;-spec] and it is the leftmost constituent. Can ibu be fronted? The answer is no, because ibu can not take ART, so it can not be made [tanaph], because recall that the possessed noun can never be [tanaph] unless both the possessed and the possessor are [tanaph]. However, the possessor anak is always [+anaph] when only this noun has ART, so anak [tanaph] (i.e. where ibu is [-anaph]) can be copied because it is the leftmost [tanaph]. When anak itu is copied and possessive pronominalisation is applied, we get:
(247) anak itu, ibunya membeli sepatu

That child, his mother bought shoes. cf. (244)
When the structure of the NP-Poss is [[[Noun] [Noun]]NART]NP and both are [+spec], then the entire NP is fronted, since it is the leftmost [+spec] which can take ART, and we get an SP-construction with NP-Poss subject:
(248) ibu anak itu membeli sepatu

The child's mother bought shoes.
When the structure of NP-Poss is as above, this NP is also qualified for copying, since it is the leftmost [+spec]. After copying, anaphora, deletion of ada, and possessive pronominalisation, we get (249):
(249) ibu anak itu, dia membeli sepatu

That child's mother, she bought shoes.
The derivation for different foci with possessive nouns is very similar:


Assuming relativisation has been applied, we have the above form.

When anak is [+spec] it can be copied and after anaphora, deletion of ada, and possessive pronominalisation we get:
(250) anak itu, ibunya yang membeli sepatu That child, HIS MOTHER bought shoes. cf. (245)
When the NP-Poss is

it can be fronted, and we get:
(251) ibu anak itu yang membeli sepatu THE CHILD'S MOTHER bought shoes.
When NP is [+spec], this NP can also be copied. And after deletion of ada and possessive pronominalisation, we get:
(252) ibu anak itu, dia yang membeli sepatu That child's mother, SHE bought shoes.
To summarise, with NP-Poss we can get the following sentences:
(a) SP-construction:
(253) ibu anak itu membeli sepatu The child's mother bought shoes. cf. (248)
(b) FP-construction:
(254) ibu anak itu yang membeli sepatu

THE CHILD'S MOTHER bought shoes. cf. (251)
(c) TC-construction:
(255) ibu anak itu, dia membeli sepatu That child's mother, she bought shoes. cf. (249)
(256) ibu anak itu, dia yang membeli sepatu That child's mother, SHE bought shoes. cf. (252)
(257) anak itu, ibunya membeli sepatu That child, his mother bought shoes. cf. (244)
(258) anak itu, ibunya yang membeli sepatu That child, HIS MOTHER bought shoes. cf. (245)

### 8.4 Yes/No-questions

The following sentences show that the domain of Yes/No-questions is $\Sigma$. In other words, Q, which is realised as kah, should be attached to $\sum$ rather than any lower constituents:
(259) [[ada anak membeli sepatu]-kah?] $\Sigma_{\text {SP }}$

Is there a child buying shoes?
(260) [[ada anak yang membeli sepatu]-kah?] $\Sigma_{\text {FP }}$ Is there a child who bought shoes?
(261) [[anak itu membeli sepatu] $\left.{ }_{S}-k a h ?\right] \Sigma_{\text {SP }}$ Did the child buy shoes?
(262) [[anak itu yang membeli sepatu] $\left.{ }_{S}-k a h\right] \Sigma_{-F P}$ Was it the child who bought shoes?
(263) $\#\left[[\text { anak itu, dia membeli sepatu }]_{\mathrm{S}}-\mathrm{kah} ?\right]_{\mathrm{TC}}$ *Is it the child, did he buy shoes?
(264) *[[anak itu, dia yang membeli sepatu $\left.]_{S}-k a h ?\right] \sum_{T C}$ *Is it the child, was it he who bought shoes?

Furthermore, note that the constraint for $Q$ is still the same, i.e. the NP of $\Sigma$ has to be [-anaph], which is why (263) and (264) above are ungramatical, because the NP of $\sum$ contains [tanaph]. The deep structure for (259) and (261) is (265) below, and the deep structure for (260) and (262) is (266):


When (265) contains [-spec], Yes/No-questions with $\sum_{S P}$ are generated, and when it contains [+spec], Yes/No-questions in SP are generated. When (266) contains [-spec], Yes/No-questions in $\sum_{F P}$ are generated, and when it contains [+spec], Yes/No-questions in FP-construction are generated.

In addition, instead of adding kah, (259)-(262) can also be expressed by adding apa-kah in front of the sentences. I will assume at the moment that to generate Yes/No-questions with apa-kah instead of $k$ ah at the end, the subject of $\sum$ is a pro-form apa.

### 8.5 Semi-Yes/No-questions

As stated before, certain lower constituents can contain Yes/No-questions. Interrogative sentences of this type are referred to as semi-Yes/No-questions. Observe the following:
(267) *ada anak-KAH membeli sepatu
(268) *ada anak-KAH yang membeli sepatu
(269) *anak itu-KAH membeli sepatu
*Is it the child bought shoes?
(270) anak itu-KAH yang membeli sepatu

Is it the child who bought shoes?
(271) *anak itu-kah dia membeli sepatu
*Is it the child, he bought shoes?

> *anak itu, dia-kah membeli sepatu
> *The child, is it he bought shoes?
> anak itu, dia-kah yang membeli sepatu
> The child, is it he/him who bought shoes?

Notice that the realisation of $Q$ into $k$ ah follows the same $Q$ constraint. Sentences (267) and (268) are ungrammatical because anak in both sentences is [-spec]; (269) is ungrammatical because anak is a constituent of an embedded $S$; (270) is grammatical, because anak is [-anaph;-spec] and it is not a constituent of an embedded $S$; (27l) is ungramatical because anak is a constituent of an embedded $S$; (272) is ungrammatical because dia is a constituent of an embedded S. After copying, anaphora, and pronominalisation, dia in (273) is no longer a constituent of an embedded $S$, so the condition on $Q$-constraint is met.

This last section demonstrates the generality of the condition on $Q$-constraint, which further indicates that the blocking of wh-subject questions in terms of this condition is correct.

## 9. CONCLUSION

This work starts with an observation of the relationships among three major constructions in BI/JAV: (a) the Subject-Predicate Constructions, (b) the Focus-Presupposition Constructions, and (c) the Topic-Comment Constructions. Among these three, (b) is somewhat a new label that has not been used before to label a type of sentence construction. The notion of focus, however, has been used by many linguists before. (b) is essentially referring to sentences which have a focus.

As a working hypothesis, the analysis starts with the assumption that the base component of a grammar should supply all the necessary semantic information for a semantic interpretation of the sentences in the language, which means that the transformational rules which map base structures into their surface structures should not add any semantic information. Note that this is not necessarily saying that one should not try to give the analysis without using such an assumption.
One of the striking differences among these three constructions is their susceptibility to certain wh-questions. One phenomenon which, semantically speaking, seems illogical occurs in BI/JAV, namely the fact that the subject of a sentence can not be questioned, but the focus can. It seems natural that the topic of a sentence can not be questioned. This leads us to the observation of the behaviour of the subject of a sentence. Since the subject of a sentence is mostly a noun phrase, the observation of the properties of articles is inevitable.
In section 3, the different forms of the nouns and pronouns were described. It was suggested that the features [anaphoric] and [specific] could be used to characterise these different forms. It was also observed that there is a principal difference between the semantic interpretations of the overtly marked nouns and pronouns in BI/JAV and English (I am indebted to Prof. Partee for this observation).

In section 4, we discovered that a subject of a sentence must not be [-anaph; -spec]. We found that existential sentences express meaning of a sentence with [-anaph;-spec]-subject, and we also learned that there are two kinds of
existential sentences in BI/JAV; one consists of a verb-phrase with the existential verb ada followed by a relativised noun, and the other ada followed by a sentence complement. The former has a structure which looks very much like an FP-construction and the latter an SP-construction. Since pro-forms are also generated in existentials, and since we accept Katz-Postal's claim about the relationships between interrogatives with declaratives containing pro-forms like someone, we looked for the explanation why the pro-form in SP-existentials can not be made into a question word. We found that there is a general constraint in interrogatives, namely that elements in the embedded sentence can not be questioned. Applying this general constraint to the two existentials with pro-forms will block the generation of wH-subject questions and allow WH-focus questions. So, to properly generate the existing interrogatives, interrogatives can be generated from existential sentences.

In section 5, it was argued that the same rules to derive interrogative sentences can also be used to derive FP-constructions, and it was also shown that there are other cases which support the derivation of FP-constructions from existential sentences. Such analysis does not require the assumption that a formative like Focus is needed in the underlying forms of FP-constructions.

In section 6 , $S P$-constructions were also claimed to be derived from existential sentences.

In section 7, it was shown that the subject or the focus of the comment in TC-constructions is the antecedent of its topic, and it was suggested that TC-constructions be derived from the same existential sentences which underlie SP- and FP-constructions by applying an optional, non-meaning-preserving transformation, i.e. copying transformation. Thus, as far as syntactical evidence gathered so far is concerned, it is very difficult to maintain the meaning-preserving hypothesis, which is the working hypothesis of the present work, to account for the phenomena observed in TC-constructions.

In section 8 , it was shown that the same rules which are used to generate the sentences whose surface subject, focus, or topic, is the subject or object of the embedded sentence in the existential sentences, can also be used to generate other types as well.
The evidence which supports the analysis given in this work so far seems to be very convincing. However, the data observed are limited to a very small portion of the cases in the language. It still remains to be seen whether, given more complicated constructions, the analysis can still account for these other cases in a natural way.

Prof. A. Teeuw (1961:66) refers to the syntactical study of Bahasa Indonesia as 'this virgin field'. It still is.

## NOTES

${ }^{1}$ Although efforts are made to give English translations which correspond as closely as possible to sentences in BI/JAV, the readers should not be misled by the translations. In most cases it has been difficult to reveal both the meaning as well as the structure of a sentence by simply giving its corresponding sentence in English. Throughout this work, structurally nonparallel sentences will be used to translate the meaning of the sentences in $B I / J A V$, and discussions concerning the structures of the sentences will follow.

The words in BI/JAV as well as in English which need special attention are capitalised. Thus, the capitalisation has no semantic or syntactic significance.
${ }^{2}$ It will be shown later that this is not entirely correct. Certain presuppositions have to be made about the subject, topic, and the focus of a sentence.
${ }^{3}$ This paragraph implies that in this work disputes concerning the proper labeling of these constructions are considered irrelevant, as long as the suggested analysis does not depend on these labels.
${ }^{4}$ Sadja used in this context is very difficult to translate into English. With sadja sentence (8) requests an exhaustive list of the persons who bought shoes yesterday. Probably the English translation should be ?Who exhaustively bought shoes yesterday? or, in Southern dialect, Who-all bought shoes yesterday?
${ }^{5}$ Lagi meaning else as in (12) and (13) is homophonous with lagi which means again.
${ }^{6}$ Although BI/JAV do not utilise morphemes which contain $W H$ sounds, it is convenient to refer to questions with question-words like apa, siapa, dimana, etc., as WH-questions, in contrast to Yes/No-questions.
${ }^{7}$ I am assuming that lexical entries for BI/JAV contain only roots whose categories are unspecified, and that the lexical rules will contain rules like:

$$
\text { Affix-1 }+ \text { root }-m \rightarrow[+C-x]
$$

where $C-x$ is a category like Verb, Noun, etc., and affix-l and root-m are complex symbols. Such an assumption seems reasonable since roots like ajar for example can have the following derivations:

| mengAJAR | to teach (intransitive) |
| :--- | :--- |
| mengAJARKAN | to teach (transitive) |
| pengAJAR | a teacher |
| pengAJARAN | education |
| belAJAR | to study |
| pelAJAR | a student |
| pelAJARAN | a lesson |
| mempelAJARI | to research on something |
| mengAJARI | to train |
| AJARan | a teaching, phiZosophy |
| terpelAJAR | educated |
| terAJARKAN | teachable |

${ }^{8}$ Since the English translation of the nouns other than the roots will be misleading at this stage, the translation for only the roots is given. Similarly, the readers should not be misled by the forms of the nouns in English used to translate the different forms of nouns in BI/JAV in sentences (35)-(38) and other sentences containing nouns having the forms (a), (b), (c) or (d).
${ }^{9}$ Itu is homophonous with demonstrative itu that. In the sentences cited in this work itu is never used as a demonstrative.
${ }^{10}$ The relative clause in $B I / J A V$ is inserted between a noun and an article when the relative clause is a restricted relative clause and is attached after a
noun and its article when it is a non-restrictive relative clause. In other words, we have the following surface structures:

${ }^{11}$ Sentence (228) unfortunately is ambiguous in another way. It can also mean an NP-NP construction meaning: the one who bought shoes is that child, and the reversal of it can also be the focusing of its predicate. The test of distinguish NP-NP and FP is that one is the answer to questions like: Who is that child? and FP is the answer to Who bought shoes?

## POSTSCRIPT

This work was written in 1970 for a Ph.D. dissertation at the University of California at Los Angeles. It is published with no major revision other than of the Indonesian spelling. Issues regarding transformation may no longer be relevant according to contemporary theories. However, there are three major aspects of Indonesian and Javanese grammar that still need to be resolved: (a) the nature of perspectives of specificity and definiteness of a noun and a noun phrase,
(b) the relationship between the existential sentence and the three major structures (Subject-Predicate, Topic-Comment, and Focus-Presupposition), and (c) the major word order - the inverted forms of the three structures in (b).

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# THE SOCIOCULTURAL VARIANTS OF THE SECOND PERSON SINGULAR PRONOUN IN BAHASA INDONESIA 

Karyono Purnama

## INTRODUCTION

In natural languages, a certain alternating variable or element, which can be a grammatical feature, a set of vocabulary items, or a series of special expressions, may be employed to carry a particular sociolinguistic value. They may indicate a degree of respect expressed by the first speaker toward the second speaker, reveal the distance in their relationship, or perhaps the difference in their rank or social status. In Bahasa Indonesia (the national language of the Republic of Indonesia) such sociolinguistic properties are principally expressed through the choice of the appropriate forms of pronouns. In the case of two people engaged in a conversation, this would involve the choice of the right form of the first person singular pronoun (hereafter FPSP), and of the second person singular pronoun (hereafter SPSP). ${ }^{1}$ In this analysis, the Indonesian SPSPs will be discussed objectively in terms of their usage in the actual cultural setting, recognising any possible ethnic or foreign influence tending to increase the diversification of their forms. Three sociolinguistic properties of the Indonesian SPSPs will be described: their function as social group identifiers, indicating the social rank, status, and ethnic or racial background of the participants; their function as proxemic markers, indicating the personal distance between the participants; and their function as indicators of social register, reflecting the degree of respect mutually expressed by the participants during the conversation.

## THE PRONOMINAL FORMS OF THE INDONESIAN SPSPs AND THEIR SOCIOLINGUISTIC PROPERTIES

Among the languages of the world, Bahasa Indonesia is one of those that have the widest selection of SPSPs. There are at least six major groups of SPSP forms actively used. Some are standard, accepted as the official forms of the Indonesian SPSP to be used on formal occasions and in written forms of the language; the rest are non-standard. The latter are in common use in daily conversation, sometimes even more commonly than the standard SPSPs ${ }^{2}$ yet for several reasons they are excluded from formal domains. In spite of the extensive use of Bahasa Indonesia all over the country, the use of the Indonesian SPSP is predominantly influenced by Javanese social norms.

## A. The standard SPSP forms

1. The native terms: engkau/kau and kamu (FPSP: saya, aku). Long before Bahasa Indonesia was declared the official language of Indonesia in 1928, engkau and kamu were referred to as the standard forms of the Indonesian SPSP. Engkau (often abbreviated as kau) is considered the most polite form of the native Indonesian SPSP; however, it is rarely used in everyday conversation, except in some places like Palembang and Medan. Kamu on the other hand is more frequently used. However, care has to be taken in deciding to use it, since in some areas in Indonesia it is taken as acceptable, but in other geographical parts, for example, in East and Central Java, it is regarded as rude. Neither engkau nor kamu should be employed when talking respectfully to an older person or, in many circumstances, even to someone of about the same age group as the speaker, especially when the relationship between them is not intimate. Other polite standard forms of SPSP, such as bapak, ibu, and saudara are more acceptable. According to Anwar, kamu is usually employed only to children or people very low in social status and rank (Anwar 1980). In many Indonesian literary works, however, kau and kamu are often used as common terms of SPSP in conversations among the young characters. The reason is that in written narratives there are no real-life speech-act participants who could be negatively affected by the use of an inappropriate form of address.
2. The standard anda (FPSP: saya). This term is the most controversial among the modern standard forms of Indonesian SPSP. An Indonesian called Sabirin introduced the word anda (origin unknown) and suggested that it should be used as a second person pronoun with a meaning similar to that of the English word you, which, he noted, can be employed with practically anyone, and so differs from any existing Indonesian pronouns (Sabirin 1957; Anwar 1980). However, this suggestion was not fully accepted by some other Indonesian linguists. Harimurti Kridalaksana in his comment says:

Seperti kami kemukakan dalam karangan kami terdahulu penggunaan kata anda memang memperkaya kosa-kata bahasa Indonesia, tetapi telah gagal menyederhanakan sistim sapaan kita. Bukan hanya itu: kata anda tidak dapat dipergunakan untuk menyapa orang kedua akrab, kita dianggap menyelipkan situasi resmi dalam wacana kita. Kata ini juga tidak dapat dipakai untuk menyapa orang kedua akrab dan hormat. Jadi tidak dalam segala situasi resmi kata itu dapat dipakai. (Kridalaksana 1981)

Translation: As I wrote in my previous article, the word anda has really enriched the Indonesian vocabulary; however, it has failed to simplify our terms of address system. The word anda, practically, cannot be used to address an intimate second person in a normal situation lest it makes the conversation sound formal. This word cannot be employed to address an intimate respected second person either; thus, this word cannot be used in every formal situation.

Anton Moeliono, in favour of Kridalaksana's view, adds:
Anda hanya berfungsi lancar dalam iklan, siaran radio dan teve, pidato, atau kuliah tertulis. Artinya, jika kita tidak dapat melihat lawan bicara kita, atau jika kita tidak mengharapkan jawaban langsung daripadanya. (Moeliono 1984)

Translation: Anda serves best only when it is used in advertisements, radio and television programs, public speeches,
or articles. In other words, when the speaker is not face to face with his/her addressees, or when $s /$ he does not expect a direct response from them.

However, Yus Badudu says:
Pemakaian kata anda untuk menyapa orang kedua alangkah baiknya jika bisa diterima oleh masyarakat, sehingga kita memiliki kata yang sifatnya netral dan demokratis, sebagai you dalam bahasa Inggris. Jika ini dapat diterima, maka kita akan keluar sedikit dari kesukaran pemilihan kata sapaan yang tepat. Masih adanya perasaan segan mempergunakan kata anda, rasanya disebabkan oleh kebiasaan alam masyarakat feodal, takut kurang dapat menghormati seseorang sebagaimana patutnya. Orang yang rendah kedudukannya rasanya tidak akan berani menyapa atasannya atau orang yang tinggi kedudukannya dengan kata anda. Pendemokrasian sapaan seperti ini mungkin memakan waktu sekurang-kurangnya satu atau dua generasi. (Yus Badudu 1982)

Translation: How wonderful it would be if the use of the word anda to address a second person could be accepted by the society, so that we may have a neutral and democratic word such as you in English. In this way, we will be able to solve the problem of choosing the appropriate term of address when speaking to a person. The difficulty of using the word anda, I think, is primarily due to the feudalistic social system still retained by the society, in which a person may easily feel uncomfortable for not demonstrating adequate respect when speaking to somebody. A subordinate, for example, would not have the courage to address his superior or somebody having a higher status with the word anda. The process of acquiring a more democratic term of address would probably take at least one or two generations.
In spite of all the above controversy, the term anda is, in fact, gradually gaining popularity in certain political and intellectual groups. Though still in very constrained situations and occasions, it is often used in conversations and discussions. During his stays in Indonesia, Wolff heard anda frequently used also among people who knew each other well and were friendly, but not of the same ethnic group.
Regarded as a literarily modern and versatile term, anda is often used in place of kamu and kau in many current modern novels and short stories. Surapati notes:

In interpersonal correspondence among close members of a family, the term anda is often used as a suffix and attached to the words ayah (father), ibu (mother), kakak (older brother/sister), adik (younger brother/sister), paman (uncle), bibi (aunt), and anak (son/daughter); and thus give us the affectionate but courteious terms ayahanda, ibunda, kakanda, adinda, pamanda, bibinda, and ananda, which are generally used in the salutation, such as in Ayahanda dan ibunda yang tercinta, (Dear father and mother,), and are sometimes carried in the body of the letter as well.
(Surapati 1987)
3. The use of the terms of address/titles in place of SPSP: Bapak / Pak, lbu / Bu, Saudara, Saudari, Kakak / Kak, Adik / Dik, Tuan, Nyonya, Nona, etc. (FPSP: Saya). The use of the terms of address, such as Bapak / Pak (literally means father or sir), Ibu / Bu (mother or madam), Saudara (brother), Saudari (sister), Kakak / Kak (older brother/sister), and Adik / Dik (younger brother/sister) ${ }^{3}$ is acceptable either in informal or formal situations. The terms Bapak and Ibu are usually used to address older persons or people of a similar age group; however, in a professional environment, they can be used to address colleagues (or other adults) of any age. For a young or younger person, male or female, the terms Saudara or Saudari are used, but many speakers prefer to use the terms Kakak and Adik which are friendlier because of their common usage in the family context or setting. Very often, when the relationship between the persons involved in the conversation is getting closer, their first names are added to the terms, for example: Pak Tom, lbu/Bu Hartini, Saudara Situmorang, Kak Peter, and Adik/Dik Unyil. About this Anwar writes: "When I use Saudara without mentioning the name of the person 1 am addressing, I feel I am slightly formal, but less so when I do mention his name after the word Saudara." (Anwar 1980).

In such cases, terms such as Bapak, lbu, Saudara, and Saudari are used much in the same way as titles. "The shortened terms: Kak, Dik, Bu, and Pak are, in fact, never used without a following name in contexts other than vocatives", Steinhauer (1987) remarks.

In some areas of the country where last names are popular to use, for example, in Batak and Ujung Pandang, in cases in which the addressee deserves some respect, his last name will be used in place of the first name, e.g.: Pak Sinaga (from Dicky Sinaga), lbu Tambunan (from Lina Tambunan), and Saudara Sigarlaki (from Anton Sigarlaki). Consequently, however, when the addressee is younger or inferior in his/her social status and rank, the chances that his/her last name will be attached to the terms of address is smaller.

In some extremely rare formal occasions both the first name and the last name of the second participant are used, for example:

BAPAK THOMAS HABIBI tinggal di mana?
Where do you (= Bapak Thomas Habibi) live?
IBU RUDY SILALAHI sudah lama menunggu?
Have you (= Ibu Rudy Silalahi) been waiting very long?
SAUDARA BUDI RAHARDJO dipersilahkan masuk.
You (= Saudara Budi Rahardjo) please, come in.
These forms are polite, but awkward in a real conversation, and often indicate a rather insincere attitude of the speaker toward the addressee; thus, their use should be avoided.

Though, similarly awkward as the SPSP forms above, the terms Bapak and lbu may sometimes be used together with professional titles, for example:

BAPAK JENDRAL SUKOCO sudah menerima laporan kita?
Have you (= Bapak Jendral Sukoco) received our report?
Wah, IBU PROFESSOR AMBARWATI pandai mangajar, lho. Well, you (= Ibu Professor Ambarvati) teach very well.

SAUDARA INSINYUR MAHMUD nampak sibuk amat, nih.
You (= Saudara Insinyur Mahmud) seem to be busy.
In many cases, the names of the persons are omitted and only their titles are used, for example:

PAK LURAH sedang masuk angin?
Do you (= Pak Lurah) have a cold? (Lurah = the head of a village)
BU GURU bisa naik mobil saya.
You (= Bu Guru) can go in my car. (Guru = teacher)
PAK KETUA sudah menerima undangan kami?
Have you (= Pak Ketua) got our invitation? (Ketua = Chairman)
These forms are more commonplace and acceptable than the last two sets, since they are less formal, yet remain polite.
Whereas the terms Bapak and Ibu are friendly and intimate, the terms Tuan and Nyonya (Mr and Mrs/Ms) are formal and distant. The word Tuan (FPSP: saya) is used sometimes in business correspondence to indicate respect, while Nyonya (FPSP: saya) is usually addressed to a married woman, either younger or older, in conversation and writing. ${ }^{4}$ Speaking about the term Tuan, Anwar said:

> Foreigners everywhere in Indonesia are likely to be addressed as Tuan by many people. Sometimes, when one does not like the opinion of another on a particular topic in a discussion, he can address him as Tuan to show his disapproval. (Anwar 1980)

Anwar's remark is correct, but only in strictly limited situations. Some foreigners are addressed as Tuan only in highly formal occasions to indicate respect and cordiality to him, and the use of Tuan to show disapproval has rarely been found in current social conversations. About the words Tuan and Nyonya, Yus Badudu separately says: "Kata sapaan yang resmi Tuan dan Nyonya kurang populer, kurang disenangi penggunaannya, mungkin karena terasa agak feodalistis." (Yus Badudu 1982) Translation: "The formal terms of address Tuan and Nyonya are not very popular. People simply do not like to use them, probably because they sound rather feudalistic."
In addressing foreigners, the compounding of the titles $M r$ and $M s$ and the last name of the person addressed is frequently found, for example:

MR SIMPSON bisa menghadap Pak Ketua sekarang.
You (= Mr Simpson) can see the president (= Pak Ketua) now.
MS WHITE suka gado-gado?
Do you (= Ms White) like gado-gado? (gado-gado = Indonesian vegetable salad)

## B. The SPSP non-standard forms

1. Borrowings from local dialects/ethnic languages. Bung, lu, sampeyan, Mas, Mbak, etc. (FPSP: saya, except for lu). Since there are several hundred ethnic languages in Indonesia contributing to the development of Bahasa Indonesia, and to analyse all of the loan forms of SPSP from them in this paper is really an impossible task, the discussion will be limited to some prevalent borrowings of SPSP only, that is, to those which are taken from the local/ethnic languages spoken on the Island of Java. The variants discussed here should be taken as sample cases of borrowings from local language variants.
To start with, there is Bung, a borrowing from the old local dialect Betawi of Jakarta, which may be regarded as once the most popular term of this group. It was especially popular during the Indonesian national revolution against the Dutch and the Japanese occupations in 1940s when it was used to address intimately some Indonesian revolutionary leaders. Some that might be taken as
examples are: Bung Karno, Bung Hatta, and Bung Tomo. Later, in the 1950 s and 1960 s, as a friendly term of address for a male participant, Bung was particularly used to address a stranger who was younger or of the same age group, but equal or lower in social rank and status than the speaker in the Jakarta area and West Java. "Today, the term Bung is often offered and used as a democratic term to address the male participants of a social or political youth group" (Surapati 1987).
Lu (FPSP: gua/gue) is used informally to address a younger person, or somebody of an age group similar to the speaker, most often a close friend or a member of the speaker's family. In contrast to the other forms of SPSP discussed previously, lu is never attached to the addressee's name or professional title. For example:

LU sekolah di mana?
Where do you (= Zu) go to school?
LU sudah makan siang?
Have you (= Zu) had your Iunch?
Lu is often treated as a nonstandard term particular to the Chinese Indonesians living in East Java and Madura Island. As the term of a minority group there, it is not likely to gain wider popularity. In Jakarta and West Java, however, it is popular as a common local term.

Sampeyan, a term borrowed from a register of Javanese (Madyo Javanese), is commonly used in Central and East Java to address a person, a Javanese in particular. In spite of the way it is used, it is considered a polite term, though sometimes not a very intimate one. Sampeyan is never attached to the addressee's names or titles. Some examples are as follows:

SAMPEYAN dari mana?
Where do you (= sampeyan) come from?
SAMPEYAN mau beli apa?
What do you (= sampeyan) want to buy?
The term sampeyan is generally used with persons of lower social rank and status, male or female, young and old. However, it is used particularly only among adult speakers, rarely among children.
Mas and Mbak are other borrowings from Javanese, used especially toward young addressees. Mas is used for males, Mbak for females. Both terms are friendly, and polite. Though they are used in particular with a person having a Javanese background, people frequently use them to address those coming from other social ethnic groups as well. ${ }^{5}$ They may be used comfortably with an intimate friend or even a stranger.
2. Borrowings from foreign languages: you, jij, and ni. Although not extensively used, these borrowings from foreign languages are often found in colloquial Bahasa Indonesia. The first term, you (FPSP: saya) is beyond doubt used only within the educated group, those most likely to know some English. Concerning the term, Anwar remarks: "I notice that some people who have some knowledge of English or are good at the language, sometimes use the English word you while conversing in Indonesian in a natural way" (Anwar 1980).

This friendly, intimate, and appreciative term is generally addressed to a young person, or a friend; but never to a much older addressee or a complete stranger. The following are some examples:

Besok YOU pergi dengan saya, lho.
Tomorrow, YOU will go with me.
YOU dengan saya 'kan sekelas.
YOU and I are in the some class, aren't we?
The term jij (FPSP: ik/ike) is taken from the Dutch SPSP, and is often employed together with its polite form, $U$, which is used with some respect to address a person, either older or younger, in and among Dutch educated families. This intimate and friendly term of address is still retained in Indonesian daily conversation, but is gradually losing ground.

Among some Chinese living in Indonesia, the term ni (FPSP: wo') is used when they speak to a person having the same ethnic and linguistic background. This Chinese borrowing is particularly used within the Chinese business comunity, especially when Chinese is spoken as a first language. This term is used very exclusively and serves more as an ethnic group identifier than as a social class marker. For some, it functions as an interlanguage term between their first language, Chinese, and their second language, Indonesian.
3. The use of the addressee's first name (FPSP: saya, one's own name). This replacing of the SPSP with the addressee's name is normally practised when an adult addresses a child; however, within some educated groups, it is frequently used to address an adult or a young person as well; for example:

JOHN masih ingat saya, 'kan?
JOHN (= you) still remember me, don't you?
LISA sudah pernah bertemu dengan Pak Harun?
LISA (=you) ever met Pak Harun?
Although this term of address is accepted as a friendly and pleasant way to address a person, it is not appropriate for use with a stranger or a much older person.
4. The pseudo pronoun situ (FPSP: saya). Situ literally means your part or there. This word, normally used by Javanese speakers, to some may not sound very appreciative, polite, or friendly; though, as Steinhauer observes, it is often used in situations where the degree of distance called forth by the use of Pak + Name is felt to be too high, while the relation between the participants is not intimate enough to use Kamu. Steinhauer also notices that situ is often used as a neutral form, when the relation between the participants is still undescribed, so that there are no determinants for the choice of a more marked expression. Situ, however, should in any case not be used with older persons or people of higher rank and status. Here are some examples of its common use:

SITU sudah pernah makan mangga atau belum?
Have you (= situ) ever had some mangoes, or not?
Saya rasanya pernah bertemu dengan SITU di stasiun kereta api. I think I have met you (= situ) once at the railway station.

## CONCLUSION

The complexity of the Indonesian SPSP (and the other personal pronouns) is a constant problem for both a learner and a speaker of Bahasa Indonesia. This is due to the fact that in using the Indonesian SPSPs one has not only to be
familiar with the existing forms, but also to learn their appropriate use in a given speech community. In one of his articles, Anwar says:

In choosing the right pronoun to use, both the first person and the second person pronouns, one has to take into consideration several factors, such as the type of relationship that exists between oneself and his/her interlocutor, the topic of the conversation, the place in which the conversation takes place, ethnic background, etc. (Anwar 1980)

To Anwar's remark, Amran Halim cautiously adds:
However, there are occasions when this relation cannot be clearly defined, at least temporarily, as is the case with, say, a new acquaintance, so that on one form can comfortably be chosen and used by either speaker-hearer. (Halim 1974)

Halim's proposition brings out an important point. Even a native speaker of Bahasa Indonesia may occasionally feel indecisive and hesitant in choosing the right term when he is engaged in a conversation, particularly with a new person. Only after some period of time, after being reassured about the nature of the situation, and getting better knowledge about the person he is speaking to, does he make his choice. ${ }^{6}$ In many cases one never makes any choices at all. One deliberately omits the subjects of the sentences one uses and speaks temporarily, or at some length, in ellipses; for example:

Sudah mendaftar?
Have (YOU) signed up?
Saya kira sudah mengerti penjelasan saya?
I think (YOU) have already understood my explanation?
In many instances, still to avoid referring to the interlocutor directly, in addition to the ellipsis, a suffix -nya (which is the genitive form of the third person singular pronoun dia/ia, but here which acts as a specifier the emphasising the very action the addressee does) is added to the verb of the sentence, which consequently behaves more or less like a gerund; for example:

Berangkat NYA ke Yogyakarta jam berapa nanti?
What time will be "the" (= your) leaving for Yogyakarta.
Makan NYA di warung nasi goreng dengan saya nanti.
"The" (= your) dining will be at the restaurant (that sells fried rice) with me. (literally translated)

In order to eliminate the syntactic complications created by the need to (temporarily) avoid specific second person forms of address, an Indonesian speaker will generally choose one of the following, socially safe, strategies. In the first, when the addressee is likely to be superior in social status and age, one would wait and see what the term of address the addressee uses for her/himself when speaking. In this way, then, the speaker will be better able to determine his or her own position. In the second, on an unspecified occasion, when there is no clear predetermined difference of rank or status evident, or when talking to a stranger, one would constantly use safe terms, like Bapak, Ibu, and Saudara (on Java, Mas and Adik/Dik); and avoid the sensitive terms kamu, and engkau. Normally, after some time both the speaker and the interlocutor will come to an agreement on the terms that are more comfortable for both parties.

It is good to keep in mind that learners of Bahasa Indonesia must be as much sensitive to the sociolinguistic properties of the language as to its form, since within the Indonesian community, language is employed as one of the primary means to display social manners and etiquette, and as more than simply a verbal tool for communicating messages or ideas. Success in getting across a message is often credited to the appropriate use of the language's sociocultural elements compatibly selected, rather than to the clarity of the words themselves. In other words, the complexity of Bahasa Indonesia is not due merely to the structure of the language per se, but also to the complexity of the social norms that determine and govern its use.

Table A

| To Persons of: | Age |  |  | Sex |  | Social Status/Rank |  |  | Ethnicity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VARIANTS | $Y$ | S | 0 | M | F | L | S | H |  |
| 1. Engkau/Kau <br> 2. Kamu <br> 3. Anda <br> 4. BAPAK <br> 4a. PAK + Title or Name <br> 4b. Pak + Title and Name <br> 5. IBU <br> 5a. BU + Title or Name <br> 5b. Bu + Title and Name <br> 6. Saudara <br> 7. Saudari <br> 8. Kakak/Kak <br> 9. ADIK/DIK <br> 10. Oom/Um <br> 11. Tante <br> 12. Tuan <br> 13. Nyonya <br> 14. Nona <br> 15. Bung <br> 16. Lu <br> 17. Sampeyan <br> 18. Mas <br> 19. Mbak <br> 20. You <br> 21. Jij <br> 22. U <br> 23. Ni <br> 24. Paman <br> 25. Bibi <br> 26. Abang/Bang <br> 27. Opa <br> 28. Oma <br> 29. Zus <br> 30. Addressee's First Name <br> 31. ELLIPSIS <br> 32. Situ | - ${ }^{-}$ | - ${ }_{\text {• }}$ | - |  |  | - ${ }_{\text {• }}$ | - |  | Javanese Javanese Javanese <br> Chinese |

## Notes to Table A:

(1) Abbreviations: Age: $Y=$ younger, $S=o f$ the same age to the speaker, $O=$ older; Sex: $M=$ male, $F=$ female; Social Status/Rank: $L=$ lower, $S=$ the same as the speaker's, $H=$ higher.
(2) Ethnicity indicates the ethnic group that exclusively uses a particular variant, particularly of the addressees.
(3) The variants listed in these tables DO NOT constitute all of the linguistic forms of the SPSP possibly used in spoken Indonesian, but they do represent the most common ones. The following are the terms that are added into these tables but are not discussed in the text: 0 om/Um = uncle, Tante $=$ Auntie, Paman = Uncle, Bibi = Auntie, Abang/Bang = Elder Brother, Opa = Grandpa, Oma $=$ Grandma, Zus = Miss. Their usage is self explained in the table. The terms jij, U, Opa, and Oma are often used among the Dutch educated speakers. The capitalised variants are recomendable for safe and extensive use.
(4) Anda is also appropriate to use for addressees older ( $O$ ) and higher in social status or rank ( $H$ ) than the speaker when it is not used in face-toface communication.
(5) The chart above describes the use of Bung in the 1950s and 1960s. In recent time, Bung is apt to be used only exclusively among members of some social or political youth groups as a democratic term of address. In such circumstances it may be used to address an older person or one of a higher social status/rank.

Table B


Table B (cont'd)

| Sociolinguistic Properties | Proxemics |  | Lang. Status |  | Degree of Reverence |  | Frequency of Use |  | Geograph. Area of Use | FPSP <br> Counterpart (s) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VARIANTS | I | D | S | NS | P | R | C | R |  |  |
| 15. Bung | - | - |  |  | - | - | - |  | West Java | Saya |
| 16. Lu | - |  |  | - | - |  | - |  | E\&W Java | Gua/Gue |
| 17. Sampeyan |  | - |  | - | - |  | - |  | Cent.Java | Saya |
| 18. Mas | - |  |  | - | - |  | - |  | C\&E Java | Saya |
| 19. Mbak | - |  |  | - | - |  | - |  | C\&E Java | Saya |
| 20. You | - |  |  | - | - |  | - |  |  | Saya |
| 21. Jij | - |  |  | - | - |  | - |  |  | lk/Ike |
| 22. U | - | - |  | - | - |  | - |  |  | lk/Ike |
| 23. Ni | - | - |  | - | - |  | - |  |  | Wo' |
| 24. Paman | - | - | - |  | - |  |  | - |  | Saya |
| 25. Bibi | - | - | - |  | - |  |  | - |  | Saya |
| 26. Abang/Bang | - | - | - | - |  |  |  |  | West Java | Saya |
| 27. Opa | - |  |  | - |  |  |  |  |  | Saya, Ik |
| 28. Oma | - |  |  | - | - |  | - |  |  | Saya, Ik |
| 29. Zus |  | - |  | - | - |  | - |  |  | Saya |
| 30. Addressee's |  |  |  |  |  |  |  |  |  |  |
| First Name | - |  |  | - | - |  | - |  |  | Saya |
| 31. ELLIPSIS | - | - | - | - | - |  | - |  |  | Saya |
| 32. Situ | - | - |  | - | - |  |  | - | C\&E Java | Saya |

Notes to Table B:
(1) Abbreviations: Proxemics: I = Intimate; D = Distant; Lang.Status: S = Standard; NS = non-standard; Degree of Reverence: P = Polite; R = Rude; Frequency of Use: $C=$ Common; $R=$ Rare; FPSP Counterpart(s) $=$ First Person Singular Pronoun Counterpart(s).
(2) The Geographical Area of Use indicates the place where the terms are exclusively used.
(3) The terms paman and bibi, when being used as kinship terms: proxemics intimate, social ranks - higher. When they are being used beyond the family circle: proxemics - close or distant; social rank/status of the addressee lower.
(4) In the use of kamu, bung, lu (and the FPSP aku), the degree of reverence of the speaker depends upon the proxemics context. If the relationship between the speakers is intimate, the use of kamu, bung, lu (and aku) is accepted as polite, but if not, it may be considered rude.
(5) "Situ is used in situations where the degree of distance called forth by the use of Pak + name is felt to be too high, while the relation between the participants is not intimate enough to use kamu. It is also often used as a neutral form, when the relation between the participants was still undescribed, so that there were no determinants for the choice of a more marked expression" (Steinhauer 1987).

## NOTES

${ }^{1}$ Though the Indonesian FPSP has as many interesting aspects as the Indonesian SPSP, in this paper the discussion will be concentrated on the forms and the sociolinguistic properties of the Indonesian SPSP only. This particular pronoun itself has the largest degree of variation, and choosing the right variant has a significant and direct implication and effect for the relationship between the persons involved. (Its counterparts, the corresponding forms of FPSP, will be given in brackets following the introduction of each form of the SPSP.)
${ }^{2}$ Students of Bahasa Indonesia may expect to come across the non-standard variants of Indonesian SPSP in almost every daily conversation. For those who wish to use the language in its truest cultural context, knowledge and acquisition of these variants is indespensible.
${ }^{3}$ Y.S. Badudu called this type of SPSPs "pseudo personal pronouns" (Kata ganti orang yang tak sebenarnya) (Badudu 1982:127).
${ }^{4}$ An unmarried woman can be addressed as Nona (FPSP: saya), but this term is really getting obsolete, and is frequently replaced by the word Saudari or lbu.
${ }^{5}$ "Among the Javanese speakers, women call men (who are not their relations) Dik (not Mas), and men call women Mbak (not Dik). For a woman to call a man Mas, and for a man to call a woman Dik implies a closeness of relationship" (Wolff 1987).
${ }^{6}$ "Many speakers, however, never use a single term of address chosen consistently. There is always a great deal of shifting back and forth among several terms" (Wolff 1987). Reasons for this are often situational or personal.

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# SKETCHES OF THE MORPHOLOGY AND PHONOLOGY OF BORNEAN LANGUAGES <br> 2: MUKAH (MELANAU) 

Robert Blust

## 0. BACKGROUND

The following description of Mukah Melanau is the second of seven language sketches promised in Blust 1977. Given the time lapse between these publications a recapitulation of the circumstances under which the data were collected, and a brief restatement of the goals and theoretical position which have guided the analysis will perhaps be helpful.

Preliminary work in Honolulu with a speaker of the Bario dialect of Kelabit led to the discovery of a previously unnoticed problem in comparative Austronesian linguistics (Blust 1969). To pursue the matter further, fieldwork was undertaken in Sarawak, Malaysian Borneo, from April-November, 1971. Material was collected for 41 speech communities representing all of the major languages of northern Sarawak and some of the languages of adjacent areas. In very few cases did the total collection time for any language exceed 20 hours. Moreover, since the data collection procedure was guided by the need to test a phono-logically-based subgrouping hypothesis in the field, it was heavily biased toward selected lexical material. Only a small part of this material could be used in my still unpublished doctoral dissertation (Blust 1974).

My original dissertation plan was to include sketches of seven representative languages in a central descriptive chapter, as follows:

1. Uma Juman (Kayan)
2. Mukah (Melanau)
3. Bintulu
4. Miri
5. Kiput
6. Long Anap (Kenyah)
7. Bario (Kelabit)

The first two sketches were written in 1972, and together totalled 211 typed pages. At this point the feasibility of my dissertation plans began to appear doubtful even to me, and the descriptive chapter was drastically scaled down.

In the summer of 1976 the sketch of Uma Juman was revised for publication, and an accompanying vocabulary prepared. It appeared the following year. The present sketch is modelled closely after the first, as the two were written only months apart.

Papers in Western Austronesian linguistics No.3, 151-216.

The focus of both sketches is a phonological description, with some remarks on morphology and superficial features of syntax. The descriptive model derives from that of Chomsky and Halle (1968) in requiring a single underlying representation for all morphemes, but departs from their position in several important respects. No attempt has been made to incorporate more recent proposals in phonological theory, since 1) the sketches in this series are not primarily theoretical in orientation, and 2) it is clear that a number of the phonological rules that must be posited for these seven languages cannot be insightfully stated in terms of distinctive features, thus compelling me to depart from all published versions of generative phonology.
More, perhaps, than most languages Mukah raises the seemingly intractable issue of phonological abstractness, and hence by implication the issue of how synchrony is to be distinguished from diachrony in language description. In 1972 I favoured somewhat less abstract underlying representations than I now adopt. The major issues in Mukah phonology arise not so much because of phonological alternations as because of 1) historical consonant mergers which have left a trace of the original opposition in their differing effects on preceding vowels, 2) a second set of reflexes found in the numerous Malay loanwords in the language, and 3) a complex sequence of changes which gave rise to a typologically unusual system of verbal ablaut. These issues are discussed at greatest length in section 2.5.2.

## 1. GENERAL INFORMATION

Mukah, located on the coast at the mouth of the Mukah River, is the site of the district headquarters Mukah District, Third Division, Sarawak. The nearest major settlements are Oya' (officially spelled Oya), at the mouth of the Oya' River 15 miles to the south, and Balingian, 8-9 miles up the Balingian River, which empties into the South China Sea some 35 miles to the north. At the time of the 1960 census the population of the entire Mukah District $(2,835$ square miles) was 38,724 , of which 15,892 were classed as 'Melanaus'.

The term 'Melanau' or 'Milano' (sometimes spelled 'Lemanau') was applied by the Brunei Malays as early as the 16th century to the indigenous coastal peoples of western Borneo from the Rejang estuary in the south to at least the Kemena River in the north. This label, which corresponds only partly to a demonstrable linguistic subgroup, persists to the present as an exonym (Appell 1968), the people so classified calling themselves a likow, plus a qualifying place-name.

The proper linguistic referent of the term 'Melanau' is a dialect chain which extends along the coast of Sarawak from Balingian in the north to the region of Rejang, Jerijeh and Sarikei villages in the south, and up the Rejang River as far as Kanowit. Contrary to an often-repeated statement, it does not include Bintulu. As noted by Clayre (1970:333), "It would seem likely that Mukah's prestige as the centre of local government, its magnetic attraction for youth to the Three Rivers School, and the radio broadcasts in its dialect, will cause it to emerge as the eventual cultural form for spoken Melanau." Because they are distinguished by only minor linguistic differences, the people of the Mukah and Oya' basins are sometimes referred to collectively as 'Mukah-Oya' Melanaus' (Leach 1950; Cense and Uhlenbeck 1958).

Throughout the Melanau coastal zone and in the Bintulu District to the north, rice - the staple of all other sedentary Bornean peoples - is replaced by sago as the principal food plant (Morris 1953). It is undoubtedly this common and distinctive ecological adaptation to a swampy coastal environment that has
caused Melanau and Bintulu speakers to be grouped under a common term, leading to confusion in the classification of the languages.

Hang Tuah Merawin of Kampung Teh, an upper 6 arts student at the Kolej Tun Datu Tuanku Haji Bujang, Miri, age about 18, served as informant. Apart from his native language the informant was fluent in English and, together with a large segment of the population at Mukah, spoke Sarawak Malay. Material was collected between 17 April and 23 June 1971, and included $388^{\frac{1}{2} " ~} \times 11^{\prime \prime}$ notebook pages of data in phonetic transcription, plus a four and one half page account of principal episodes in the life of the Melanau culture hero, Tugau ('Serita Tugau, raja Melanau'), handwritten by Hang Tuah, with English translation.

After several centuries of heavy Malay influence there has been in recent years an awakening interest among the people of Mukah in their own linguistic and cultural heritage. As an indication of its growing practical importance, Radio Sarawak now broadcasts a daily program in the language. The most important published materials are:

ANON
1930 A vocabulary of Mukah Milano. SMJ 4.1.12:87-130. (Approximately 1,600 words compiled anonymously from material collected by Frs Bernard Mulder at Dalat and Anthony Mulder at Mukah, and by government officer A.E. Lawrence.)

CLAYRE, I.F.C.S.
1970 The spelling of Melanau (née Milano). SMJ 18(NS):330-352. (Principally concerned with the rather different dialect of Dalat, with passing references to other forms of Melanau.)

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## 2. LINGUISTIC INFORMATION

The description is organised under the following headings: 1. subsystems, 2. morphology, 3. lexical representation, 4. morpheme structure, 5. phonology, and 6. vocabulary.

### 2.1 Subsystems

Four subsystems are described: 1. personal and possessive pronouns, 2. demonstrative pronouns, 3. numeration/classifiers, and 4. kinship terms.

### 2.1.1 Personal and possessive pronouns

There are two partially distinct sets of personal/possessive pronouns, called respectively sets $A$ and $B$, as follows:

|  | Set A | Set B |
| :---: | :---: | :---: |
| lsg. | akəw | kəw |
| 2 sg . | ka?aw | now |
| 3 sg . | sion |  |
| ldu. (incl.) | tua | Third person singular and non-singular |
| ldu. (excl.) | mua | forms are identical with set $A$ |
| 2du. | kədua |  |
| 3du. | dua ion |  |
| lpl. (incl.) | talow |  |
| lpl. (excl.) | molaw |  |
| 2 pl . | kəlaw |  |
| 3 pl . | (də) low i |  |
| Members of | A occur as |  |
| 1. Goal |  |  |
| 2. Actor (Active verb) |  |  |
| Members of Set B occur as |  |  |
| 1. Actor (Passive verb) |  |  |
| 2. Possessives |  |  |

Examples:
(la) akəw b-əm-in siən mabəy
I carried him on my back yesterday. (A2, A1)
(lb) siən b-ən-in kəw mabəy
I carried him on my back yesterday. (Al, Bl)
(2) bin akəw
carry me on your back (Al)
(3a) siən $\quad$-pə-u-pək akəw
he whipped me ( $\mathrm{A} 2, \mathrm{Al})$
(3b) akəw pə-i-pək siən
he whipped me (A1, Bl)
(4) minow tan siən b-əm-ukut ka? aw?

Why did he punch you? (A2, Al)
(5a) ka?aw po+igi? sulud ion you took the comb (A2)
(5b) sulud iən ən+igi? nəw
you took the comb (B1)
(6a) sion g-am-utin buk kəw
he is cutting my hair (A2, B2)
(6b) buk kaw g-an-utin siən
he cut my hair ( $\overline{\mathrm{B} 2, \mathrm{~B}} 1$ )
(7) gaday mas now
pawn your gold (B2)
In addition, non-singular members of both sets occur as the actor and goal of reciprocal verbs:
(8) dua i ən pə+bukut
the two of them are fist-fighting
Following ga? at, to (relational), the goal is represented by a set B pronoun:
(9a) (də) low iən tətawa ga? kəw they are laughing at me
(9b) (də)low iən tətawa ga? now they are laughing at you

A surface pronoun was not observed in any injunction. It should be noted, however, that the form of the verb suggests that the underlying pronoun in positive injunctions is selected from set $B$ and the underlying pronoun in negative injunctions from set $A$, as seen in the following sentences:
positive injunction (imperative)
(10a) də-i-dut kayəw itəw uproot this tree
(lla) su?un kayow itaw carry this wood
(12a) bə-i-nu? babuy iən kill that pig
negative injunction
(10b) ka? də-u-dut kayəw itaw don't uproot this tree
(llb) ka? məŋ+su?un kayəw itow don't carmy this wood
(12b) ka? $\quad$ +bə-u-nu? babuy ion don't kiZl that pig
passive declarative
(10c) kayəw itow də-i-dut now you uprooted this tree
(llc) kayow itaw su?un now you carried this wood
(12c) babuy ion bə-i-nu? now you killed that pig
active declarative
(10d) ka? aw do-u-dut kayow itaw
you uprooted this tree
(11d) ka?aw məŋ+su?un kayəw itow you carried this wood ka? aw n+bə-u-nu? babuy iən you kizled that pig

Reflexive constructions are formed with diri? self:
siən pə+bənu? diri?
he conmitted suicide

### 2.1.2 Demonstrative pronouns

The demonstrative pronouns involve three locative dimensions: 1. near speaker, 2. definite, place already known to the addressee regardless of location relative to him or the speaker, 3. indefinite, place not known to the addressee regardless of location relative to him or the speaker. The forms and their glosses, with proximity to participants in the conversation and definiteness marked by + and non-proximity and indefiniteness marked by - are:

|  | near |  |
| :--- | :---: | :---: |
| speaker hearer | definite |  |
| itow this : ga? gitow here | + | + |
| ion that :ga? gion there | - | + |
| inan that :ga? ginan there | - | - |

Location near the speaker apparently is regarded as necessarily definite.

### 2.1.3 Numeration/classifiers

The cardinal numerals $1-12,20,100$ and 1000 are:

```
satu ~ jal one
dua two
təlow three
pat four
lima five
nom six
tuju? seven
lapan eight
samilan nine
səpuluh ~ pulu?+on ten
so+bəlas eleven
dua bolas twezve
dua pulu? twenty
so+ratus one hundred
sə+ribu one thousand
```

Multiplicative values are indicated by placing the smaller number to the left, additive values by placing the smaller number to the right of any of the simple decimal values: dua ratus 200, lima ribu təlow ratus dua 5,302. /pulu?/ (not
/puluh/) forms the base of non-singular multiples of ten: dua pulu? tuju? 27. As seen above, singular multiples of ten, hundred and thousand are formed with the clitic prefix so- rather than with satu or ja. /ja/ does not occur in any higher number: dua pulu? satu 21 (never **dua pulu? ja), sotratus satu 101 (never **sətratus ja). The numerals eleven through nineteen are formed by placing the smaller number to the left of bolas teen.
Five numeral classifies were identified, as follows:

```
ala? (lit. seed)
    dua ala? buna two flowers
    lima ala? bua? bə\kappauh five coconuts
    təlow ala? batow three stones
    nom ala? kərtih six sheets of paper
    tuju? ala? buna seven flower seeds
```

apah (lit. body)
tuju? apah jokan seven fish pat apah da?un four leaves
awa? (lit. meaning unknown)
lima awa? kayow five sticks
lawas (lit. meaning unknown)
lapan lawas apah eight persons (= eight bodies)
dua lawas anak umit two children
usah (lit. meaning unknown)
lima usah kayəw five trees (cp. lima awa? kayəw five sticks) usah badan the body ${ }^{2}$

Although the preferred order of elements in numeral classifier constructions is number-classifier-noun, the noun can be placed first, as in:
kayow dua awa? two sticks
jokan tolow apah three fish
These differences appear to be entirely stylistic.

### 2.1.4 Kinship system

The kinship terminology recorded for Mukah is as follows. Compositional definitions do not necessarily represent the full range of relationships designated by the classificatory label:

| relative | $:$ warih |
| ---: | :--- |
| $\mathrm{FF}, \mathrm{MF}, \mathrm{FM}, \mathrm{MM}$ | $:$ tipow |
| F | $:$ tama |
| M | $:$ tina |
| So | $:$ anak lay |
| Da | $:$ anak mahow |


| CC | $:$ səw |
| ---: | :--- |
| $\mathrm{FB}, \mathrm{MB}, \mathrm{FZH}, \mathrm{MZH}$ | $:$ tua? |
| $\mathrm{FZ}, \mathrm{MZ}, \mathrm{FBW}, \mathrm{MBW}$ | $:$ təbusəw |
| eSb | $:$ janak tika |
| YSb | $:$ janak tadəy |
| $\mathrm{FBC}, \mathrm{MBC}, \mathrm{FZC}, \mathrm{MZC}$ | $:$ jipəw |
| $\mathrm{BC}, \mathrm{ZC}$ | $:$ nakən anak |
| $\mathrm{SpF}, \mathrm{SpM}$ | $:$ mətua |
| Sp | $:$ sawa |
| $\mathrm{SpB}, \mathrm{SpZ}$ | $:$ ma?it |
| CSp | $:$ bənatəw, bisan |
| other | terms |
| in-law | $:$ saudara mara |
| second cousin | $:$ jipaw dua lakaw |
| nephew's nephew | $:$ nakən |

### 2.2 Morphology

The morphology of Mukah can be described under the following headings:

THE SIMPLE ROOT
Apart from particles, pronouns and numerals, the simple root is usually a noun (təba well, pəsoy fishhook) or an adjective (rata smooth, of surface, biləm black). When verbal it generally appears as the imperative of non-ablauting roots, in accidental passives or non-agentive completives with buya? or tarah struck, affected by, ${ }^{3}$ after ua? thing and in future (or desiderative) constructions with ba? ${ }^{4}((2),(7),(11 a)$ and sentences (15), (16), (18), (19), (21), (23), (25), (27), (28), (32), (34), (36), and (39) below):
(14a) siən t-om-ud kayəw he is bending a stick
(14b) kayow t-an-ud sion he bent a stick
(15) tud isi ion bend that ruler
(16) kayow itow ba? tud siən he will bend this stick
(17a) siən pə+idu? akow/(1) təlow ala?/(2) bua? balak (or 2, 1) he gave me three bananas
(17b) akəw ən+idu? siən/(1) tələw ala?/(2) bua? balak (or 2, 1) he gave me three bananas
(18) $\frac{\text { idu? }}{\text { give } \text { him (1) } 1 \text { ima ala? } /(2) \text { bua? bə coconuh (or 2, 1) }}$
(19) itəw ua? idu? siən this is his gift (the thing that he gave)
(20a) siən ศัə-u-ก̃a? sagu? iən he chewed the sago balls
(20b) sagu? iə กั๐-i-กัa? siən
he chewed the sago balls
(21) itəw ua? ศəฉกัa? siən this is the thing that he chewed
(22a) siən əm-upuk kain iən she washed the clothes
(22b) kain iən ən+upuk sion she washed the clothes
(23) upuk kain itaw wash these clothes
(24a) siən la-u-pow buna
he picked a flower (intentionally)
(24b) buna lə-i-pow siən he picked a flower (intentionally)
(25) buna itow $\left\{\begin{array}{l}\text { buya? } \\ \text { tərah }\end{array}\right\}$ lopow kəw

I picked this flower (accidentally, as when intending to pick s.t. else)
(26a) siən tə-u-bək akəw
he stabbed me (intentionally)
(26b) akəw tə-i-bək siən he stabbed me (intentionally)
(27) akəw $\left\{\begin{array}{l}\text { buya? } \\ \text { tərah }\end{array}\right\}$ tobək siən
he stabbed me (accidentally)
(28) bas təbək agəy dən aŋay
the mark made by stabbing (wound or scar) can still be seen clearly
(29) tənawan itow bo-i-nu? a this person was killed by s.o. (intentionally)
(30) tənawan itow $\left\{\begin{array}{l}\text { buya? } \\ \text { tərah }\end{array}\right\}$ bənu? (a)
this person was killed (accidentally)
(31) jəkan iən k-in-an siən
he ate the fish (intentionally)
(32) jəkan iən $\left\{\begin{array}{l}\text { buya? } \\ \text { tərah }\end{array}\right\}$ kan
the fish was eaten (accidentally, as when s.o. intended to save it for another occasion)
(33a) siən tə-u-tək kayəw iən he cut the wood (intentionally)
(33b) kayəw iən tə-i-tək siən
he cut the wood (intentionally)
(34) kayəw iən $\left.\begin{array}{l}\text { buya? } \\ \text { tərah }\end{array}\right\}$ tətək sion
he cut the wood (accidentally)
(35a) bolabaw nə-u-nət kain itow
a rat has nibbled this cloth
(35b) kain itow no-i-nət bolabaw
a rat has nibbled this cloth
(36) bah busəw kain itow $\left.\begin{array}{l}\text { buya? } \\ \text { tərah }\end{array}\right\}$ pəpət
the cormer of this cloth has been nibbled away (as by a rat)
(37) sak sion sala? ji
her way of putting/arranging things is improper
(38) tələŋ siən ta?ah aŋay
his diving is very noisy
(39) kayow ion ba? su?un sion he will carry the wood

A few simple verbal roots occur in other constructions:
gigit to chatter, of the teeth
(40) $\kappa$ ipən siən gigit
his teeth are chattering
boy have
sagu? itow nda bəy fam these sago balls are tasteless

## REDUPLICATION

Reduplication is put to morphological use with only two lexical items in the collected corpus. In both cases it indicates an intensification of the meaning of the root: kumuh itch : kumuh kumuh itchy, itching all over, laju quick, fast : laju laju very fast. The relationship between the monosyllabic root and its reduplication in forms such as tok piece made by cutting ; totək cut, cutting, and kan eat : kakan feed does not appear to be systematic.

Some roots that were formed historically by reduplication have variant shapes, one simple the other reduplicated, which are completely interchangeable in certain environments:
$\left\{\begin{array}{c}\text { babod } \\ \text { bəd }\end{array}\right\}$ talay tie the rope

In some of these roots the synchronic relationship of the variant shapes is no longer one of simple reduplication:
itow supay $\left\{\begin{array}{c}\text { kokut } \\ \text { kut }\end{array}\right\}$ this is a man-made river (= canal)

Partial reduplication of nominal roots is not at all uncommon, and must have been historically productive, but in contemporary Mukah is completely lexicalised:
kəkəlit small cave bat
lolanaw housefly
గəగนala light burning ashes carried off by the wind
గวกiow kind of large flying fox
totadow caterpillar
mən-
The prefix mən- is added to words of two or more syllables that do not begin with a voiced obstruent. It forms active verbs which may be transitive, as with paləy taboo, prohibition : məŋ+paləy forbid, prohibit
(42) a dukun mən+paloy siən pə+isa? diba? lobu? the shaman forbade him to play under the house
tabun lid, cover : mən+tabun to cover
(43) akəw məŋ+tabun ua? kan I'm covering the food
kunin yellow : mən+kunin make s.t. yellow
(44) (də) law ion mən+kunip kərtih ion they are making the paper yellow
səruru? a joke : mən+səruru? tease, play a joke on s.o.
(45) dua iən mən+səruru? akəw the two of them played a joke on me
anit sharp : mə刀+aкit sharpen
(46) tika kəw məŋ+aగit utup kayəw my older brother is sharpening the end of a stick
lasu? hot : məp+lasu? to heat
(47) siən məŋ+lasu? na?əm iən she is heating the water
pali? a wound : mən+pali? to cut, wound
(48) paran iən mən+pali? buduk siən the parang cut his leg
or intransitive, as with
(49) paday na? mən+kunio the paddy is already turning yellow (ripening)

In one recorded example the root prefixed with mon- is interchangeable with the simple root:

nə円-
The prefix nəŋ- forms the passive of mən- verbs. It was recorded only in:
(51) గа? วm nəฤ+lasu? sion she heated the water

## рә-

There is apparently more than one prefix with this phonemic shape. In some examples pə- indicates habitual activity or the role defined by such activity:
upuk wash, washing of clothes : pətupuk wash clothes (habitually); s.o. who washes
(52) kərja pə+upuk kain susah anay washing clothes is hard work
(53) siən pə+upuk kain she is a washerwoman
su?un carry, carrying : potsu?un carry (habitually); s.o. who carries
(54) siən məŋ+su?un kayəw iən
he is carming the wood
(55) kərja pə+su?un kayəw susah aŋay carrying wood is hard work
(56) tama kəw kərja potsu?un kayəw my father works as a wood-carrier
ung rub, rubbing : potung rub (habitually); s.o. who rubs
(57) ung asu? iən pəba? $\kappa$ u? rub the floor with (using) oil
(58) akəw kərja pə+uug təpun I work as a (sago) flour sifter (rubbing lumpy sago flour to break it into finer pieces)

In other cases a prefix with the same shape indicates intransitive action, while the transitive equivalent is signalled by mən- or -am-:
(59) akəw pə+pikir

I'm thinking (**akəw məŋ+pikir)
(60) akəw məŋ+pikir hal itəw I'm thinking of that matter
(61) akəw pə+patan baw tilom I'm lying on the mattress
(62) siən məŋ+patan anak iən baw tiləm she laid the child on the mattress
(63) akəw ba? pə+lukuh I want to go on a hunger strike
(64) ka? l-əm-ukuh anak a don't make other people's children go hungry (as by not offering them food)

In a few sentences pə- marks reciprocal action (sentence (8) and the following):
(65) dua ion po+daləw the two of them are quarrelling (with each other)

Certain other examples appear to represent spontaneous action, or action that is not the result of reflection or intent:
(66) siən pə+tabik ga? da?an
he is hanging from a branch (as after falling some distance and catching hold)
next to:
(67) siən məŋ+tabik bua? dian iən he reached for the durian
pə+təmək knock against the bank (as a raft forced out of control by a strong current)
next to:
(68) tomək akit iən ga? təbin push the raft to the riverbank
(69) siən pə+tuab he is youning
(70) pali? kəw pə+nana?
my wound is suppurating
In one sentence pr- evidently signals the result of non-directed action:
(71) kayow iən pə+tud that tree is (naturally) bent

Some verbs with pə-, however, clearly describe intentional or directed action:
(72) ka?aw pə+igi? bua? iən you took the fruit
(73) akow po+bin baw buta sion he is carrying me on his back
(74) akow ba? pə+ta? ah ucapan siən I will listen to his speech
isa? game : pə+isa? to play
Finally, a prefix pə- occurs with some roots in which the morphological relationship is apparently idiosyncratic:
(75) siən kərja potmatay lalu he works himself to exhaustion
(76) sion matay $\left\{\begin{array}{l}\text { buya? } \\ \text { tərah }\end{array}\right\}$ bonu? (a)
he was killed by someone (accidentally)
tuduy sleep : pa+tuduy nuptial night

-     - m-

The infix -om- is inserted after a root-initial consonant if there is one, but is not found in polysyllabic roots that begin with a voiceless obstruent. It forms active verbs which may be transitive, as with:
(77) auy pu? aкi ion smoke out that beehive
(78) sion m+auy pu? afi
he is smoking out a beehive
ibay buying (n.)
(79) sion om+ibay ua? jaja kow
he is buying my merchandise
(80) siən am+uug asu? pəba? kain
she is scrubbing the floor with a cloth
(81) minow tan ka? aw t-əm-ud kayow iən?
why are you bending that stick?
(82) kan bənawan
open the door
(83) siən k-əm-an bənawan
he is opening the door
(84) bua? ion b-om-aat pa?an un the fruit just adds to the weight of the tote bag (said when advising s.o. who is about to embark on a jowrney not to take some fruit)
(85) siən d-əm-əkət kərtih ga? didin
he attached the paper to the wall
(86) tina kəw j-əm-a?it kain my mother is sewing clothes
(87) sion g-om-atup bakul ion he hung the basket up
(88) tadəy kow l-əm-u?uy pil
my younger brother swallowed a pill
or intransitive, as with
l-om-opow fall, of a fruit
g-om-adup turn green, become green
mən-, po- and -əm- are neutral with regard to tense:
(89) akow məŋ+lasu? nasi? I'm warming up the (cooked) rice
(90) akow na? mən+lasu? nasi? I've already warmed up the (cooked) rice
(91) akow məŋ+lasu? nasi? maboy I warmed up the (cooked) rice yesterday
(92) akəw (ba?) məŋ+lasu? nasi? səmunih I'Zl warm up the (cooked) rice tomorrow
(93) siən pə+bin baw buta kow I'm carrying him on my back
(94) siən pə+bin baw buta kow mabəy I carried him on my back yesterday
(95) siən (ba?) pə+bin baw buta kəw səmunih

I'Zl carry him on my back tomorrow
(96) akow l-əm-u?uy pil

I'm swallowing a pill
(97) akəw l-əm-u?uy pil mabəy

I swallowed a pill yesterday
(98) akəw (ba?) l-əm-u?uy pil səmunih I'ZZ swalZow a pill tomorrow

As can be seen, the affixes mən- and -om- are in partial complementation, the former not occurring on monosyllables or any root that begins with a voiced obstruent, and the latter not occurring on polysyllables that begin with a voiceless obstruent. ${ }^{5}$ These facts might be taken as evidence that the forms in question are divergent surface realisations of a single underlying affix. An inspection of polysyllabic roots that begin with a vowel or a consonant other than a non-nasal obstruent, however, reveals clearly that these elements contrast in other environments, as in:
(99) siən məฤ+lasu? ка?əm she is heating water
(100) sə Nawi l-əm-u?uy pil ion

Nawi swallowed the pill
(101) məlow məŋ+adək Ku? waŋi itaw we (pl.excl.) smelled the odour of this fragrant perfume
(102) mua əm+itun bua? iən we (du.excl.) counted the fruit
(103) siən am+upuk kain
she is washing clothes
Given sentences (99)-(102) it is difficult to maintain that mən- and -am- are not distinct. This issue is treated at greater length in section 2.5.2.

- $\quad$ n-

The infix -ən- forms the passive of -om- and of some other verbs (sentences (lb),
(5b), (6b), (14b), (17b), (22b) and the following):
(104) dabow ion g-ən-aup anak
a child blew the ashes away
(105) akow p-on-ayun sion
he held the umbrella for me (over my head)
(106) bukan a tama t-ən-aŋih siən he wept over his father's corpse
(107) గนa?วm iən s-ən-ipuəh (də) low iən they ( pl. ) let the water cool
(108) kain j-ən-a? it tina kəw my mother sewed some clothes
(109) bua? iən ən+itup siən he counted the fruit
(110) buŋa iən ən+adək kəw I smelled the flower
-ən- differs further from -əm- in referring specifically to completed action. Thus:
**akəw b-ən-in siən səmunih
is rejected on the grounds that a verb infixed with -on- and a word referring to future time (səmunih tomorrow) are incompatible.

## ABLAUT

A number of disyllabic roots show systematic variation of the penultimate vowel. ${ }^{6}$ As this variation is correlated with grammatical function (much like the variation in English sing : sang : sung), and has not to my knowledge previously been described in its simple form for any Austronesian language, the familiar term 'ablaut' has been borrowed from Indo-European linguistics as a provisional designation. ${ }^{7}$ Roots that undergo ablaut exhibit three grades of the variant vowel: /ə/, /u/ and /i/. Shwa-grade realisations will be referred to as the neutral grade. Because they have the widest distribution, and correspond for the most part with the historically primary vowel, neutral grade realisations are adopted as the underlying representation of ablauting roots. /u/- and /i/grade realisations are represented phonemically by an infixed vowel.

## /ə/ grade

/ə/-grade realisations, which were discussed in part under THE SIMPLE ROOT, appear in concrete or abstract nouns (often after ua? thing), in accidental passives or non-agentive completives with buya? or torah stmuck, affected by, with reciprocals, and in some future (or desiderative) constructions (sentences (13), (21), (25), (27), (28), (30), (34), (36) and the following):
(ua?) pəpah a whip
(111) ua? kəkut siən nda bəy dia?
his digging is not good
(112) ga? ləŋən siən bəy gəlama səbut asəw
there is a scar on his arm from a dog's bite
(113) səsəp siən ta?ah aŋay his sipping is very Zoud
(114) babuy itəw ba? bənu?
this pig will be killed
In one known form the neutral grade realisation of an ablauting root appears in a positive injunction: ${ }^{8}$
(115) $\left.\begin{array}{c}\text { bəbəd } \\ \text { bəd }\end{array}\right\}$ taloy tie the rope
/u/ grade
/u/-grade realisations indicate that the first nominal expression in the sentence is the actor. They are neutral with regard to tense (sentences (10d), (20a), (24a), (26a), (33a), (35a) and the following):
(116) siən kə-u-kut təba
he is digging a well
(117) asəw sə-u-but ləŋən kəw (mabəy) a dog is biting my arm (a dog bit my arm yesterday)

As noted earlier, the /u/ grade of the root also occurs in negative injunctions ((l0b) and the following) :
(118) ka? kə-u-kut ləgah
don't dig fast
(119) ka? sə-u-but ləpən siən don't bite his arm

In several stems which begin with a labial stop a prefix $\quad$ - (simple nasal substitution), which only rarely occurs alone, co-occurs with /u/-grade ablaut ((3a), (12b), (12d) and the following):
(120) (də) low iən $\quad+$ pə-u-pah asəw itow
they (pl.) whipped this dog
(121) akəw $\eta+b ə-u$-bəd taləy

I'm tying the rope
/i/ grade
/i/-grade realisations indicate that the first nominal expression in the sentence is the goal $((3 b),(10 c),(12 c),(20 b),(24 b),(26 b),(29),(33 b),(35 b)$ and the following) :
(122) asəw itaw pə-i-pah (də) law iən
they (pl.) whipped this dog
(123) taləy bə-i-bəd kəw

I tied the rope
As already noted, the /i/ grade of the root also occurs in positive injunctions ( (10a), (12a) and the following):
(124) pə-i-pah asəw iən
whip that dog
(125) sə-i-bət biləm kain iən
blacken that cloth
(126) sə-i-but ləpən siən
bite his arm
In declarative sentences the /i/-grade realisation of an ablauting verb refers specifically to completed action. Thus
**təbaa(ba?) kə-i-kut siən səmunih
reportedly is regarded as unacceptable because of contradictory time reference.
There are two recorded examples of a root which takes either /u/-grade ablaut or mən-. In one of these mən- occurs with the neutral grade of the root, in the other with the /u/-grade. The resultant morphologically complex verbs appear to be completely interchangeable:
akəw $\left\{\begin{array}{c}\text { mən }+ \text { tətə } \\ \text { tə-u-tə }\end{array}\right\}$ kupi
I drank some coffee
(128) siən $\left\{\begin{array}{r}\text { məŋ+sə-u-səp } \\ \text { sə-u-səp }\end{array}\right\}$ juu? bəగ̃uh
he is sipping coconut water
In several other examples a root takes either /i/-grade ablaut or -on-. While some of the resultant morphologically complex verbs appear to be interchangeable without affecting the meaning of the sentence, as in
(129) kupi $\left\{\begin{array}{c}t-ə n-ə t ə \eta \\ t ə-i-t ə \eta\end{array}\right\}$ kəw

I drank the coffee
others clearly involve a semantic distinction:
(130) asəw iən pə-i-pək siən
he hit the dog
(131) kayəw iən p-ən-əpək siən
he used the stick to hit with
(132) uji? tə-i-bək siən ga? tana?
he plunged the knife into the earth (with prior intent to do so)
(133) uji? t-ən-əbək siən ga? tana?
he plunged the knife into the earth (through a last-second change of mind after prior intent to stab s.o. or s.t. else)

Two roots were recorded which undergo ablaut changes, but appear to lack a neutral grade variant:
['dudut] pluck, pull out : ['didut] be plucked, pulled out
['puput] what is spat out : [pə'naput] be spat upon
['piput]
[mə'maput] spit on ['puput]

To account for the observed /u/-/i/ variation in these items we might assume an abstract underlying root with penultimate shwa. Such a solution would encounter semantic difficulties, however, in items such as ['puput] what is spat out, which cannot plausibly be explained as a /u/-grade realisation of hypothetical **pəput. The problem becomes still more serious in the morphological variant [pa'nuput] be spat upon, where we would be forced to acknowledge semantically contradictory affixes in the same root (/p-ən-ə-u-əput/). As a temporary expedient the above items are written /dudut/, /didut/, /puput/, /piput/, and the morphological relationship between them left formally unstated. ${ }^{9}$
so (person-marking particle)
The clitic particle so occurs before any personal name which functions as the actor of an active verb:
(134) sə Ahmad n+bə-u-nu? dipa

Ahmad killed a snake
Before a personal name which functions as the actor of a passive verb this particle does not occur:
(135) dipa bə-i-nu? Ahmad

Ahmad killed a snake

### 2.2.1 Residual difficulties

In addition to the above well-attested affixes, a number of items are segmentable into a root and an unexplained residual element. Some of these elements may result from borrowing, while others probably involve real but minimally productive affixes whose functions are not yet well understood. The difficulties recognised are as follows:
bə-
A prefix bo- appears in:
judi die, dice : bə+judi gamble
lagu song : bə+lagu sing
and the phonological variant bol- in
ajor learning, teaching : bəl-ajor learn
where it was acquired through borrowing both the simple root and the morphologically complex word from Malay. A prefix with the same shape, however, can be identified in
ua? kahan fishing gear : bə+kahan go fishing (general term)
and
labu? a falZ : bə-labu? to faZZ
which presumably are directly inherited.
j-
An apparent prefix j - is found in
umi?~umit small : j-umi? ~ j-umit a little bit, a few
k-
It is possible to relate the verb in
(136) ['katay '7ijin] stop (i.e. kill) the engine
and
['martay] die, dead
on the assumption that the latter form contains a root /atay/ together with the infix -əm- or possibly a prefix mə- (see below). If this analysis is adopted, a prefix k- or kə- must be recognised in the former item. Similarly, the verb in
(137) ['?akəw mฐ'ทั๊ฐ 'amฐw]

I'm afraid of ghosts
can be related to the verb in
(138) [?ay, kə'øẽŋŋ 'siən ga? kəw] oh, he is very afraid of me
through the assumption of a root /nap/ which is infixed with -om- in the former and prefixed with kə- in the latter word. This analysis receives direct support from
(139) ['ทẽฐn 'siən] $\begin{aligned} & \text { frighten him }\end{aligned}$
where the root occurs unaffixed. In
(140) ['?akəw kənฐ'ทั๊ฐท 'siən]
he is afraid of me
however, it is necessary to recognise infixation of the prefix (/k-ən-ə+nan/), a morphological feature otherwise not attested in the material collected. For the present, then, the morphology of this verb remains somewhat unclear. Likewise, it remains uncertain whether [kan] eat : ['kakan] feed are related through reduplication or prefixation with ka-.

## mə- (Attributive)

An attributive or stative verbal prefix mə- appears to be isolable in:
['anit] sharpen : ['manit] sharp
[səy] flesh : [m'səy] fat, obese
['ikah] itch : ['mikah] itchy
['?udip] Zife : ['madip] Ziving, alive
['laso?] hot : [mə'laso?] burning hot
['7anat] face s.t. bravely : ['mãat] bold, fearless
[lau] wither : [mə'lau] withered
[кеә?] fat, grease: [mə'кеә?] fatty, oily
[pa'?it] bittermess : [məpa'?it] bitter
though it is conceivable that the affix in all cases is -om-.
mi-, ni-
Apparent affixes with these shapes occur in:
(141) [hig bup ion]
move that book a bit
(142) ['sien 'mihig bup ien]
he moved the book a bit
(143) [bup ion 'nihig 'sion]
he moved the book a bit
where they perhaps result from an idiosyncratic change of the affixal vowel of /h-əm-ig/, /h-ən-ig/.

గー
A formative fi- can be isolated in one recorded word:
['7agəm] grasp : ['Ћăəm] hand
n-
In a single known example $\eta$ - occurs without ablaut:
[bə'ləy] buy : [mə'ləy] to buy (= /bələy/ : /n+bələy/)

```
pan-
Two known items, at least one of which (pə\eta+tawar) appears to be a Malay loan,
take pan-:
    panas feeling of anger : pon+panas hot-tempered
    tawar treat with medicine : pan+tawar antidote
Sə-
As noted earlier (2.1.3) a clitic prefix so- one occurs in the numerals
    sə+puluh ten
    sə+bəlas eZeven
    sə+ratus 100
    sa+ribu 1000
where it was borrowed from Malay.
t-
A single root in the available material exhibits a morphologically complex shape
with t-:
    ['?udip] Zife: ['tudip] Ziving, alive
tələ-
An apparent affix with this shape can be identified in:
(144) suy kayow iən
    let the wood slip down
trlo+suy slip, slide forward
-in-
This infix is attested only in the root kan eat; food, and might be compared
with the prefix in sentence (143):
(145) nasi? k-in-an Nawi
    Nawi ate the rice
-әn
-ən is attested in two words:
    pulu?+on ten
    ua? kan ordinary food
    ua? kan+on any special food, as one's favourite food
```


### 2.2.2 Sample paradigms

```
The following paradigms illustrate the range of affixes that can be attached to a few particular roots:
lasu? hot
mən+lasu? to heat
nop+lasu? be heated
motlasu? buming hot
```

```
bad, babəd tying, tie (imper.)
    n+ba-u-bad to tie
    ba-i-bad be tied
    po+bad tie (habitually, as in an occupation)
uug rubbing; rub (imper.)
    əm+uug rub
    ən+uug be rubbed
    po+ung mub (habitually, as in an occupation)
kan eat (imper.); ordinary food
    ka+kan feed (imper.)
    mən+ka+kan to feed
    k-ən-a+kan be fed
    k-əm-an eat
    k-in-an be eaten
    kan+on special food
```


### 2.3 Lexical representation

Lexical items in Mukah can be represented in terms of the following minimal inventory of symbols. Justification of the symbols used will be given in later sections:

| P | t | $c^{10}$ | k | $?$ |
| :---: | :---: | :---: | :---: | :---: |
| b | d | j | g |  |
| m | n | ก | $\square$ |  |
|  | s |  |  | h |
|  | 1 |  |  |  |
|  | r |  |  |  |
| w | $y$ |  |  |  |


| VOWELS | DIPHTHONGS |  |
| :---: | :---: | :---: |
| $\mathrm{i} u$ | uy | iw |
| $\partial$ | əy | əw |
| a | ay | aw |

h
w $y$

Consonant phonemes have their expected phonetic values except that final /k/ is realised as /?/ after vowels other than / /, final /s/ is realised as [ih], and $/ r /$ appears as $[\gamma]$ in loanwords, but as $-[h]$ in native forms.

### 2.4 Morpheme structure (phonotactics)

Constraints on permissible phoneme sequences in morphemes can be divided into two types: categorial constraints and segmental constraints.

### 2.4.1 Categorial constraints

Categorial constraints are limitations on the distribution of the categories 'consonant' and 'vowel'. These are discussed first in terms of the syllable, then in terms of root morphemes.

### 2.4.1.1 Canonical shapes of syllables

Possible phonemic syllable shapes (underlined) are as follows: ${ }^{11}$
v i.juh extend the legs while sitting
vc Ti.an light (in weight)
CV bu. kow yom
CVC ja.tih gibbon ga. gaw busy

### 2.4.1.2 Canonical shapes of stems

All theoretically possible combinations of the categories 'consonant' and 'vowel' within root morphemes of up to three phonemic segments are listed below. Where a canonical shape is exemplified by at least one known form, a representative example is cited to the right:

| V a somebody, someone | VVC | uan dry |
| ---: | :--- | :--- |
| C | VCV uma cultivated field |  |
| VV | ua just, only | VCC |
| VC ud headwaters | CVV sia salt |  |
| CV | ja one | CVC |
| CC ip thirsty |  |  |
| CV |  | CCV nda no, not |

The following is a list of all attested canonical shapes that involve longer sequences:

```
            vCvC udut dandruff
            atay liver
            CVVC luup exhausted
            siaw chicken
            CVCV dipa snake
    CVCVV banai large river
    CVCVC puyan hearth
            dabow ashes
            tutuk knock, rap
            CVCCV karja work (L)
CVVCVC lautan open sea (L)
CVCVCV botuka large intestine; bowels
CVCVVC saluah trousers (L)
CVCVCVV galagua intestinal worm
CVCVCVC togalin tail feathers of a rooster
    babulan ocular cataract }\mp@subsup{}{}{12
    kalibuy monitor lizard
CVCVCVCVC solmmawa? large fructivorous bat or flying fox
```

On the basis of this information it is possible to formulate a set of constraints on permissible combinations of vowels and consonants within Mukah root morphemes as follows:

1. Every root morpheme must contain at least one vowel.
2. No more than two Vs may occur in sequence.
3. Except in nda no, not and a few Malay loans (as kərja work), consonant clusters do not occur.
4. No root morpheme of more than two syllables begins with a vowel.

Blanks in the above list of theoretically possible triliteral and shorter sequences can now be distinguished as structural impossibilities or accidental gaps. Non-occurring canonical shapes appear below, with constraints violated cited in parentheses. Remaining blanks indicate accidental gaps:

```
    C (1) VVV (2, 4)
    VCC
CC (1, 3) CCC (1, 2, 3)
```


### 2.4.1.3 Relative frequency of canonical shapes

Based on a sample of 100 roots selected at random the attested canonical shapes (2.4.1.2) show the following frequency percentages:

```
CANONICAL SHAPE FREQUENCY %
```

                    V
                    VC
                    CV
                    VVC
                VCV
                CVV 2
                CVC 8
                CCV
            VCVC 15
            CVVC 6
            CVCV 7
            CVCVV 2
            CVCVC 49
            CVCCV
        CVVCVC
        CVCVCV 1
        CVCVCVV 1
        CVCVCVC 9
    CVCVCVCVC
100

### 2.4.2 Segmental constraints

Segmental constraints are limitations on the distribution of particular segments. For expository convenience consonant distribution and vowel distribution will be discussed separately.

### 2.4.2.1 Constraints on the distribution of particular consonants

The recorded distribution of consonant phonemes in initial, intervocalic and final positions appears below, keyed by number to the illustrative lexical items that follow. To simplify the statement of environments attested clusters are cited separately at the end. Segments which are rare in any given position, or that are known to occur only in loanwords are marked as such:

|  | INITIAL | INTERVOCALIC | FINAL |
| :--- | :--- | :--- | :--- |
| p | 1,20 | 2,26 | 8,18 |
| t | $7,9,19,21$ | 11,16 | 10 |
| c | - | 26 (in loans) | - |
| k | 18 | $9,10,17$ | 19,21 |
| p | - | 13 | 5 |
| b | 11,27 | 19 | 7 |
| d | $10,23,24$ | 21 | 9,17 |
| j | 5 | 1,12 | - |
| g | 12 | 20 | 1 |
| m | 16 | 22 | 4,13 |
| n | 8 | 23 | 22,26 |
| f | 13 | 4 | - |
| p | 14 | 14 | 6 |
| s | 2 | 3 | 27 |
| h | - | 18 | 15,25 |
| l | 15 | 5 | 12 |
| r | 17 | 25 | 20 |
| w | 6,25 | 24 | 2,3 |
| y | - | 15 | 24 |

1. pajug foot
2. sapaw thatch
3. asaw dog
4. aగ̃am weave
5. jola? tongue
6. wuv rapids
7. tuab yawn
8. nap fish scale
9. tukod climbing; climb
10. dəkət stick, adhere
11. buta back (anat.)
12. gajil lazy
13. กัa?วm water
14. घana mouth of fish trap
15. layah sail
16. mata eye
17. rukəd space between joints
18. kuhəp crush with molars
19. təbak stabbing; stab
20. pagar fence (L)
21. tuduk single-barbed harpoon
22. amun if
23. dana old, of things
24. daway wire
25. warih relative
26. ucapan speech (L)
27. kias mosquito

ATTESTED CONSONANT CLUSTERS
nd- nda no, not
-rb- karbaw water buffalo (L)
-rj- kərja work (L)
-rt- kərtih paper (L)
In addition to the above clusters, city people (people in Mukah proper) sometimes introduce a homorganic nasal before a medial stop in self-conscious imitation of Malay: ['kapuən] ~ ['kampuən] settlement. This usage is apparently quite recent and is sometimes overgeneralised, as it occasionally affects words which lack a nasal in the Malay cognate: [sə'nฐpeəŋ] ~ [sə'nampeəŋ] gun, weapon (Sarawak Malay senapan gun, rifle).

In summary, the following constraints on the distribution of consonant phonemes can be stated:

1. /c/ is rare, and occurs only in Malay loanwords or with restricted segments of the population in certain conversational styles.
2. /7/, /h/ and /y/ do not occur initially. ${ }^{13}$
3. /n/ does not occur before /i/.
4. medial nasal clusters occur with restricted segments of the population in certain styles as a mark of social prestige, but do not occur in normal speech between social peers.
5. palatals do not occur finally.

### 2.4.2.2 Constraints on the distribution of particular vowels

The following constraints on the distribution of vowel phonemes can be stated:

1. apart from the Malay loanword lautan open sea, all vocalic oppositions are neutralised as shwa in prepenultimate syllables within a root.
2. shwa does not occur initially, prevocalically, before /7/ or $/ \mathrm{h} /$, or in open final syllables.

AtTESTED VOWEL SEQUENCES
aa baat heavy
bənaa glowing ashes
ai kain cloth, clothing pai stingray
au jaut recede, of the tide fau eagle; kite
ia dia? good sia salt
iə iən that (def.)
ii dii housepost
ua bua? fruit dua two
uu tuun swim
nuu secondary forest

### 2.4.2.3 Relative frequency of phonemes

The relative list frequency of consonant phonemes in each position appears below. Given the zero convention marking the non-occurrence of an initial, intervocalic or final consonant, initial and final consonants necessarily total 100. Absolute numerical values and percentages are thus identical. Due to a substantial number of monosyllables only partly compensated by multiple intervocalic consonants in words of three or more syllables, the absolute number of intervocalic consonants is less than 100:

| $p-$ | : 8 | -p- | : 8 | -p | : 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| t- | : 15 | -t- | : 10 | -t | : 10 |
| c- | : $\emptyset$ | -c- | : $\varnothing$ | - | : |
| k- | : 5 | -k- | : 4 | -k | : 7 |
| - | : - | -7- | : 5 | -? | : 16 |
| $b-$ | : 17 | -b- | : 5 | -b | 1 |
| d- | : 5 | -d- | : 7 | -d | 1 |
| j- | : 7 | -j- | : 2 | - | : - |
| g- | : 2 | -g- | : 2 | -g | : $\varnothing$ |
| m- | : 1 | -m- | : 6 | -m | : 1 |
| n - | : 1 | -n- | : 5 | -n | : 14 |
| K- | : 5 | -ก゙- | : $\varnothing$ | - | : - |
| ロ- | : $\emptyset$ | - 0 - | : 3 | - 0 | : 10 |
| s- | : 9 | -s- | : 5 | -s | : 4 |
| - | : | -h- | : 1 | -h | : 8 |
| 1- | : 6 | -1- | : 11 | -1 | : 3 |
| r- | : 2 | -r- | : 1 | -r | : $\varnothing$ |
| - | : | -w- | : 5 | -w | : 5 |
| - | : - | -y- | : 4 | -y | : 7 |
|  | $: 17$ | - $\square$ - | : 8 | - $\emptyset$ | 11 |
|  | $\overline{100}$ |  | 92 |  | 100 |

Based on the above observations, the following general claims about the relative frequency of consonants in Mukah seem tentatively to be justified:

1. /b/, initial vowel and /t/ are strongly favoured in C-position within root morphemes.
2. In intervocalic position /l/ and /t/ are preferred, followed closely by $/ p /$ and $\emptyset$.
3. In final position /7/ is the preferred segment, followed by /n/, $\varnothing$, /t/ and /n/.

The relative frequency of vowel phonemes in each syllable (penultimate and ultimate) is as follows:

|  | penultimate | ultimate |
| :---: | :---: | :---: |
| a | 45 | 49 |
| ə | 15 | 20 |
| i | 10 | 9 |
| u | 18 | 22 |
| e | - | $\emptyset$ |

Based on the above observations the following general claims about the relative frequency of vowels in Mukah appear tentatively to be justified:

1. /a/ is the most frequent vowel in both positions.
2. /u/ is the second most frequent vowel in both positions, followed closely by /ə/, and more distantly by /i/.

The preferred canonical shape (disyllabic) and segment distribution of Mukah can be symbolised by the formula: bala?, though formulae bata? and tala? receive nearly as much support.

No associative tendencies between segments were noted. The only dissociative tendency recognised to date is the inherited Austronesian aversion to unlike labials (b--p, p--m, etc.) in successive syllables within the same morpheme.

### 2.5 Phonology

The phonology of Mukah can be described in terms of a set of partially ordered rules relating lexical representations to their phonetic realisations.

### 2.5.1 Phonological rules

The phonological rules of Mukah are as follows:
1 (stress placement)
As stress placement in Mukah citation forms is apparently governed by a rather complex set of conditions, it will perhaps be clearest if the general case (a) is stated first, followed by each subcase (b-d) in descending order of importance:
(a) the penultimate vowel of a word receives stress.

## EXAMPLES

| /uləd/ | $\rightarrow$ ['?uləd] maggot, caterpiZZar |
| :--- | :--- |
| /tuləy/ | $\rightarrow$ ['tuləy] dammar |
| /liŋa/ | $\rightarrow$ ['liŋa] ear |
| /daa?/ | $\rightarrow$ ['daa?] blood |
| /pəmaləy/ | $\rightarrow$ [pa'maləy] python |

(b) if the penultimate vowel of a word is schwa, stress shifts to the final syllable.
EXAMPLES

$$
\begin{array}{ll}
\text { /tələw/ } & \rightarrow \text { [tə'low] three } \\
\text { /bəbut/ } & \rightarrow \text { [bə'but] hole } \\
\text { /təba/ } & \rightarrow \text { [tə'ba]well } \\
\text { /sələlan/ } & \rightarrow \text { [sələ'lan] mirror }
\end{array}
$$

(c) following /a/ and preceding word boundary high vowels receive stress (and perhaps added length - not mentioned further).

This subpart of the stress rule is posited to account for the fact that minimal pairs such as

$$
\begin{aligned}
& \text { /pay/ } \rightarrow \text { [pay] go across } \\
& \text { /pai/ } \rightarrow \text { [pa'i:] stingray } \rightarrow \text { [law] day } \\
& \text { /lau/ } \rightarrow \text { [la'u:] wither }
\end{aligned}
$$

and the similar parts of

```
/matay/ -> ['matay] die, dead
/tai/ }->\mathrm{ [ta'i:] long, of time (up to several hours)
/sunay/ }->\mathrm{ ['supay] streom, tributary, small river
/bənai/ ) [bəpa'i:] main branch of a river, large river
```

differ not only in number of syllables, but also in placement of stress. The shift of stress in such cases may be motivated by a desire to avoid homophony,
or may have been a product of unnatural emphasis for my sake. No examples of -iu or -ui were recorded.

In a sequence of like vowels the first vowel is normally stressed, though stress sometimes shifts in emphatic pronunciations, as to distinguish minimal pairs:
/baat/ $\rightarrow$ ['baat] or [ba'at] heavy (by contrast with /bat/ $\rightarrow$ [bat] net, web)
(d) if the penultimate vowel is followed by glottal stop, stress optionally shifts to the final syllable.

EXAMPLES

| /da?un/ |  | ['da?un] ~ [da'?un] Zeaf |
| :---: | :---: | :---: |
| /pa?a/ | $\rightarrow$ | ['pa?a] ~ [pa'7a] thigh |
| / $九$ a? ${ }^{\text {a }}$ / | $\rightarrow$ | ['кรารm] ~ [กร'フรm] water |
| /məท+su?un/ | $\rightarrow$ |  |

2 (glide insertion)

$$
\emptyset \rightarrow\left[\begin{array}{l}
-v o c \\
- \text { cons } \\
+ \text { high } \\
\text { aback }
\end{array}\right] /\left[\begin{array}{l}
+ \text { voc } \\
+ \text { high } \\
\text { aback }
\end{array}\right]-\left[\begin{array}{l}
+ \text { voc } \\
- \text { cons }
\end{array}\right]
$$

(between a high vowel and any following unlike vowel a glide is inserted homorganic with the first phonemic segment)

## EXAMPLES

/biah/ $\rightarrow$ ['biyah] run
/siən/ $\rightarrow$ ['siyən] 3sg.
/bua?/ $\rightarrow$ ['buwa?] fruit

3 (prepenultimate neutralisation)

$$
V \rightarrow \partial \quad / C \quad C V(C)+V C
$$

(any vowel that comes to be prepenultimate as a result of affixation is neutralised with shwa)

This is a minor rule, needed to account for the alternation in the first syllable vowel of

> /pulu?/ $\rightarrow$ ['pulo?] group of ten (in counting even multiples of ten beginning with twenty)
> /pulu?+ən/ $\rightarrow$ [pə'lu?ən] $[$ [pəlu'?ən] ten

Although this interpretation is not adopted here, Rule 3 might also be invoked to account for the vowel change in the reduplicated variant of ['diyan] $\sim$ [də'diyan] candle.

4 (shwa deletion)

$$
ə \rightarrow \emptyset \quad+\quad+V \quad \begin{aligned}
& \text { (a shwa that comes to be prevocalic as a result of } \\
& \text { affixation is deleted) }
\end{aligned}
$$

## EXAMPLES

$$
\text { /pə+upuk/ } \rightarrow \text { ['pupuə?] wash clothes (habitually) }
$$

$/ p ə+i g i ? / \rightarrow$ ['pige?] take
$/ p ə+i s a ? / \rightarrow$ ['pisa?] play
In other environments shwa remains:
/pə+su?un/ $\rightarrow$ [pə'su?un] ~ [pəsu'?un] carry on the shoulder (habitually)
/pə+tuab/ $\rightarrow$ [pə'tuwab] to yown

5 (deletion of prepenultimate initial vowels)

$$
\begin{array}{r}
\mathrm{V} \rightarrow \emptyset / \# \ldots \mathrm{C}+\mathrm{V}(\mathrm{C}) \mathrm{V}(\mathrm{C}) \begin{array}{l}
\text { (a vowel which comes to be prepenultimate and } \\
\text { initial as a result of affixation is deleted) }
\end{array}
\end{array}
$$

## EXAMPLES

/əm+uug/ $\rightarrow$ ['maqg] rub
/on+uug/ $\rightarrow$ ['naag] be rubbed
/om+itun/ $\rightarrow$ ['mitaรn] count
/on+itun/ $\rightarrow$ ['nitaรn] be counted

6 (glottal onset)
$\emptyset \rightarrow \quad \# \quad V$ (glottal stop is added before a vowel that follows word boundary. This rule applies in citation forms, and phraseinitially, but apparently not phrase-medially)

## EXAMPLES

/arən/ $\rightarrow$ [1?aron] charcoal
/ida?/ $\rightarrow$ ['?ida?] much, many
/uma/ $\rightarrow$ [1?uma] cultivated field

7 (breaking)
The rule of breaking is divided into three subparts, the second of which may involve more than one phonological process:
(a) $\left[\begin{array}{l}+v o c \\ +h i g h\end{array}\right] \rightarrow \quad$ [+central offglide] / $\quad\left[\begin{array}{l}k \\ \eta\end{array}\right] \#$
(high vowels are pronounced with a centralising offglide before word-final /k/ and /n/)
EXAMPLES
/tabik/ $\rightarrow$ ['tabiə?] reach
/gutiŋ/ $\rightarrow$ ['gutiən] scissors
/tutuk/ $\rightarrow$ ['tutuə?] knock, rap
/jalun/ $\rightarrow$ ['jaluəच] flame

The breaking of high vowels does not occur before word-final /g/:
/hig/ $\rightarrow$ [hig] budge, move slightly
/duhig/ $\rightarrow$ ['duhig] mythological forest monster
/tug/ $\rightarrow$ [tug] ball of the heel
/pajug/ $\rightarrow$ ['pajug] foot
(b)


## EXAMPLES

| /sak/ | $\rightarrow$ [seə?] red |
| :--- | :--- |
| /anak/ | $\rightarrow$ [1?anẽs?] child |
| /kan/ | $\rightarrow$ [keəŋ] open |
| /bitap/ | $\rightarrow$ ['biteoŋ] star |
| /nar/ | $\rightarrow$ [nẽsh] heat |
| /sadar/ | $\rightarrow$ ['sadeəh] Zean against |
| /gagar/ | $\rightarrow$ ['gageəh] k.o. raised platform |

The fronting, raising and offgliding of /a/ does not occur before word-final /g/:
/tatag/ $\rightarrow$ ['tatag] patch, repair
$/$ tipag/ $\rightarrow$ ['tipag] stamping of feet ${ }^{14}$
Strict adherence to the use of features within the standard theory of generative phonology would force us to regard the breaking of high vowels before word-final /k/ and /n/ as unrelated phenomena, since the environment in question is not a natural class. If this implicit claim is correct, however, it should be possible to find a language in which breaking occurs just before e.g. word-final /p/ and $/ \mathrm{g} /$ or $/ \mathrm{k} /$ and /m/, or any two randomly selected consonants. Breaking before various word-final consonants is extremely widespread in languages of western Borneo, and in all languages for which information is available, if high vowels are affected before only two word-final consonants these segments are /k/ and $/ \mathrm{p} /$. There thus appears to be some reason to believe that breaking is rulegoverned even though the environment of the proposed rule violates the formal requirements of the simplicity metric.

The fronting, raising and breaking of /a/ is clearly more problematic. Phonetically there seems to be no reason to believe that fronting and raising are related to offgliding. To treat these two phonetically dissimilar processes as phonologically unconnected, however, fails to account for the fact that /a/ is fronted and raised in just those environments where it is also offglided, and that /g/ is excluded both from the set of environments in which fronting and raising takes place and from the set of environments in which offgliding occurs.

The phonemic interpretation of a few items is indeterminate for the presence of underlying /ə/, as with ['?ayəŋ] big, ['?iəŋ] precede, go before, [kə'layəท] double-headed spear or harpoon and ['layon] float on the wind, all of which are potentially assignable to underlying forms with -/yəp/ or -/ip/. In such cases I have adopted the representation that most closely conforms to the dominant canonical shape of phonemically unambiguous morphemes. A single known example shows reinterpretation of an earlier phonemic shwa as a predictable offglide: /baun/, borrowed from Malay bawan as [bawon], with subsequent reanalysis.

8 (height assimilation) - OPT

$$
\begin{array}{r}
\mathrm{i} \rightarrow[\mathrm{e}] / \mathrm{(?)e} \quad \begin{array}{l}
(/ \mathrm{i} / \text { is optionally lowered to [e] if it is followed } \\
\text { by [e] (</a/). Glottal stop may intervene) }
\end{array}
\end{array}
$$

## EXAMPLES

```
/liap/ }->\mathrm{ ['liyerp] ~ ['leyeən] light in weight
/ti?a\eta/ ) ['ti?eə\eta] ~ [ti'?eə\eta] ~ ['te?eə\eta] ~ [te'?eə\eta] cemetery
```

Assimilation does not occur if other consonants intervene:

```
/bitap/ \(\rightarrow\) ['biteəp] star
/isak/ \(\rightarrow\) ['?iseə?] cooking (n.)
```

9 (gemination)

$$
\left[\begin{array}{l}
\text {-voc } \\
+ \text { cons } \\
\text { +high } \\
- \text { nas }
\end{array}\right] \rightarrow \text { [+long] / } \quad \begin{aligned}
& \text { (non-nasal velar stops are geminated after } \\
& \text { shwa, but only if }[ə] \text { is penultimate) }
\end{aligned}
$$

EXAMPLES

$$
\begin{aligned}
& \text { /jəkan/ } \rightarrow \text { [jək'kan] fish } \\
& \text { /bəka?/ } \rightarrow \text { [bək'ka?] leave behind; remainder } \\
& \text { /jəgəm/ } \rightarrow \text { [jəg'gəm] and }
\end{aligned}
$$

Other consonants do not geminate after shwa:
/lə⿰ən/ $\rightarrow$ [lə'ŋIn] Zower arm
/pədih/ $\rightarrow$ [pə'deh] sick
/taləw/ $\rightarrow$ [tə'ləw] three
nor do velar stops geminate after other vowels:
/akah/ $\rightarrow$ ['?akah] vine, aerial root
/tigah/ $\rightarrow$ ['tigah] straight
/lukuh/ $\rightarrow$ ['lukoh] hungry

10
(lowering)

$$
\left[\begin{array}{l}
\text { +voc } \\
- \text { cons }
\end{array}\right] \rightarrow[-h i g h] /\left[\begin{array}{l}
-v o c \\
-\operatorname{cons} \\
- \text {-high }
\end{array}\right] \begin{aligned}
& \text { (high vowels become non-high before } \\
& \text { word-final } / h / \text { and } / 7 / \text { ) }
\end{aligned}
$$

EXAMPLES
/bəsuh/ $\rightarrow$ [bə'soh] satiated, full after eating
/tanih/ $\rightarrow$ ['taŋerh] weep
/bibih/ $\rightarrow$ ['bibeh] lip
/tuli?/ $\rightarrow$ ['tule?] deaf
/ləbu?/ $\rightarrow$ [lə'bo?] house
/təpu?/ $\rightarrow$ [tə'ŋठ?] neck

It is possible that rule 10 is a rule of laxing rather than a rule of lowering. My phonetic transcriptions vary between [i], [e] and [ $\varepsilon$ ] for /i/, and [u], [u] and [o] for /u/.

The following apparent exceptions to lowering (or laxing) have been noted:
['biyu?] blue
['tuju?] seven
['juu?] juice
['jau?] far
['lipih] thin, of things
['jifih] beautiful, of women
['kukuh] stable, enduring
['kumah 'kumah] itch
['wayih] relative
['puluh] ten
['sauh] anchor
['masuh] enemy

Because the above items do not undergo lowering a few minimal and near-minimal pairs can be found which differ in [i] : [e] or [u] : [o]:
/kukuh/ $\rightarrow$ ['kukuh] stable, enduring
(manuk) /kukuh/ $\rightarrow$ ['kukoh] small dark blue bird
$/$ tuju?/ $\rightarrow$ ['tuju?] seven
/tuju? $\rightarrow$ ['tujo?] hand
/lipih/ $\rightarrow$ ['lipih] thin, of things
/bəlipih/ $\rightarrow$ [bə'lipeh] cockroach

Given these straightforward phonetic contrasts it is possible to contend that Mukah has phonemic mid vowels /e/ and /o/. To adopt this interpretation, however, would obscure the fact that the occurrence of [e] and [o] is almost fully predictable, contrast resulting only from the failure of a few lexical items to undergo lowering. Several of these exceptions (the words for blue, stable, relative, ten, anchor and enemy) are almost certain Malay loans, and it seems clear that the relationships between the segments involved can be captured in most general terms by the recognition of lexical strata which exhibit differential behaviour with respect to certain synchronic rules. ${ }^{16}$

## 11 (weakening of /r/)

Between /a/ and a following word boundary /r/ is weakened to [h] in directly inherited words:

EXAMPLES
/gagar/ $\rightarrow$ ['gageəh] kind of raised platform
/nar/ $\rightarrow$ ['neæh] heat
/sadar/ $\rightarrow$ ['sadeəh] Zean against
In indirectly inherited words weakening does not occur.

12 (weakening of /s/)
Word-finally /s/ is weakened to [ih].
EXAMPLES
/abus/ $\rightarrow$ ['?abuih] fog, mist
/bias/ $\rightarrow$ ['biaih] body
/panas/ $\rightarrow$ ['panaih] feeling of anger
/ratus/ $\rightarrow$ ['yatuih] group of one hundred

## 13 (weakening of /k/)

Between an offglided vowel and a following word-boundary /k/ shifts to /7/.
EXAMPLES

| /titik/ | $\rightarrow$ ['titiə?] speck, dot |
| :--- | :--- |
| /adik/ | $\rightarrow$ ['?adiə?] short |
| /buduk/ | $\rightarrow$ ['buduə?] leg |
| /manuk/ | $\rightarrow$ ['manaə?] bird |
| /lalak/ | $\rightarrow$ ['laleə?] baZd |
| (bua?) /pak/ | $\rightarrow$ ['peə?] knee cap |

Before a non-offglided vowel (/ə/) /k/ remains unchanged:
/təbək/ $\rightarrow$ [tə'bək] stab; mark made by stabbing
/pəpək/ $\rightarrow$ [pə'pək] what is used to hit
/sək/ $\rightarrow$ [sək] grass
Following last-syllable vowels other than / / my transcriptions generally show /k/ as /7/, but occasionally show [k] instead. It is unclear whether this means that rule 13 applies optionally, or whether the transcriptions are inaccurate in such cases.

14 （metathesis of－əm－，－ən－）

（the consonant of the infixes－om－and－on－meta－ thesises with the first consonant of an infixed root．Metathesis is optional with polysyllables， but obligatory with monosyllables）${ }^{19}$

EXAMPLES

$$
\begin{aligned}
& \text { /j-əm-a?it/ } \rightarrow \text { [jə'ma?个t] ~[mฐ'ja?it] sew } \\
& \text { /j-ən-a?it/ } \rightarrow \text { [jə'nฐ?it] ~ [nฐ'ja?it] be sewn } \\
& \text { /g-əm-utin/ } \rightarrow \text { [gə'matiən] ~[mə'gutiən] cut with scissors } \\
& \text { /g-ən-utin/ } \rightarrow \text { [gə'natiən] ~ [nす'gutiən] be cut with scissors } \\
& / \mathrm{t} \text {-om-ud/ } \rightarrow \text { [m'tud] to bend } \\
& \text { /t-ən-ud/ } \rightarrow \text { [nฐ'tud] be bent } \\
& / k \text {-əm-an/ } \rightarrow \text { [mə'keən] to open } \\
& / k-ə n-a \eta / \rightarrow \text { [nฐ'keən] be opened } \\
& \text { /b-əm-in/ } \rightarrow \text { [mə'bin] carry on the back }
\end{aligned}
$$

There appear to be generational differences in the use of this rule．According to the informant，speakers of his grandparents＇generation use only non－meta－ thesised forms：［jə＇ma？it］，etc．Speakers of his parents＇generation use meta－ thesised forms most often，but occasionally use non－metathesised forms when conversing with their elders．As indicated above，younger people use either form．An opinion was expressed that the metathesised form of roots infixed with －am－seems more＇modern＇and the non－metathesised form more＇old fashioned＇．By contrast，no such social connotation was felt to attach to the alternative pro－ nunciations of roots infixed with－on－．

## 15 （nasal substitution）

This rule must be stated as a complex（multi－step）phonological process．Two steps are recognised here：
（a）（assimilation）

$$
[+ \text { nas }] \rightarrow\left[\begin{array}{l}
\alpha a n t \\
\alpha \operatorname{cor}
\end{array}\right] /\left[+\left[\begin{array}{l}
-\operatorname{son} \\
\alpha \operatorname{ant} \\
\alpha \operatorname{cor}
\end{array}\right]\right.
$$

The nasal ending of the prefixes／mən／－and／nən／－and the nasal prefix／n／－ which co－occurs with／u／－grade ablaut in most stems that begin with a labial stop，assimilates to the point of articulation of a following obstruent．${ }^{18}$
（b）（replacement）
Root initial obstruents are replaced by the assimilated nasal．

## EXAMPLES

| ／paləy／ | $\rightarrow$ | paləy］taboo，prohibition |
| :---: | :---: | :---: |
| ／məŋ＋paləy／ | $\rightarrow$ | ［m＇maloy］forbid，prohibit |
| ／tabun／ | $\rightarrow$ | ［＇tabun］lid，cover |
| ／məŋ＋tabun／ | $\rightarrow$ | ［mg＇nabun］to cover |
| ／kunin／ | $\rightarrow$ | ［＇kunizn］yellow |
| ／mən＋kunin／ | $\rightarrow$ | ［ms＇ทantsp］become yellow；make s．t．yellow |
| ／səruru？／ | $\rightarrow$ | ［sə＇үuyo？］a joke |
| ／məŋ＋səruru？／ | $\rightarrow$ | ［mรณร＇yuyo？］tease，play a joke on s．o． |

## 16 (shwa epenthesis)

When the nasal ending of the prefixes /məv/- and /nəŋ/- comes to stand before a root-initial /l/ shwa is inserted between the members of the derived cluster. ${ }^{19}$

EXAMPLES

$$
\begin{array}{ll}
\text { /lasu?/ } & \rightarrow \text { ['laso?] heat } \\
\text { /məท+lasu?/ } & \rightarrow \text { [mæந઼'laso?] to heat } \\
\text { /nəท+lasu?/ } & \rightarrow \text { [nฐŋัฐ'laso?] be heated }
\end{array}
$$

Before vowel-initial roots the nasal ending remains unchanged:

| /adək/ | $\rightarrow$ | ['?adək] sniff, smell; sniffing, smelling |
| :---: | :---: | :---: |
| /mən+adək/ | $\rightarrow$ | [mฐ'nadək] to sniff, smell |
| /afit/ | $\rightarrow$ | ['7a¢Tt] sharp |
| /məŋ+aగit/ | $\rightarrow$ | [mฐ'øฐศTt] sharpen |

## 17 (nasalisation)

Vowels are nasalised after a nasal consonant, and this nasalisation carries over to succeeding vowels unless interrupted by an oral consonant other than $/ \mathrm{y} / \mathrm{l} / \mathrm{w} /$, /?/ or /h/).

EXAMPLES


If not nasalised by the process described above, the nasalisation of vowels before a nasal consonant is negligible:

```
/puyan/ -> ['puyan] hearth
/kədə\eta/ }->\mathrm{ [kə'dən] stand; place upright
/bin/ -> [bin] carry on the back
/guun/ -> ['guun] jungle, forest
```

Several other phonological phenomena involving changes in non-segmental characteristics such as stress and juncture can be mentioned here.

## Liaison

Within a phrase /h/ at the end of a word is resyllabified as the initial consonant of a following word that begins with an underlying vowel.

EXAMPLES
/susah anay/ $\rightarrow$ ['susa 'hanay] very difficuZt
/bah aju?/ $\rightarrow$ ['ba 'hajo?] upriver (loc.)
/kipas aŋin/ $\rightarrow$ ['kipai 'haŋin] electric fan

It is not known whether glottal stop exhibits similar linking behaviour.

## Clitics

The unstressed person-marking particle /sョ/ invariably belongs to the same phonological word as a following morpheme:
/sə Tugaw/ $\rightarrow$ [sə'tugaw] Tugaw (name of a culture hero)
In rapid speech /tarah/, one of the two recorded markers of non-agentive or non-deliberate action loses its stress and contracts to [tə]:
/tərah dudu?/ $\rightarrow$ [tə'dudo?] fall into a sitting position (through buckling of the legs, etc.)
/tərah səbut/ $\rightarrow$ [təsə'but] mention inadvertently
Before a vowel-initial deictic expression the unstressed locative marker ga? contracts to g -:
itow this
/ga? itəw/ $\rightarrow$ ['gitəw] here
ion that (def.)
/ga? iən/ $\rightarrow$ ['giyən] there (def.)
inan that (indef.)
/ga? inan/ $\rightarrow$ ['ginan] there (indef.)
Before consonant-initial expressions of location ga? remains uncontracted:
jaway face, front
/ga? jaway $\rightarrow$ [ga? 'jaway] in front
buta back, behind
/ga? buta/ $\rightarrow$ [ga? 'buta] behind, in back
dawok side, flank
/ga? dawək/ $\rightarrow$ [ga? 'dawək] beside, at the side
By contrast with the above, /a/ person appears never to be cliticised.

### 2.5.2 Major issues in phonology

Several of the more important issues in Mukah phonology merit a more extended discussion than they have received thus far. I will take these up separately, but attempt to interrelate them in a coherent pattern of interpretation. Unresolved issues or debatable points that cannot easily be incorporated into our discussion of the major problems will be treated separately at the end.
The vowel allophones of Mukah include not only [i], [u], [ə] and [a] (the phonetic symbols for the recognised phonemes), but also [e], [o], and the diphthongs [iə], [uə], [eə], [ai] and [ui]. With the marginal exceptions already mentioned under phonological rule 8 , all lowered and off-glided allophones occur in final closed syllables. The distribution of vowel allophones in relation to final consonant allophones appears in Table 1:

Table 1: Distribution of vowel allophones in final syllables

| No. | $\begin{aligned} & \mathrm{i} \\ & \mathrm{u} \end{aligned}$ | e | iə иə | a | еә | ə | ai | ui | -[C] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | X |  |  | X |  | X |  |  | p |
| 2. | X |  |  | X |  | X |  |  | t |
| 3. |  |  |  |  |  | X |  |  | k |
| 4. | (X) | X | X | X | X |  |  |  | $?$ |
| 5. | X |  |  | X |  | X |  |  | b |
| 6. | X |  |  | X |  | X |  |  | d |
| 7. | X |  |  | X |  | X |  |  | g |
| 8. | X |  |  | X |  | X |  |  | m |
| 9. | X |  |  | X |  | X |  |  | n |
| 10. |  |  | X |  | X | X |  |  | 0 |
| 11. | (X) | X | 1 | X | X |  | X | X | h |
| 12. | X |  |  | X |  | X |  |  | 1 |
| 13. | (X) |  |  | (X) |  | (X) |  |  | r |
| 14. | i |  |  | X |  | X |  |  | w |
| 15. | u |  |  | X |  | X |  |  | $y$ |
| 16. |  |  |  | X |  |  | X |  | $\emptyset$ |

### 2.5.2.1 The phonemic status of [e], [o]

As can be seen in Table 1, [i] and [e], [u] and [o] (as opposed to the corresponding offglided variants) appear to contrast only before final / / / and /h/. In both environments underlying high vowels are normally lowered (or, perhaps, laxed) before a final laryngeal in the directly inherited vocabulary. Twelve apparent exceptions were recorded, of which six ([biyu?] blue, [kukuh] stable, enduring, [wayih] relative, [puluh] ten, [sauh] anchor and [musuh] enemy) almost certainly are Malay loans. Of those exceptions to lowering which do not appear to be Malay loans one ([tuju?] seven) has an etymological doublet which shows lowering ([tujo?] finger), ${ }^{20}$ indicating probable borrowing from some other language.
In most variants of American Structuralism [e] and [o] would be considered phonemes in Mukah, based on this marginal evidence of contrast. However, in any approach which aims at distinguishing the blurring effects of recent loans from fundamental phonological processes, the phonemic status of mukah [e] and [o] must be questioned. There is little doubt that the great majority of morphemes which contain a high vowel before a final laryngeal show a lowered or laxed allophone in this position. The issue is whether the exceptions should be treated as such or taken as evidence for contrast. In accordance with the general orientation of these sketches I have adopted the former, more abstract, interpretation, marking the exceptions as loans.

### 2.5.2.2 The phonemic status of [iə], [uə] and [eə]

One of the most striking features of Mukah historical phonology is the addition of a rule of breaking which in final closed syllables had the phonetic effects shown in Figure 1:

Figure 1: Sources of last-syllable vowels and diphthongs in Mukah Melanau

| PRE-MUKAH | мUКАН | PRE-MUKAH | мUKA |
| :---: | :---: | :---: | :---: |
| *-ak | [ eə $^{\text {] }}$ ] | *-a? | [a?] |
| *-ək | [ək] | *-ə? | [a?] |
| *-ik | [ i ว $]$ | *-i? | [ $\mathrm{e}^{\text {] }}$ ] |
| *-uk | [ua?] | *-u? | [0?] |
| *-ag | [ag] | *-ar | [ah, eeh] |
| *-əg | [ag] | *-ar | [ah, eah] |
| *-ig | [ig] | *-ir | [eh] |
| *-ug | [ug] | *-ur | [oh] |
| *-ap | [eәn] | *-as | [aih] |
| *-ə | [ə๐] | *-as | [aih] |
| *-in | [iən] | *-is | [eh] |
| *-up | [иə๐] | *-us | [uih] |

In directly inherited vocabulary, then, *i and *u developed a mid-central offglide before final *k or ${ }^{*} \eta$ (but not *g). Following the introduction of breaking *k shifted to [?] in final position after all vowels other than shwa. Although I consistently recorded a voiceless velar stop after shwa, and generally transcribed glottal stop after other vowels and diphthongs, I occasionally recorded [k] after breaking vowels. The change of final *k to glottal stop thus appears to be in progress, though spontaneous speech samples suggest that it is all but completed.

A glance at Table 1 shows that, apart from [sipuəh], which may be due to an idiolectal peculiarity (the Mulders give singoh cold), [iə] and [uə] contrast with the [e], [o] allophones of /i/, /u/ only before a final glottal stop. Moreover, although they clearly contrast intervocalically, final [k] and [?] are in complementary distribution. Since high vowels invariably are offglided before final [ $\eta$ ], and since glottal stop sometimes appears as [k] after breaking vowels in careful speech, the simplest interpretation of this distribution would be one in which [?] is treated as /k/ after breaking vowels (but not elsewhere). Under such an interpretation the breaking of high vowels becomes fully predictable: /i/ and /u/ are offglided before final /k/ and /n/. ${ }^{21}$ This analysis is further supported by considerations of morpheme structure. No prepenultimate vowels other than shwa occur in unambiguous (non-breaking) stems, and apart from /nda/ no, not, no consonant clusters occur in any position in non-borrowed words. Transcriptions such as /tabiə?/ reach would violate the first of these constraints if [ə] is interpreted as a vowel, and the second if [ə] is interpreted as a consonant.

Given /tabik/ and the like it is noteworthy that breaking is synchronically transparent before $/ \mathrm{v} /$ but opaque before $/ \mathrm{k} /$, since it applies in an underlying - not in a surface environment (Kiparsky 1971). The case of mukah breaking illustrates nicely how terms such as "opaque" and "transparent" cannot be categorically opposed, since one and the same phonological rule can be opaque in some environments and transparent in others, a situation that might be described as one of "split opacity".

The phonemic status of [eə] involves somewhat greater complications than are found with [iə] and [uə]. As seen in Figure 1, [eə] results historically from 1) the raising, fronting and offgliding of $* a$ before final $* k$ and ${ }^{2} \eta$, and 2) an apparently unconditioned split of $*-a R / e R$ which generally yielded -[ah], but in three recorded morphemes produced - [eah] instead.

The distributional relationship of [eə] and [a] parallels that for [iə] and [i], [ua] and [u] before final $/ k /$ and $/ 0 /$. In these environments [ea] can be regarded as an allophone of /a/. Before final /h/, however, [eə] and [a] contrast, as with [layah] sail, [sadeah] lean against. Since all other instances of [e] can be assigned to /i/ or /a/ in accordance with general phonological processes, it would be desirable to avoid the recognition of a new phoneme /e/ in three morphemes, particularly since this phoneme would be the only vowel to undergo breaking before final $/ \mathrm{h} /$.
To accomplish this we could write -/ar/ for - [eah]. A number of recorded forms end with - [ay], but all of these appear to be loans. We would thus write /sadar/1 (=[sadeəh]), /sadar/2 (=[saday]) lean against. Non-homophonous forms which are etymologically equivalent, then, would be written as phonemic equivalents, the phonetic differences resulting from phonological rules which apply differently to directly inherited and to borrowed vocabulary.
The foregoing analysis implies that earlier * $r$ (Proto-Austronesian *R) remained a liquid phonemically if it followed *a or *e (shwa), but otherwise became /h/: *sanDeR > /sadar/ ([sadeah]) lean against, *bibiR > /bibih/ ([bibeh]) lip. Since such a phonemic split did not occur phonetically we might have reservations about adopting a phonemicisation which could complicate the historical description of the language. Moreover, as seen in Figure 1, although pre-Mukah *r and *s remained distinct following other vowels, the sequences *-ir and *-is fell together. In contemporary Mukah, then, final [h] following [e] is in complementary distribution both with [ y ] and with [s]. To avoid an arbitrary assignment of allophone to phoneme which inevitably would create some distortions in the statement of historical phonology I write final [h] after [e] as $/ \mathrm{h} /$. The [h] of phonetic transcriptions is consequently assigned to any of three different phonemes: /r/ in the three words in which the preceding vowel is [ea] ([sadeah] = /sadar/), /s/ if the preceding sequence is a vowel followed by unstressed [i] ([main], [aluih] = /mas/, /alus/), and /h/ if the preceding sequence is a consonañt followed by [e] ([bəteh] =/bətih/). ${ }^{22}$
Historically, the breaking of word-final high vowels through the addition of a centering onglide (*tali > taloy rope, *batu > batow stone) undoubtedly is related to breaking before word-final $/ \mathrm{k} /$ and $/ \mathrm{o} /$. Synchronically, however, the sequences - $\partial y$ and -ow must be treated as underlying diphthongs.
A basic consideration in the foregoing, rather abstract interpretation, is whether the underlying forms are psychologically real, or are products of linguistic analysis. I have little doubt that the breaking of high vowels before final /o/ would be recognised as a rule by most speakers of Mukah. This part of the rule of breaking is transparent, and given its high productivity there is no reason to believe that speakers would prefer underlying representations with a centering offglide. Before final /k/ the psychological reality of the rule becomes somewhat less clear, as its phonetic transparency decreases. Much the same can be said of the fronting, raising and breaking of /a/ before final $/ k /$, $/ g /$ and $/ r /$ (three forms). In summary, then, the matter remains in limbo. It seems clear that we want to describe breaking as part of the synchronic grammar of Mukah, but to do so completely we must depart from the phonetic facts to a greater degree than may suit the tastes of some linguists.

### 2.5.2.3 Ablaut

Mukah is one of a number of languages in north-west Borneo which have developed a system of verbal ablaut from earlier infixes *-um-, *-in-. Historically this development involved two steps: 1) syncope of *e (shwa) / VC__CV, 2) reduction
of consonant clusters. There is no known support for a synchronic analysis which recapitulates the historical development, but a process which is independently required - deletion of prevocalic shwa - permits us to derive the surface forms from underlying representations with $-/ u /-$ and $-/ i /-$. Thus, *tetek cutting, hacking, *t-um-etek to cut, hack, *t-in-etek be cut, hacked by became Mukah [tətək], [tutək], [titək], and in the analysis adopted here the corresponding underlying forms are /tatak/, /tə-u-tək/, /tə-i-tək/. Although this analysis "works" I regard it as little more than a descriptive gimmick, given the fairly clear indications of the historical development. At the same time I see no way to justify underlying representations that correspond to the reconstructed forms as psychologically real. Although much appealed to in contemporary linguistics, the entire issue of psychological reality seems to me to be one in need of much more careful testing than is typically done. Individual speakers may differ in their views on the psychological reality of competing underlying representations, and it is possible that some speakers store paradigmmates as sets rather than as a single underlying form with affixational differences.

### 2.5.2.4 Relation of /mən/- and -/am/-

Although /məp/- and -/əm/- contrast in stems that begin with a vowel or /l/, the contrast is neutralised before consonant-initial stems, the former occurring with voiceless-initials and the latter (in its optionally metathesised form) with voiced initials. It is not altogether clear how this situation developed. Historically -/om/- derives from three sources: *ma- 'stative/attributive', *-um'marker of active voice', *man- 'marker of active voice'. ${ }^{23}$ Other things being equal, voiceless-initial stems should reflect *-um- as -/əm/- and *man- as /mən/-, while voiced-initial stems should reflect both as -/əm/- ( $\sim / \mathrm{ma} /-$ ). In fact, voiceless-initial stems of two or more syllables reflect *-um- and *manindifferently as /mən/-. In monosyllables only -am- occurs, whether the initial is voiced or voiceless.

There appear to be two historical scenarios for this situation: 1) *-um- was lost in voiceless-initial stems, leaving only reflexes of *man-, 2) after prepenultimate neutralisation, consonant cluster reduction and optional metathesis had occurred, the reflexes of *map- and *-um- both appeared as mə- in voiced initial roots, but still contrasted in voiceless-initial roots. The neutralisation of contrast before voiced initials precipitated a neutralisation before voiceless-initials, but by generalising the distribution of mən- rather than of -əm-.
It seems fairly certain that the affixational difference between semantically parallel paradigmatic sets such as /kunip/ yellow : /mən-kunin/ become yellow and /gadup/ green : /g-am-adup/ become green arose through neutralisation of the /mən/- : -/om/- contrast. The occurrence of a cognate inchoative or inceptive prefix in Malay (kunin yellow : mən-kunin become yellow; hitam black : mən-hitam become black) and Tagalog (puti? white : man-puti? become white, itim black : man-itim become black) suggests that Mukah /g-am-adup/ derives from *man-gadup. Following prepenultimate neutralisation of $* a$ and $*$ in stems that began with a voiced obstruent, consonant cluster reduction and optional metathesis evidently led to confusion of the two previously distinct affixes. In stems that began with a voiceless obstruent the metathesis of -am- could not in itself have levelled the earlier morphological distinction, since nasal substitution in this environment must have been part of the language from an earlier period. At this point, for unknown reasons, voiceless-initial stems with an optionally metathesising -am- began to undergo nasal substitution. In effect, then, *man- and
*-um- fell together as -/əm/- before voiced-initial stems and as /məp/- before voiceless-initial stems, but continued to contrast in other environments.

### 2.5.2.5 Miscellaneous

In one known paradigm the shapes of the simple and affixed stems differ in the presence of a glottal stop in intervocalic position:

## ['?aid] wipe (imperative) : ['ma?id] to wipe (kain) ['pa?id] cloth for wiping

Although no other examples of this alternation were recorded, comparative evidence suggests that these forms are to be related by a rule of metathesis which operates on sequences of initial vowel plus /7/ (cf. Blust 1977:3.3.5.2). The stem meaning wipe is tentatively written /a?id/, then, and a provisional rule of metathesis posited to account for the disappearance of / // in the non-affixed form.

In a few words the simple and morphologically complex shapes of the stem are further distinguished by an unexplained change of the initial consonant:
(146) ga? gaan ləbu? səkul? where is the school(house)?
(147) k-ən-aan ka?aw?
where are you going?
(148) kudu? diba? sit down
(149) siən tərah dudu?
he fell into a sitting position (after stumbling, buckling of the knees, etc.)

### 2.5.3 Sample derivations

To illustrate the interaction of the phonological rules and the crucial ordering arguments relevant to determining their position in the sequence, some sample derivations are given below:


7. /g-am-utip/ cut with scissors g-a'm-utio
g-ə'm-utiə
g-ə'm-utiəp ~ mə-'gutiən (14)
g-ə'm-atiəŋ ~ mə-'gutiən (17)
[gə'mũtiəŋ] ~ [mə'gutiəŋ]
6. /lian/ light in weight
lian (1)
'liyan
(2)
'liyeən
(7)
'liyean ~ 'leyeap (8)
['liyeə口] ~ ['leyean]
8. /mən+sadar/ lean against man+'sadar (1)
man+'sadear (7)
məŋ+'sadeəh (11)
məగ†'sadeəh (15a)
mə+'గаdeəh (15b)
mฐ+'గฐdeəh [mæ'กฐdeəh]
10. /məp+lasu?/ to heat
məp+'lasu?
mən+'laso?
(10)
məŋə+'laso? (16)
mว̃ทəั+'laso? (17)
[mãyวั'laso?]
12. /tulak/ push away
'tulak
'tuleak
'tulea? (13)
['tulea?]

The following crucial ordering requirements are necessary. Numbers refer to phonological rules. The rule referred to by the number on the left must precede the rule referred to by the number on the right in order to prevent the derivation of forms such as those given in parentheses. Underlying representations are written between slant lines:

| 1 | 7 | (guti'əp) /gutip/ scissors |
| :---: | :---: | :---: |
| 3 | 7 | (tə'leəp) /tulan/ bone |
| 5 | 6 | (?ə'mituən) /əm+itup/ count |
| 7 | 8 | ('ti?eən) ${ }^{24} / \mathrm{ti}$ (2ap/ cemetery |
|  | 11 | ('gagah) /gagar/ k.o. raised platform |
|  | 13 | ('tutu?) /tutuk/ knock, rap |
| 9 | 14 | (mək'keəŋ) /k-əm-ap/ to open |
| 14 | 17 |  |
| 15a | 15b | (m§'ñləy) /mən+paləy/ forbid, prohibit |
| 15 | 17 | (m§'mayuəp) /məp+payup/ hold an umbrella for s.o. |
| 16 | 17 | (mnə'laso?) /məp+lasu?/ to heat |

### 2.5.4 Evidence of contrast

A few minimal and subminimal pairs are given below to demonstrate contrast in areas where transcriptional errors might be expected:
['giyan] addicted : ['giyən] there (definite)
[pay] cross, go across : [pa'i:] stingray
['nawi] male personal name : ['naay] be smoked out, of a beehive

|  |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
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### 2.6 Variation

Variant pronunciations not attributable to the application or non-application of an optional phonological rule were noted in:

```
layu ~ layow invitation
aluy ~ saluy boat
umi? ~ umit smalZ
adi? ~ adik short
tuh ~ atur arrange, put in order
tabih ~ tawar [-breaking] treat with medicine }2
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## NOTES

1/ja/ is regarded as 'old' language.
${ }^{2}$ It is not known whether /usah apah/ is permitted.
${ }^{3}$ As in buya itəw $\left\{\begin{array}{l}\text { buya? } \\ \text { tərah }\end{array}\right\}$ lopəw kəw I picked this flower (accidentally). It is possible that such constructions actually consist of $\left\{\begin{array}{l}\text { buya? } \\ \text { tərah }\end{array}\right\}+$ noun + possessive pronoun (= this flower was affected by my picking). If so, the distribution of morphologically simple roots that are intrinsically verbal is even more restricted.
${ }^{4}$ Some morphologically complex verbs, however, occur in future constructions:
low ion tuad ba? potsu? un kayow they are going (somewhere) to carry wood
akow (ba?) pə+bin baw buta sion səmunih
he will carry me on his back tomorrow
${ }^{5}$ Because of gaps in the available data the affixation potential of nasalinitial and r-initial roots is unclear. For purposes of formulating the phonological rules it will be assumed that such roots never take a prefix which ends in a nasal (i.e. take -əm-, -ən-, but never məp-, nəp-).
${ }^{6}$ This is apparently true of all disyllabic verbal roots that historically contained shwa as the penultimate vowel, though some roots that do not meet this condition have also come to belong to the ablauting class. Since no root begins with shwa in Mukah ablaut occurs only in consonant-initial roots.
${ }^{7}$ Egerod (1965:258) has described an ablaut pattern as one type of morphophonemic alternation in the verb system of Atayal (northern Taiwan), but all
examples cited by him appear to involve coexistent affixation of other types, as in m-blaq :liq-an good, do it well, h-m-op:hab-an stab, m-ziup:iop-un enter or m-qes:qas-un happy.
${ }^{8} /$ təmək/ (sentence (68)) is possibly another example, though /u/- and /i/-grade realisations were not recorded.
${ }^{9}$ Since both exceptions reflect reduplicated monosyllables, it is conceivable that ablaut developed historically both in disyllabic verbal roots in which the penultimate vowel was shwa, and in reduplicated monosyllables irrespective of vocalism.
${ }^{10}$ Found only in recent Malay loanwords (as ucapan speech) and in some conversational styles where the usual /s/ < *c of older loans is replaced by /c/ in imitation of Malay.
${ }^{11}$ To these we might add C in n . da no, not, though this item is phonotactically unique, and the syllabification remains unclear.
${ }^{12}$ The following synchronic roots were recorded which developed historically from partial reduplications: bəbulan ocular cataract, dian $\sim$ dədian candle, kəkəlit k.o. small insectivorous bat, ləlaŋaw housefly, గəగаla flying ashes, గəగiəw k.o. flying fox (larger than səlamawa?), tatawa laugh.
${ }^{13}$ Clayre (1970:337) implies that / // occurs initially in Dalat Melanau. However, I did not record a contrast of initial smooth and glottal onset in Mukah, Dalat, or any other Melanau dialect.
${ }^{14}$ No forms ending in [ag] were actually recorded. These items are taken from the Mulders' vocabulary.
${ }^{15}$ It is likely that height assimilation also occurs across /h/, but the available material does not permit a definite statement.
${ }^{16}$ Nonetheless, for reasons that are not yet well understood, a few words which are clearly Malay loans do undergo lowering: [lə'beh] excess, [kəy'teh] paper.
$17 / k-$ am-an/ eat, however, is never pronounced [my'kan]. This root must either be marked as an exception to Rule 14, or the affix regarded as distinct.
${ }^{18}$ It should be noted that $/ \mathrm{p} /$ - plus $b$ in ablauting stems undergoes nasal substitution, but in the present analysis /mən/-, /nəŋ/- never occur before a root which begins with a voiced obstruent. If morphologically complex words of the latter type were admitted, complications would be introduced into Rule 15, since nasal substitution occurs in e.g. /n+bə-u-bad/ (['mabad]) to tie, but would not occur in, e.g. /mən+bilam/ ([mə'biləm] ~ [ba'milam]) blacken; become black. As I have argued elsewhere (Blust n.d.), the initial segment in ['mabad] and similar forms is historically a product of canonically motivated assimilation, and has no connection with nasal substitution.
${ }^{19}$ Gaps in the available data prevent our knowing whether $/ \mathrm{p} /-\mathrm{can}$ be added to ablauting roots that begin with /1/, and if so, whether these also form input to Rule 16.
${ }^{20}$ From *tuZuq index finger, the seventh in finger-counting.
${ }^{21}$ Superficially the distribution of final [k] and [?] resembles that in Javanese, where - [k] (after shwa) and -[?] (after other vowels) have been united as /k/ (Uhlenbeck 1949:41ff). To unite Mukah -[k] and -[?] under /k/, however, would obscure important differences between the two languages. First, unlike Javanese, Mukah has a contrastive glottal stop in intervocalic position. Any loss of contrast between $*-k$ and $*-?$ in final position could thus at best be
regarded synchronically as the neutralisation of a phonemic opposition which is well-attested in intervocalic position. Second, because the historical rule of breaking in Mukah affected vowels before a final /k/ but not vowels before a final glottal stop, the phonetic change *-k > [?] did not lead to partial merger (hence to neutralisation in the synchronic relationships of the phones) if we regard breaking as still present in the synchronic grammar of Mukah.
${ }^{22}$ Clayre (1970) proposed an ad hoc segment $-H$ as the phonemic source for surface -[ih] following a vowel. The interpretation of this sequence as /s/accounts for the complementation of $-[s]$ and $-[i h]$ and solves the problems for which he proposed $-H$, without introducing the undesirable consequences of his analysis.

23
Originally *-um- and *man- appear to have distinguished verb classes. In Mukah there is no clear semantic basis for such a distinction.
${ }^{24}$ Without a variant ['te?eəp].
${ }^{25}$ The forms actually recorded were ['tabeh] chewed betel nut and sirih leaf spat on the abdomen of a sick child (generally not used for adults) and ['taway] treat with medicine < *ta(n)baR antidote, medicine. The latter is identifiable as a Malay loan from the distinctive treatment of *b (> w/*a_ *a). Given the formal and semantic similarity of these items it seems likely that ['tabeh] is a transcriptional error for ['tabeəh]. If so, this set of variants parallels sadar $\sim$ sadar [-lowering] lean against, tuh $\sim$ atur arrange, put in order and other pairs of words with differing meanings (as bosəy spear, besi iron) in containing a cognate Malay loan next to the directly inherited item.

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## VOCABULARY

A
a somebody, someone; other people anak a other people's children a bayuh shaman, native healer a botkahan fisherman
a iən someone
a ki? someone else, a different person
a lakəy old man
a məŋttapa? stranger
aam pangolin, scaly anteater
aan (see gaan, tan) how?
aat press two surfaces together to squeeze liquid from something, as in squeezing copra; press in a vice am+aat to press, squeeze
aba? (see bah) downriver
abay late afternoon, evening abay mabay yesterday evening
abuk tiny ash-like particles in the air (as from sago flour that is too dry)
abus fog, mist
adək sniff, smell
məŋ+adək to sniff, smell (something)
ən+adək to have been smelled by
adət (L) custom, traditional law
adik (= adi?) short
adi? (= adik) short
agap dragonfly
aga? coffin (regarded as a new word; cf. lupun)
agəm grip, grasp (cf. గagəm) am+agam to grip, to grasp
agəy (L?) again; more
ajər (L) bal+ajar to learn məŋ+ajar to teach
aju? (see bah) upriver
akah creeper, vine; (aerial?) root (cf. amut, dalid)
akal (L) wits, cunning, intelligence məŋ+akəl to cheat
akəw I; me
akit raft
alan (see guun) virgin forest (cf. nuu)
ala? seed; numeral classifier used with fruits, flowers, sheets of paper, stones
alaw long; distance
alih (L) change position (as a person shifting in a chair); move an object
alun alun (L) major road (cf. jalan)
alus fine (as powder)
aman float (something), send adrift

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    pə+aman adrift, drifting on the
water
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amow ghost
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amow ghost
amid cockscomb
amid cockscomb
(a)mun conditional, if
amut root (cf. akah, dalid)
amut prpudup taproot
amut tuba the root of Derris
elliptica (used to stun fish)
an (see gay)
anak child; offspring
anak lay son
anak mahow daughter
anak umi?/anak umit small child
aగаm plait, plaiting
əm+aగam to plait
ən+afiam to have been plaited by

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afi honeybee
afit sharp, sharpen
    mə+aగit sharp
    məŋ+aగit sharpen
    on+aగit to have been sharpened by
anat face bravely
    om+anat bold or fearless in facing
    someone who is angry with you
apay intensifier, very; intently
    tuab sion ta? ah anay his yawn is
    very Zoud
    təlabaw a tama t-ən-a? ah sion anay
    he listened intently to his father's
    advice
anit anger
    om+anit to provoke, make angry
    on+anit to have been provoked,
    made angry by
apah, numeral classifier for fish,
    leaves
\(a^{a} h_{2}\) person, body (cf. badan, usah)
    apah lay man
    apah mahəw woman
apu? white
    məŋ+apu? to whiten, make white
    ən+apu? to have been whitened by
apuy fire
a?id (see pa?id) wipe
ara? (see kayəw) fig tree

bas mark, trace
basa? wet
bat net; web bat bəlawa? spiderweb
batan trunk, log
bataw stone (cf. batu) batəw asa? whetstone
batik (L) batik cloth
batu (L) mile (cf. batəw)
baup (L) onion baup sak red onion baup apu? garlic
baw on, upon; over, above
baway rising baway dug rising tide
bay loincloth
baya crocodile
bayar (L) pay (cf. səsan)
bayow old (as a dry coconut or an unmarried girl past her prime)
bayuh ceremony for the curing of illness
pa+bayuh to perform the rites of the a bayuh (playing the gonan and chanting incantations to drive off evil spirits)
bəbah split (stative); broken (as vases)
ŋ+bə-u-bah to split
bə-i-bah to have been split by
beba? mouth (coarse expression; cf. mujun)
bəbəd tie (cf. bəd)
n+bə-u-bəd to tie
bə-i-bəd to have been tied
bobulan cataract of the eye
bəbut hole in the ground
bəd tie (cf. bəbəd) pə+bəd to tie, bind (habitual action)
bəduk large yellowish-brown shorttailed monkey
bojagarj (see kayow) teak
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bolabaw rat, mouse
bolakin Achille's tendon
bəlanək k.o. fish: mullet?
balanaw housefly
bolas (L) formative for numerals
from 11-19
bol awa? spider
bələba\eta butterfly
bələbawən dizzy
baləy buy (cf. ibay)
\eta+bələy to buy
b-ən-ələy to have been bought by
bəlusu? (see jakan) dolphin, por-
poise
bonaa hot ashes
bona\eta (L?) thread
bonata\eta (L) animal
bonatəw son- or daughter-in-law (cf.
bisan)
bonawan door
bənu? kill
\eta+bə-u-nu? to kill
bə-i-nu? to have been killed by;
kill (polite imperative)
pə+bənu? diri? suicide
bənusia (L) person, human being
(cf. tənakaw, tənawan)
bəfa\kappai (L) sing (cf. bəlagu)
bəగuh (see bua?) coconut tree
bə\etaai large stream, river (cf.
supay)
bəras (L) husked rice
borian (L) gold, jewelry, valuables
(see pakan)
bosəy spear (cf. bəsi)
bəsi (L) iron (cf. bəsəy)
bosuh satiated, full after eating
botih thigh
botuka intestines
botul (L?) correct
bəy be, have; possess

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fish trap (cf. pana)
bubuk (L?) small shrimps
bubun ridge of the roof
buda? foam, bubbles
budəy false
buduk leg (cf. pajug)
buən storm, bad weather (cf. bunas) buən baliw a storm said to be caused by doing something unnatu-
ral. NOTE: cf. Blust 1981 for a description of the thunder complex in Malaya, Borneo and the Philippines.
buh fishing rod
buk head hair (cf. bulow)
bukan corpse
bukəw \(_{1}\) knee (cf. buku?)
buk \(\partial w_{2}\) yam
bukit (L) hill
buku? (L) knuckle, joint (cf. bukəw)
bukut punch
b-am-ukut to punch
\(b\)-an-ukut to have been punched by
po+bukut punch one another
bulan moon, month
bulas (see bua?)
bulot (L) round
bulow body hair, feathers (cf. buk) bulow manuk feathers
bulin wooden dish
bulun (see jakan) k.o. fish
bulu? bamboo
bulu? tadin kind of bamboo
bun odour
potbun to smell, have an odour
buna flower
bupas storm (cf. buən)
bup (L) book
buruk old and crumbling (furniture, madam)
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busow corner (of table, cloth, room)
buta back (anat.); behind
buut breathe (cf. gus, sigud)
po+buut
buya? be struck, affected by (= Malay
kena; cf. torah)
buyən terrified, paralysed by fear
buyow marine crab 1"-4" in diameter,
with large pincers (cf. gəramah)
D
daa? blood
daat littoral sea, sea near the
shore (cf. lautan)
dabow ash
dada incisor (cf. fipən)
dadən sit by the hearth to recuper-
ate (of women for some time after
childbirth)
dagin (L) meat
dalom depth (as of water)
dalow a quarrel, altercation
po+dalow to quarrel
d-ən-alow be on bad terms (?)
dal id buttress root (cf. akah, amut)
damay (L?) peace
dana old, of things (cf. lakəy)
danaw lake
dapur (L) kitchen
da?un leaf
daway (L) wire
dawək side, flank; edge
daya inland, toward the interior
(cf. aju?)
dəbəy on purpose
siən mə\eta+pədih siən dəbəy He hurt
himself on purpose. NOTE: possibly
nda + bəy.
dədian candle (cf. lilin)
dəkət stick
d-əm-əkət to stick, cause to ad-
here (tr.)

```
\begin{tabular}{|c|c|}
\hline d-ən-əkət to have been stuck on pə+dəkət to adhere, stick (intr.) dəlaw dalaw ion they (pl.) & \begin{tabular}{l}
gabər (L) picture \\
gaday (L) pawn \\
g-am-aday to pawn \\
g-ən-aday to have been pawned by
\end{tabular} \\
\hline dən visible & gadin (L) ivory (cf. tarin) \\
\hline dənah news & gadup green \\
\hline dəpa fathom, measure of outstretched arms & g-am-adup to become green; to make something green \\
\hline dian (see bua?) durian & by \\
\hline dia? good & gagar kind of raised platform \\
\hline diba? beneath, under & gagaw busy \\
\hline bah diba? beneath & gahut scratch \\
\hline didin wall (of a house) & \(g\)-əm-ahut to scratch \\
\hline dii housepost & gajah (L) elephant \\
\hline dipa snake & gajil lazy \\
\hline dipah opposite bank of a river & galan throw \\
\hline dipan slave & g-am-alan to throw \\
\hline dipih hide d-əm-ipih to hide, stash away & ga? at (locative and relational), on; to, toward; for (benefactive) ga? buta behind, in back \\
\hline diri? self, oneself & ga? dawək beside, at the side \\
\hline dua \(_{1}\) two & \begin{tabular}{l}
ga? g+aan where? \\
ga? g+ian there (place known to
\end{tabular} \\
\hline  & the hearer, whether near or far, in view or not) \\
\hline duduh thunder & ga? g+inan there (place unknown to the hearer, whether near or far \\
\hline dudut pluck (feathers, hair), pull & in view or not) \\
\hline out (as a post), unsheath & ga? g+itow here \\
\hline didut to have been plucked, pulled & ga? jaway in front \\
\hline out by & ga?am jaw \\
\hline dury thorn & gatup \\
\hline dug (see baway) & g-om-atup hang, suspend \\
\hline & g-on-atup be hung, suspended by \\
\hline duga (L?) measure, estimate d-om-uga to fathom, measure the & gaul (L?) mix (cf. **sapur) \\
\hline depth of water; (fig.) probe some- & \(g\)-əm-aul to mix \\
\hline \begin{tabular}{l}
one's mind \\
d-an-uga to have been fathomed by d-əm-uga akəl to measure one's intelligence
\end{tabular} & \begin{tabular}{l}
gaup blow, blow away (with the breath) \\
g-am-aup to blow, blow away (with the breath)
\end{tabular} \\
\hline duhig mythical monster of the forest & g-an-aup to have been blown, blown away (by the breath) \\
\hline dukun Moslem healer (cf. a bayuh) & gay how much/how many? gay an gay how much/how many? \\
\hline G & gaya (L?) way, manner \\
\hline gaan (see ga?) where? & \\
\hline
\end{tabular}
```

gayup dipper, water scoop used in
bathing
gaga chase away (as a fowl)
gr-u-ga to chase away
gə-i-ga to have been chased away
by

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gəgət gnaw; silverfish, moth
    gə-u-gət to gnaw
    gə-i-gət to have been gnawed by
gəlama scar
gələgua intestinal worm
gələŋ bracelet
gonan (L) open-ended drum about 18"
    long, used by the shaman (cf.
    rəbana)
gənuk (see bua?) gourd
gəramah small freshwater crab (cf.
    buyaw)
gətan failure
gian (L?) addicted to
    siən gian ba-judi he is addicted
    to gambling
gion (see ga?) there (cf. ion)
gigit chatter (of the teeth)
ginan (see ga?) there (cf. inan)
gitaw (see ga?) here (cf. itaw)
gua (L?) cave
gurm abdomen below the navel (cf.
    pa?it)
gula (L) sugar
guli (L; see bua?) marble
gunup (L) mountain
gupul (L?) gather
    bo+gupul
gutin (L?) scissors
    g-am-utin to cut with scissors
    g-an-utin to have been cut with
    scissors by
guun jungle, forest
    guun alan virgin forest
guy look, see
    potguy to look, watch
    g-an-uy to have been watched by

\section*{H}
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hal (L) reason

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hig budge, move something a bit
    \(h\)-əm-ig to move (something) a bit
    \(h-ə n-i g\) to have been moved a bit
    by
I
iap count (cf. itun)
    am-iap to count
iaw sound
ibay buying, buy (cf. bələy)
    am+ibay to buy
ida? much, many
idu? (see ua?) give
    pə+idu? to give
    \(\quad n+i d u\) ? to have been given by
ion the, that (thing known to hearer,
    whether near or far, in view or not)
iən preceding, in front
igi? take
    \(p ə+i g i ?\) to take
    on+igi? to have been taken by
ihat stretch oneself
    po+ihat to strectch oneself
ii? yes
ija? (L) spell
    am+ija? to spell
    ən+ija? to have been spelled by
ijin (L) engine
ijuh stretch out the legs (as after
    sitting cross-legged for awhile)
ikah itch (cf. kumuh kumuh)
    mə+ikah itchy
ikiw tail (cf. tikiw)
iluh channel between the roots of
        mangrove trees in a mangrove swamp
imən raise, rear (an animal)
    pə+imən to raise, rear (an animal)
inan the, that (thing unknown to
    hearer, whether near or far, in
    view or not)
inow (see ua?) what?
ipa? hunt (animals)
```

    pə+ipa? to hunt (animals)
    ən+ipa? to have been hunted by
    (of animals)
    iput coconut husk
isak cook
əm+i sak to cook
ən+isak to have been cooked by
pə+isak to cook (as an occupation)
isa? game
pə+isa? to play
po+isa? raga? game played with a
rattan ball which is knocked over
a net using only the head or feet
isi (L; Eng. inch) ruler; (linear)
measurement (cf. sukat)
mm+isi to measure
isi finger ring
itaw this
itik duck (bird)
itup count (cf. iap)
am+itup to count
an+itup to have been counted by
J
ja one (cf. satu) NOTE: regarded
as "old" language.
jadi (L?) become
jaja sell, selling
j-əm-aja to sell
j-ən-aja to have been sold by
jalan path (cf. alun alun)
jala? independent
jalup flame
pa+jalup flaming, of a fire
janak sibling
janak lay brother
janak mahow sister
janak tadəy younger sibling
janak tika older sibling
japan just now, a moment ago
japan kəna susow new-born baby
japan tapa? just come/arrived
ja?it sew
j-am-a?it to sew
j-an-a?it to have been sewed by
jatih gibbon

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jatu\eta (L?) heart (cf. nasə\eta)

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jau? (L) far
jaut to flow downward, of a receding
    tide (cf. jujuk)
jaway face; front
jəgaha? with
    jəgaha? say with whom?
jəgəm and
jəkan fish
    jəkan balusu? dolphin, porpoise
    jokan bulun small orange scaly fish
    with barbels - prized as food
    jəkan kəluan shark
    jəkan malan fish resembling tabəy,
    but smaller and lighter in colour
    jəkan ma?ən small scaly fish with
    lateral stripe - resembles a carp
    jokan paus whale
    jokan taboy highly prized edible,
    long black scaleless fish that
    resembles an eel
jola? tongue
japolah slip on a slick surface
ji appearance
        dia? ji pleasing to the eye (of
    objects, scenery or people)
jinih beautiful (of a woman)
jipaw cousin (FBC, MBC, FZC, MZC)
    jipaw dua lakaw second cousin
juah give
    pa+juah to give
    j-ən-uah to have been given by
judi die, dice
    bə+judi to gamble
jujab hack, chop vegetation (cf.
    supəd) NOTE: possibly jə-u-jab.
jujuk to flow upward, of a rising
    tide (cf. jaut)
jujur (L) honest
juu? juice (of fruit), sap (of
    trees); gravy
    juu? baగuh coconut cream
K
kabin (L) goat

kabut buttocks, posterior, bottom,
    base
    hap fishing
    bə+kahan to go fishing (general
    term)
kain (L?) cloth, clothes
kajan roof made of nipa palm fronds
kalay amount, quantity
    kalay lakaw how many times?
    an (see ua?) eat
    k-əm-an to eat
    \(k-i n-a n\) to have been eaten by
    kan+on (see ua?)
    ka+kan feed
    məŋ+ka-kan to feed
    \(k-ə n-a+k a n\) to have been fed by
kap open
    \(k-ə m-a \eta\) to open (a door, etc.)
    \(k-ə n-a \eta\) to have been opened by
    (of a door, etc.)
kapan thick, of materials
kapas cotton
kapək (L) axe
ka(m)puø (L) village, settlement
kapur (L) camphor
ka? dehortative, don't
ka?aw you (sg.)
karam (L?) capsize, sink
karap (L?) coral reef
kasaw rafter
katay stop, as an engine (cf. matay)
    mən+katay to stop (e.g. an en-
    gine)
    \(k\)-ən-atay to have been stopped
    by (of an engine)
    annual ceremony to ensure a
    ood catch of fish the following
    awit pole with a hook for picking
    kayow ara? fig tree
kayəw bəjagan teak wood
kayəw tənəjaw rubber tree
kədəŋ raise, pull up into a standing position
kədən kayəw iən raise that tree! (pull it up into a standing position)
pə+kədən to stand (stative and active)
kədua you (du.)
kəjiwat earthworm
kəkay rake
kə-u-kay to rake kə-i-kay to have been raked by
kəkəlat lightning
kəkəlit small insectivorous cave bat
kəkut dug, excavated (cf. kut)
kə-u-kut to dig
kə-i-kut to have been dug by; dig (polite imperative)
kəlayən double-headed spear or harpoon (cf. tuduk)
kələmumur dandruff, scaly skin
kələt rope (cf. taləy)
kəlaw you (pl.)
kəlibuy monitor lizard
kəluan (see jokan) shark
kəman way, direction
salinih kəman itaw jaway now turn your face this way
kəna (L) be struck, affected by (cf. buya?)
kənaan where?
NOTE: kən+aan? (cf. gaan)
kəŋaŋ fear, afraid (cf. pap)
\(k-ə n-ə \eta a \eta\) to have been feared by
kərbaw (L) carabao, water buffalo
kərəsəŋ wrinkled
kərja (L) work
məŋ+kərja to work on s.t. \(k\)-on-ərja to have been worked on (repaired, etc.) by
kərna (L) because (cf. səbap)
kərtih (L) paper

\(k\)-ən-unip to have been made yellow
kufit (L) turmeric
kupi (L) coffee
kuran (L?) lacking
kurus (L?) thin, of animate beings (cf. lipih)
kusup (L?) empty
kut dug, excavated (cf. kəkut) sunay kut/kəkut a man-made canal
kutaw louse
kuyad small brown long-tailed monkey
L
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labu? a fall (cf. paha?)
bo+labu? to fall, of people
lada chili pepper
lada sagu? white or black pepper
lagu (L) song (cf. KaKi)
bo+lagu to sing
laju laju (L?) fast (as in running)
lakaw (see kalay) business, doings;
walk (cf. makaw)
inəw lakaw Why did you come? (lit.
What business?; very polite form)
l-ən-akaw to have been walked on
lakəy old, of people (cf. dana)
lalak bald
lalu (L) excessively, too much
lalup (see siaw) cock
laman cleared area around a house
or in the centre of a village
lafih fat, lard, grease
la\etait sky
lapan (L?) eight
la?əy according to
lasəy sweat, perspiration
lasu? hot
mə\eta+lasu? to heat (as over a fire)
nə\eta+lasu? was heated by
mə+lasu? burning (as the mouth
from chili peppers)
latak to hammer (a nail, etc.)

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lati? mud
lau
mə+lau withered
NOTE: Anon gives mə-laun withered
lautan (L) open sea far from shore
(cf. daat)
law day
lawa showy
l-am-awa to show off
lawas numeral classifier used with
people
lawən (L) go against, fight, oppose
l-əm-awən to go against, fight,
oppose
lay male
layow (~ layu) invitation; invite
(imper.)
l-am-ayəw to invite people to
one's house
layah sail
layan side
layan ta?zw right side
layan ulay left side
layən (L)
l-əm-ayə\eta float on the wind, as
an eagle, or a piece of paper
dropped from a high place
ləbih (L) surplus, excess
labu? house
ləbu? səkul school
ləgah fast, quickly
ləkəb lid
ləkəb mata eyelid
lolanaw housefly
lolu? chase
l-əm-əlu? to chase, pursue (with
intent to catch)
lomari (L) chest of drawers
ləmək soft
ləగัวр disappear
lə\etaən arm
lopaw hut, shed
ləpək fold; a fold

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    lo-u-pok to fold
    lə-i-pək to have been folded by
    ləpəw pick
lə-u-pəw to pick
lə-i-pow to have been picked by
l-əm-əpəw to fall without being
picked (of fruit)
lasut to float
lian time, era, period; during
liap light (not heavy)
lia? ginger
likəw country
likəw putih England (= white
people's country)
lilin (L) wax, candle (cf. dədian)
lima five
limaw (see bua?) citrus fruit
liv saliva, spit
lina ear
lipih (L) thin, of materials (cf.
kurus)
lisin edge
lita\eta lay across
l-əm-ita\eta to lie across
luba\eta in, inside
lukuh hungry
l-am-ukuh make someone go hungry
(as when someone else's children
are in your house and you give food
to your children, but not to the
others)
pə+lukuh go on a hunger strike
(one cannot po+lukuh someone else
- one can only l-am-ukuh others)
lumut moss, lichen
lupun coffin (regarded as an old
word; cf. aga?)
lu? want, wish
lu?uy swallow
l-əm-u?uy to swallow (tr.)
l-ən-u?uy to have been swallowed
by
pə+lu?uy bua? kind of party or
game in which the seeds of rambu-
tans are swallowed

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luup exhausted
M
maap lose one's way, be lost (as in
a forest) NOTE: possibly am-aap.
mabəy yesterday (cf. abəy)
mabuk drunk
madam decaying, rotten, of flesh
(cf. buruk)
mahow female
makaw walk, go (cf. lakaw)
malan (see jokan) k.o. fish
malas (L?) lazy
maləd numb, paralysed (of part of
the body) NOTE: mə+aləd?
maləm night
maləm itəw tonight
maləm pə+tuduy nuptial night
mama? bad; dirty
mama? bun bad smell
NOTE: possibly mə+ama?. Anon
(1930) give mana?
manik (L) bead
manuk bird
manuk banaw heron
manuk kukuh small dark blue bird
manuk mayaw kind of hornbill
manuk puyu? quail
mana? crack, fissure
mapək blind
NOTE: mə+apək?
ma?ən (see jəkan) k.o. fish
ma?ih to gasp for breath
NOTE: əm+a?ih?
ma?it sibling-in-law
mara (see saudara)
maraw straight walking stick (cf.
tukat)
mas (L) gold
masin salty
NOTE: mə+asin?
mata eye
mata law sun

```
matay die; dead (cf. katay) po+matay to die siən kərja pə+matay lalu He works himself to exhaustion ('death')
mayaw (see manuk) kind of hornbill
mogaw burning (as a house on fire) NOTE: mə+gəw?
məlow we (pl.excl.)
məlirəŋ (L) sulphur
məmih a bruise, bruised NOTE: possibly mə+mih
məగəəm tasteless, insipid NOTE: mə+గึəm?
məŋəta? pale (from fear or illness)
mosəm sour
NOTE: possibly mə+səm
mətua parent-in-law
mia? shy, ashamed
miaw to lose something (objects) NOTE: əm+iaw?
mija (L) table
min all
minaw why? (cf. inaw) minaw tan why?
mua we (du.excl.)
muda? young
mudəy last, behind
mujun lips, mouth (refined expression; cf. bəba?)
mun dew; fog
musuh (L) enemy

\section*{N}
naka (see bua?) jackfruit
nakən nephew's nephew nakon anak nephew
nama (L) name (cf. padan)
nana? pus pə+nana? to suppurate, as a wound
nap fish scale
nar heat
nar apuy heat of the fire
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nasə\eta heart; emotions (cf. jatu\eta)
nasi? (L) cooked rice
nay sand
nda no, not
nda bəy fam
nda sukup
nəm six
naw you (sg., agent)
nupəy dream
nuu secondary forest (cf. guun)
N
Kabuv prow (of a boat)
K_agəm fist, hand (cf. pa?a, agəm)
Kak fat, grease
mə+గ_ak fatty, oily (of taste of
food cooked in fat)
గаm taste
KaKi (L) song (cf. lagu)
bә+గаศi to sing
గа?วm water
frat big (but capable of being
measured) (cf. ayəŋ)
fatan border, boundary
గau eagle; kite
గаwa life
గəl blunt, dull
f-əm-əl to make (something) blunt
ศวศаla light burning ashes carried
in the wind from a fire
ณәగа? chew
గә-u-กа? to chew (something)
กә-i-\kappaа? to have been chewed by;
chew (polite imperative)
ณәగiәw animal similar to but larger
than the flying fox (cf. solomawa?)
Kipa? the nipa palm: Nipa fruticans
fipən tooth
fipən dada incisor
\tilde{ip}\mp@code{\mp@code{n pu?un molar}}\mathbf{}\mathrm{ m}
ñiru? (L) round winnowing basket (cf. kila?)

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    pajəm apuy extinguish a fire
    pajug foot (cf. buduk)
pak (see bua?) kneecap
pakan money
pakan bərian dowry
pakow nail (of iron)
paləy a taboo
mə\eta+paləy forbid
p-ən-aləy to have been forbidden
by
pali? wound, cut
mə\eta+pali? to wound
p-ən-ali? to have been wounded by
pan mat
panah ray (of light)
panas feeling of anger
mə\eta+panas to make someone angry
pə\eta+panas
siən pə\eta+panas nasə\eta He/she has
a hot temper
pa\kappau? (L) turtle
panay wind
papid twins
pa?a hand (cf. fiagəm)
pa?id wipe
kain pa?id a cloth for wiping
mən+pa?id to wipe
p-on-a?id to have been wiped by
pa?ih fish or meat wrapped in
leaves and roasted over the fire
mə\eta+pa?ih wrap fish or meat in
leaves and roast over the fire
pa?it, abdomen above the navel (cf.
guəm)
pa?it2 bitterness, bitter
mə+pa?it bitter
parap (L?) bush knife, machete
pat four
patan lie
mon+pata\eta to lay someone (e.g. a
child) down
p-on-ata\eta to have been laid down
(as a child)
pə+pata\eta lie down
pajəm apuy extinguish a fire pajug foot (cf. buduk)
pak (see bua?) kneecap
pakan money pakan barian dowry
pakəw nail (of iron)
paləy a taboo mə刀+paləy forbid p-an-aləy to have been forbidden by
pali? wound, cut mən+pali? to wound p-an-ali? to have been wounded by
pan mat
panah ray (of light)
panas feeling of anger
məŋ+panas to make someone angry pəŋ+panas
siən pəŋ+panas nasəŋ He/she has a hot temper
paగu? (L) turtle
panay wind
papid twins
pa?a hand (cf. Kagam)
pa?id wipe kain pa?id a cloth for wiping mən+pa?id to wipe p-an-a?id to have been wiped by
pa?ih fish or meat wrapped in leaves and roasted over the fire men+pa? ih wrap fish or meat in leaves and roast over the fire
pa?it ${ }_{1}$ abdomen above the navel (cf. guəm)
pa?it2 bitterness, bitter mə+pa?it bitter
paran (L?) bush knife, machete
pat four
patan lie
mən+patan to lay someone (e.g. a child) down
p-an-atan to have been laid down (as a child)
pə+patan lie down

```
paus (see jokan) whale
paut long time (as a year or more; cf. tai)
pay go across
paya when?
payaw kind of large deer: Cervus equinus (cf. kijaŋ, pəlanuk)
payən fever
payun (L?) parasol, umbrella
məŋ+payup to shelter with a parasol or umbrella
pədən (L?) sword
pədəw gall, gall bladder
pədih (L?) painful, sick (cf.
pəగึakit)
mən+padih to hurt (something)
pəlanuk mousedeer (cf. kijan, payaw)
pələpət firefly
pəmaləy python
ponali? purulent skin ulcers
NOTE: possibly \(=p\)-ən-ali?
panu? full
pəfakit (L) disease (cf. pədih)
pəగiగi glowing ember
pəŋiŋih (see ba?)
popudun (cf. amut) taproot
pəpah (cf. ua?) hit, whip + +pə-u-pah to hit, whip pə-i-pah to have been hit or whipped by
pəpək anything used for hitting; whip ŋ+pə-u-pək/pə-u-pək to hit, whip pə-i-pək to have been hit or whipped by; hit, whip (polite command)
pəsəy fishhook
mən+pəsəy to fish with line and hook
p-ən-əsəy to have been caught with line and hook, of fish
piaw sound
pidin (L?) fin of a fish
pikir (L) thought; think
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    mə\eta+pikir to think about (some-
    thing)
    po+pikir think (intr.)
    pili? chosen, selected
buya? pili? He is chosen, selected
mə\eta+pili? to choose, select
pipəy cheek
pirak (L) silver
pison (see bua?) pineapple
pisit squeeze, wring out
mə\eta+pisit squeeze out, knead
p-ən-isit to have been squeezed,
wrung out
pulaw island
puli? return
puluh (L) group of ten (cf. pulu?)
sə+puluh ten
pulu? group of ten (cf. puluh)
pulu?+ən ten
dua pulu? twenty
tələw pulu? thirty
pulut latex, sticky sap
pupup bunch, cluster (of fruit)
puput spray water from the mouth,
blow suddenly, puff; anything spat
out (food, etc. mixed with saliva)
mə\eta+puput to spit on (someone
or something)
p-ən-uput/piput to have been spat
upon by
pu? nest
pu? a\kappai? beehive
pu?un base; source, origin, begin-
ning; molar (see fipən)
pu?un kayow base of a tree
pusəd navel
pusəd fa??m whirlpool
pusak promontory, peak (as of a
mountain)
pusak gunup peak of a mountain
pusin turn the body (cf. salinih)
putih (L) (see likəw) white
puyan hearth
puyu? (see manuk) quail

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\section*{R}
rabun basket containing food, scraps of cloth and small flags which is placed on a pole on the beach during the kaul ceremony; the food is meant to attract good spirits, and the cloth to frighten away evil spirits
raga? (L) (see isa?) kind of woven rattan ball
ragi (L) yeast
rajin (L) industrious
rakit approach
r-əm-akit to approach, draw near one another (of large things, as armies, rafts, etc.)
ra?ut pull
r-əm-a?ut to pull
rasun (L) poison
rata (L?) smooth, level
ratay (L) chain
ratus (L) group of one hundred
rabana (L) short open-ended drum (cf. gənaŋ)
raga (L) price
ribu (L) group of one thousnad
rugi (L) loss in business
rukəd distance between joints of the finger (used in measuring)
ruku? (L)
pə+ruku? to smoke (tobacco)
rusək (L) destroy, destroyed r-əm-usək to destroy

S
sabi? ask for
sabit sickle
sabun (L) soap
sabun fight (cocks)
po+sabup to fight one another (of cocks)
məp+sabup to pit cocks against one another
s-on-abup to have been pitted against one another (of cocks)
```

sadar1 lean against
sadar2 (L) lean against
mə\eta+sadar to lean against
s-an-sadar to have been leaned
against
sagu?1 (L) sago balls, balls of
cooked sago flour
sagu?2 (see lada)
sak, put, place
s-əm-ak to put or place
sak2 red
sakay friend, companion
sakul (L) hoe
sala? wrong, in error
salih (see ba?ay) ebb tide
saluy (~ aluy) boat
sama one another (reciprocal)
pə+bonu? sama low ion They killed
one another
samay scatter, strew (as seeds in
sowing)
sapaw roof, thatch
sapaw da?un palm thatch roofing
sapow broom
mə\eta+sapəw to sweep
s-an-apow to have been swept by
sapur (L) mix (cf. gaul)
mən+sapur to mix
satu (L) one (cf. ja)
sauh (L) anchor
sawa spouse
sawa lay husband
sawa mahow wife
s-on-awa to have been married to
pə+sawa marriage
say, blossom; numeral classifier
for flowers
s-am-ay to bloom, open up (of a
bud)
say2 sago flour
say }3\mathrm{ who?
so1 marker of personal names
sə Nawi k-əm-an nasi? Nowi is
eating rice

```
```

sənəŋ stare
mə\eta+sənə\eta to stare at
s-ən-ənə\eta to have been stared at by
səpa? betel quid
səpəd hack, chop (anything) (cf.
jujab)
sə-u-pəd to hack, chop
sə-i-pəd to have been hacked,
chopped
səput blowpipe
sə-u-put to shoot with a blowpipe
sə-i-put to have been shot with a
blowpipe
səruru? a joke
mə\eta+səruru? to mock, tease
sosa\eta pay (cf. bayar)
sə-u-sa\eta to pay
sə-i-sa\eta to have been paid by
səsəd immerse, submerge something
in the water (as a bottle to be
filled)
səsəl regret
səsə\eta a dam
səsəp sipping, sucking
mə\eta+sə-u-səp/sə-u-səp to sip, suck
sə-i-səp to have been sipped or
sucked by
NOTE: **s-ən-əsəp
sow grandchild
səw sikəw great grandchild
səy, flesh (cf. məsəy)
mə+səy fat, obese
soy}2\mathrm{ sago flour when still wet
sia salt
siaw chicken; cock
siaw lalup cock
siaw sabup fighting cock
pə+sabu\eta cockfight
sidi? a slice
siduk spoon
siən he/she/it; his/her/its
sikəw, elbow
sikow, (see sow) great grandchild

```
s-ən-u?un to have been carried on the shoulder pə+su?un to carry wood (habitually, as an occupation)
surat (L) letter
sus steam
susah (L) hard, difficult
susa? process of making iron tools, blacksmithing
NOTE: possibly s -u-sa?
susaw breast, milk
susud follow someone (who may or may not know he is being followed)
susuh ask someone to leave a place
susup lungs
susur (L) cake made of bananas and flour
suud line on a fruit (e.g. durian), marking the internal sections; also mark made by anything moving or being dragged on the ground (snake, log, etc.)
suy let slip or slide down (cf. tələsuy)

T
taas hardwood tree, the belian
taban seize, grasp, hold (cf. tabik) pəttaban hold on to something
tabəy (see jokan) k.o. fish
tabih chewed betel and sirih used as medicine (spat on the abdomen of sick children, but generally not used for adults)
tabik reach for (cf. taban) mən+tabik to reach for t-ən-abik to have been reached for pottabik be hanging by the arms
tabir (L) curtain
tabuk trigger of a trap
tabun a cover, lid
mən+tabun to cover
t-on-abun to have been covered by
tada? dance po+tada? to dance
tadəy younger sibling (cf. janak, tika)
tai long time (as several hours; cf. paut)
tain (L) unit of measurement for grains, etc.
taji (L) cockspur
tajuh needle
takup lid, cover
mən+takup to cover t-ən-akup to have been covered by
taləy string, rope (general term; cf. kələt)

\section*{tama father}
tan (see kuba, minəw) how?, why? tan aan how?
tana? earth, soil
tanih a cry; cry mən+tanih to weep, cry t-on-aŋih to have been wept over by
tap sole of the foot, palm of the hand
tapa? arrive at, visit məŋ+tapa? to visit \(t-\)-n-apa? to have been visited by
ta? brand new, just produced (of things) (cf. ba? \(\partial w\) ); raw, unripe
ta?ah loud, resounding mən+ta? ah to hear \(t-ə n-a ?\) ah to have been heard, listened to by prtta?ah to listen to (in future constructions)
ta?aŋ handspan (tip of outstretched index finger to tip of outstretched thumb)
ta? \({ }^{2} w_{1}\) know
ta? \({ }^{?} w_{2}\) (see layan) right (side)
ta?əy faeces, excrement
ta?un year
tarin (L) tusk (cf. gadin) tarin gajah elephant tusk
tatag repair məŋ+tatag to repair t-ən-atag to have been repaired by
```

tatah1 present part of one's body
that is to be affected by something
(as the arm for an injection),
leave oneself open in a fight
tatah2 to hit, punch, strike
tawar, (L) bargain, haggle
mə\eta+tawar to bargain, haggle
tawar2 (L) give medicine to
mə\eta+tawar give medicine to cure
something; done by the dukun (Mos-
lem healer) or a bayuh (Pagan
healer)
pon+tawar antidote
təbaa a well
təbək stab, stabbing
tə-u-bək to stab
t-ən-əbək/tə-i-bək to have been
stabbed by
trbə\eta fell (a tree)
tə-u-bə\eta to fell (a tree)
tə-i-bə\eta to have been felled (of
a tree)

```
təbəw sugarcane
təbin bank of a river
tabusaw aunt (FZ, MZ, FBW, MBW)
tadin (see bulu?) kind of bamboo
tədudu? fall down into a sitting
    position, as when one's knees
    buckle and one falls to the floor
    (cf. kudu?) NOTE: possibly
    /tərah dudu?/, with sporadic
    compression of the first morpheme.
    If dudu? and kudu? contain the
    same morpheme the difference of
    initial consonants is unexplained.
tegalin long tail feathers of a
    rooster
tok piece made by cutting (cf.
    tətək)
təlabaw speech, language; advice
tələkin prop; stick, etc. used as
    a prop
tələ diving for fun (cf. sələpan)
    pə+tələŋ dive in the water for fun,
    as when bathing
tələsuy slip, slide (cf. suy)
tələw \({ }_{1}\) three
tələw 2 we (pl.incl.)
təluh egg
pə+təluh to lay an egg
təmək push something heavy
    pə+təmək knock against the river-
    bank, as a raft forced out of con-
    trol by a strong current
tənakaw person (cf. bənusia,
    tənawan)
tənawan person, human being (cf.
    bənusia, tənakaw)
tənəjaw (see kayəw) rubber tree
tonad hard palate
təŋu? neck
trou?uh groan, groaning
topup flour, meal
tərah do unintentionally, by acci-
    dent (cf. buya?)
    tərah kan eat by accident
    tərah səbut mention inadvertently
tərupa? sandals
tətadəw caterpillar
totawa to laugh
    t-ən-ətawa to have been laughed
    at by
tətək cut (cf. tək)
    tə-u-tək to cut
    tə-i-tək to have been cut by
tətən drinking
    məŋ+tətəŋ/tə-u-tən to drink
    t-ən-ətəŋ/tə-i-təฤ to have been
    drunk by
totup porcupine
tidan payment, prize
tigah straight
tijun point out, indicate
    mən+tijun to point out, indicate
    t-ən-ijun to have been pointed
    out, indicated by
tika elder sibling (cf. janak,
    tadoy)
tikaw theft
    məŋ+tikaw to steal
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
tikiw tail (cf. ikiw) \\
tilam (L) mattress \\
timah (L) lead (metal)
\end{tabular} & \begin{tabular}{l}
tuduy sleep \\
mon+tuduy to put someone (as a child) to sleep \\
t-on-uduy to have been put to sleep by \\
pə+tuduy (see maləm)
\end{tabular} \\
\hline ```
timan praise
    mən+timan to praise
    t-an-iman to have been praised by
``` & tug ball of the heel
tugun smoke \\
\hline timak shoot mən+timok to shoot t-an-imak to have & tuh arrange, put in order (cf. atur) t-am-uh to arrange, put in order \\
\hline timun (see bua?) cucumber & \begin{tabular}{l}
tuju? \({ }_{1}\) finger \\
\(t u j u{ }^{2}\) (L) seven
\end{tabular} \\
\hline tina mother; female (of animals) tina tama parents & tukat (L) walking stick with a crook at the end (cf. maraw) \\
\hline tip thirsty & tukəd climbing \\
\hline tipaw grandparent, ancestor tipaw ayəp great grandparent & tukul hammer \\
\hline ti?an graveyard & tulak push mən+tulak to push \\
\hline titik speck, dot & t-ən-ulak to have been pushed by \\
\hline tua we (du.incl.)
tuab a yawn & tulan bone tulan bagəy collarbone \\
\hline pr+tuab to yawn & tulay tree resin, dammar \\
\hline tuad go somewhere & tuli? deaf \\
\hline tuad kənan ka?aw Where are you going? & ```
tulup help 
``` \\
\hline tuah (L) luck, fortune & t-on-ulun to have been helped by \\
\hline tuak (L) rice wine (bought from & tupuk heap, pile \\
\hline the Ibans) & tu?u true, correct \\
\hline tua? uncle (FB, MB, FZH, MZH); headman, leader & tutuk knock, as with the knuckles \\
\hline tua? ka(m) pup village leader & tuun swim \\
\hline tuba a plant: Derris elliptica & U \\
\hline tubih waste time joking and gossiping & uap dry \\
\hline pa+tubih to waste time joking and jossiping & ua? object, thing ua? asak clothes \\
\hline tubu? grow, sprout & ua? idu? gift \\
\hline tud bend, bent & ua? inow what? \\
\hline tud isi ion bend that ruler! & ua? jaja merchandise \\
\hline t-am-ud to bend (a stick, etc.) & ua? kahan fishing gear \\
\hline \(t\)-on-ud to have been bent by & ua? kan food (ordinary food; cp. \\
\hline pottud be naturally bent (agent & ua? kan+on) \\
\hline unspecified) & ua? kan+on special food (one's \\
\hline tuduk single-pronged spear or harpoon (cf. kəlayən) & favourite food; cp. ua? kan ua? kəkut (someone's) digging \\
\hline
\end{tabular}
```

    ua? ki? other
    ua? pəpah a whip, anything used
    for hitting
    uat vein, tendon
uay rattan
uban grey, of hair; grey hair
ubəy k.o. tuber
ubəy badu\eta cassava
ucapan (L) speech
ud headwaters of a river
uda\eta lobster
udip life
əm+udip to live
tə+udip living, alive
udup nose
udut dandruff, scurf
ujan rain
uji? knife
ukum (L) law
ukur }1\mathrm{ (L) measure the length
mon+ukur to measure the length
of something
ukur2 (L) shave
men+ukur to shave
ulay (see layan) left (side)
uləd maggot, caterpillar
ulow head
ulin rudder
zm+ulin to steer
ən+ulin to have been steered by
ulun slave, servant
ulur (L) pay out rope
uma cultivated field (cf. pada\eta)
uma paday rice field
po+uma to farm, cultivate
umi? small (cf. umit)
bry j+umi? (= ja umi??) a few, a
little
umit small (cf. umi?)
bəy j+umit (= ja umit?) a few, a
little
un only, just

```
bua? iən b-əm-aat ga?an un the fruit just makes the knapsack heavy (could be said as advice to a traveller not to take unnecessary fruit)
upan bait
upat to swell, swollen
upuk wash
əm-upuk to wash
ən-upuk to have been washed by pr+upuk to wash (as an occupation)
u? əm soak
əm+u? əm to soak
ən-u?əm to have been soaked by
uras dust?
usah numeral classifier used with trees usah badan body
usuk chest (anat.)
utap shield
uta? vomit (n.)
pr+uta? to vomit (involuntary) ən+uta? to have been vomited up by
utək brain utək tulan marrow
utup end, tip
uug rub, scrub am+uug to rub, scrub ən+uug to have been rubbed, scrubbed by pətuug to rub, scrape (unintentional or habitual action) səluəh siən pə+uug baw asu? His trousers scraped (dragged) on the floor (because they were too long) akəw kərja pə+uug təpun I work as a (sago) flour sifter

W
wani (L) fragrant
warih (L) relative
warna (L) colour
wud shin
wu rapids in a river

\title{
VERBAL FOCUS IN KIMARAGANG
}

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}

\section*{1. INTRODUCTION}

Kimaragang is a Dusunic language spoken by approximately 10,000 people living in the Kota Marudu and Pitas districts of Sabah, East Malaysia. The Dusunic languages, like most of the languages spoken in the interior of the state, can be characterised as Philippine-type languages, both lexically and grammatically.

Verbal Focus is an aspect of clause level morphosyntax characteristic of Philippine-type languages. It is roughly equivalent to the system of voice in English; the verb morphology signals the semantic relationship of a particular NP argument to the predicate. The purpose of this paper is to describe the verbal focus affixes in Kimaragang and their range of semantic functions.

Three of the seven possible focus types are illustrated below. In the free translation of each sentence, the subject of the English sentence corresponds to the focused NP of the Kimaragang. This is not necessarily the best possible translation equivalent; the pragmatic functions of voice in English and focus in Kimaragang are very different. But the superficial correspondence between English subject and Kimaragang focused nominal is used here to provide a preliminary, intuitive grasp of what is happening.
(1) Minanaak (m-in-poN-taak) ih kamaman kuh do pes sid dogon. NomF-past-trans-GIVE P/def uncle my nonP/indef knife to me (nonP) My uncle gave me a knife.
(2) T-in-aak-an okuh dih pamaman kuh do pes. *-past-GIVE-DatF \(I(P)\) nonP/def uncle my nonp/indef knife \(I\) was given a knife by my uncle.
(3) Itih pe'es n-i-taak dih kamaman kuh sid dogon. this (P) knife past-TF-GIVE nonP/def uncle my to me(nonP) This knife was given to me by my uncle.

\subsection*{1.1 Focus and Pivot}

In each main clause in Kimaragang, and in most dependent clauses, one NP must be marked as the clause-level topic or theme. The choice of an appropriate label for this thematic NP has been, and continues to be, a matter of considerable debate. Both of the traditional choices, "Subject" and "Topic", are somewhat misleading when applied to Philippine-type languages. Rather than using either of these terms, I will adopt the term used by Foley and Van Valin (1984), Pivot.

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The Pivot NP in a clause is identified by the determiner ih (for definite) or oh (for indefinite), or by Pivot forms of deictics (this, that, etc.). \({ }^{1}\) There are also distinct pronoun sets distinguishing Pivot from non-Pivot forms. For instance, in example (1) above, my uncle is marked as Pivot by the use of the determiner ih. In example (2), the pronoun used (okuh) is the Pivot form of the first person singular (cf. dogon in ex. (1) and (3)). The knife is marked as Pivot in example (3) by the use of the Pivot form of the deictic itih this.

Core NPs which are not Pivot are marked by dih (definite) or do (indefinite), or by non-Pivot deictics.
Every active verb in Kimaragang carries morphological markings which signal the semantic relationship of the participant or argument named by the Pivot NP to the event described by the verb. This system has generally been referred to in Philippine linguistics as Focus.

As mentioned above, the focus system in Kimaragang is analogous to diathesis or voice in Indo-European languages. But rather than the two or three possibilities typical of Indo-European languages, e.g. active, passive and middle, there are seven focus possibilities in Kimaragang. The five most frequently used are Nominative Focus ( \(N o m F\) ), Accusative Focus (AccF), Dative Focus (DatF), Translative Focus (TF) and Locative Focus (LOcF). Two additional focus possibilities, Instrument Focus (IF) and Setting Focus (SF), are more restricted in their usage.

The correlation between the morphological focus marking on the verb and the semantic role of the Pivot is not absolutely regular - such is the nature of human language. In the discussion that follows, this correlation is treated in terms of prototypes rather than in terms of rigid definitions. In other words, rather than stating a set of necessary and sufficient conditions under which a given semantic role will be encoded by a given focus choice, the core meaning(s) of each focus type will be presented, and the range of permitted variation discussed.
Briefly, Nominative Focus (NomF) marking on the verb indicates that the Pivot fills the semantic role of Agent (as in example (1) above), Force or Experiencer. NomF is also used for the argument of certain states (e.g. 'alive' and 'dwell') and changes of state (e.g. 'die').

Accusative Focus (AccF) encodes true Patients (i.e. affected Patients) of transitive predicates. Translative Focus (TF) indicates that the Pivot is a Theme, i.e. something whose physical location is changed by the event (e.g. the knife in example (3)). Locative Focus (LocF) marks the Pivot as Location or Goal (Destination), almost always with intransitive verbs.

Dative Focus (DatF) is the focus type with the widest range of semantic possibilities. DatF marks the Pivot as being the Recipient (as in example (2)), Benefactive or Goal of an action; the Goal (or Range) of predicates of perception, emotion and cognition; and Patient (with reduced transitivity) of some transitive verbs.
In addition to the five basic focus types discussed above, there are two more distinct focus possibilities in Kimaragang. Instrument Focus (IF) is used to mark the Pivot NP as Instrument, and Setting Focus (SF) is used to mark the Time or Location of a (generally transitive) action. These focus types are infrequent, SF occurring mainly in questions and IF in questions or subordinate purpose clauses. It may be that \(S F\) and IF should be considered nominalised forms, but the difference between Noun and Verb in Kimaragang is somewhat hazy. Virtually any verb form can be used as a noun simply by inserting a determiner before it, e.g. ih mongomot the harvester(s). (Contrast this with relativisation
as described in section 4 below; in the present example, there is no relativised head noun.)

The semantic functions of six focus types (all but Locative) are illustrated in the following examples, using the verb boli buy. In each example, the Pivot NP is underlined.
(4) Nom: Momoli (m-poN-boli) okuh do tasin. \(\frac{\text { NomF-trans-BUY }}{I(P)}\) nonP/indef salt

I am going to buy salt.
(5) Acc: Amu kuh boli-on itih tasin ditih. not \(I\) (nonP) BUY-AccF this (P) salt this I won't buy this salt.
(6) Dat: Boli-ai okuh poh do tasin!

BUY-DatF/imper me(P) yet nonP/indef salt
Buy me some salt!
(7) Thm: N-i-boli kuh it siin kuh dot tasin.
past-TF-BUY \(I\) (nonP) \(\overline{\mathrm{P} / \mathrm{d}} \mathrm{d} \frac{\text { money }}{\overline{m y}}\) nonP/indef salt
I spent my money on salt.
(8) Inst: Songkuroh ot pinomoli (-in-poN-boli) nuh dinoh how.much P/indef *-past-IF-BUY you(nonP) that (nonP)
pondulung nuh?
ring your
How much did you pay for your ring?
(9) Set: Siongoh pinomolian (-in-porboli-an) nuh dilo gampa nuh? where *-past-SF-BUY-SF you(nonP) that (nonP) machete your
Where did you buy your machete?
A relatively large inventory of semantic roles is mentioned in this paper. Most of these roles are familiar from the work of Fillmore, Cook and others: Agent, Patient, Experiencer, Benefactive, Instrument, etc. Other roles involve finer semantic distinctions: Force (inanimate agent) is distinguished from Agent; Item (used here for the argument of a stative or change of state) and Theme (the entity whose physical location is changed by an action) are distinguished from Patient (used here only for the entity affected by an action).
It is too early to think of identifying a minimal set of semantic roles sufficient to describe the grammar of Kimaragang. In using various role labels, I am (at this point) making no claims about their systematic or theoretical status, either in Kimaragang grammar or in any particular theory of Case Grammar. My aim in this preliminary study has been to use familiar terms wherever possible to capture particular semantic distinctions which need to be made.

\subsection*{1.2 Grammatical case}

In this paper, traditional case names have been used for the three most common focus types (Nominative, Accusative and Dative). The primary reason for this is to capture the range of semantic functions associated with these focus types, but there is in fact a close relationship between verbal focus and grammatical case.

In the previous section it was pointed out that focus and voice are in some ways analogous. However, in many respects focus is more similar to case than to voice. Many writers have described verbal focus as a case marking system for various Philippine-type languages. For example, Schachter (1976) describes the focus-marking affixes of Tagalog as case-marking morphemes affixed to the verb.

The notion of case is usually associated with NP markers, rather than verb morphology, and there are several devices in Kimaragang for marking the case of non-Pivot NPs. However, unlike Tagalog, the set of cases defined by these NP markers is not isomorphic to the set of focus types. Thus, while verbal focus is treated here primarily as a case-marking system, there is a distinct (but related) system of grammatical case defined by the marking of non-Pivot NPs by means of word order, choice of pronoun set, prepositional elements, etc. This system is best described in terms of the concepts Actor and Undergoer, as developed by Foley and Van Valin (1984).
Kimaragang is a verb-initial language (and predicate initial in non-verbal clauses), and the word order is more flexible than that of English. But the preferred order for nominal elements of a verbal clause is Actor-UndergoerOblique. This preferred order is often obscured by the fact that pronouns must precede full NPs, but if more than one pronoun occurs in a clause, the same ordering principle tends to apply (i.e. Actor before Undergoer).
As stated in section 1.1. above, the Pivot NP will always be preceded by the determiner ih (for definite), oh (for indefinite); or by the Pivot form of a deictic (this, that, etc.). Non-Pivot Actor and Undergoer are marked identically, either with dih/do or a non-Pivot deictic form.
Two other non-Pivot cases are distinguished: Referent and Oblique. Referent, including both Location and Goal, is marked with the determiner sid.
Oblique elements (e.g. destination, origin, instrument, etc.) must be preceded by verbal prepositions (mantad from, kuma'a arrive at, etc.), full verbs (e.g. mamakai use) or prepositional phrases like gisom sid until, silo id over there, etc.

For some pronouns, Actor and Undergoer have distinct non-Pivot forms. These are 1st and 2nd person singular, 1st person plural exclusive, 1st person dual inclusive, 2nd person plural, and sometimes (but not consistently) 3rd person singular:
\begin{tabular}{lllll} 
PERSON & TOPIC & PIVOT & NON-PIVOT ACTOR & OTHER NON-PIVOT \\
lsg. & yokuh & okuh & kuh & dogon \\
2sg. & ikau & ikau/koh & nuh & dikau \\
3sg. & yalo & yalo & yoh ( dialo) & dialo \\
ldu.incl. & ikitoh & kitoh & qoh & - \\
lpl.incl. & itokou & tokou & - & daton \\
lpl.excl. & yokoi & okoi & yah & dagai \\
2pl. & ikoo & ikoo/kou & duyuh & dikoo \\
3pl. & yaalo & yaalo & - & daalo
\end{tabular}

Since Actor precedes Undergoer and pronouns precede nouns, the Actor forms shown above (kuh, nuh, etc.) normally occur immediately following the verb. In some Dusunic languages, these are written as clitics, but in Kimaragang they are not phonologically bound to the verb. \({ }^{2}\)
The case marking system described above distinguishes four grammatical cases: Actor, Undergoer, Referent and Oblique. The focus marking on the verb adds a finer set of case distinctions for one NP in the clause, the Pivot.

Nominative Focus (NomF) marks the Actor as Pivot. As the label suggests, NomF is used both for the subject of an intransitive verb and the Agent of a transitive.

Accusative Focus (AccF) prototypically marks the Patient of a transitive verb; Dative Focus (DatF) is prototypically Recipient or Benefactive. But, as in many other languages, some transitive verbs require their Patients to be marked as Dative (i.e. when the Patient of these verbs is in focus, the verb will be marked as DatF).

Some verbs may allow either AccF or DatF when the Patient is in focus. For example:
(10) Acc: Tobuk-on kuh it sada.

STAB-AccF \(I\) (nonP) P/def fish
I will stab the fish. (implies stomach swollen with gas or fluid)
(11) Dat: Tobuk-an kuh it sada.

STAB-DatF \(I\) (nonP) P/def fish
I will clean the fish.
The semantic distinction here is partially idiosyncratic, but also appears to be related to an aspectual distinction. The Accusative Focus tends to mark punctiliar actions, whereas Dative Focus is often used for durative actions. Thus AccF may be said to be higher in transitivity than DatF, with respect to the parameter of Punctuality.

Foley and Van Valin (1984) define Actor and Undergoer as semantic macro-roles. In Kimaragang, these categories could be said to function as grammatical macrocases, which are further subdivided by the focus system. The Undergoer, when it is in focus, may be marked as Accusative, Dative or Translative. When the Referent is Pivot, it may take Dative or Locative Focus.
It is standard practice in both descriptive and theoretical works to distinguish between thematic (semantic) role and grammatical case. For Kimaragang, as has been shown, it is necessary to distinguish between two distinct systems of grammatical case, in addition to the system of semantic roles. The system of case marking for non-Pivot elements \(I\) will refer to as syntactic case. The system of case marking for the Pivot, i.e. the focus system, I will refer to as morphological case. Thus Kimaragang distinguishes four syntactic cases, seven morphological cases, and something over a dozen thematic roles.
The correlations between the two systems of grammatical case and the set of thematic roles is illustrated in the following diagram:


In the preceding discussion, nothing has been said about grammatical relations. As many writers have pointed out (notably Schachter 1976), the notions of Subject and Object are not entirely appropriate for Philippine-type languages. There appears to be only one "grammatical relation" in Kimaragang, i.e. one NP "position" in the clause which is relevant to syntactic processes like those discussed in section 4 below. That relation is what we have labelled Pivot.

\section*{2. FOCUS MARKING AND INTERPRETATION}

\subsection*{2.1 Nominative Focus (NomF)}

Nominative Focus is marked by the prefix \(m\)-. When the \(m\) - occurs before a consonant other than \(/ p /\), it is realised as the infix -um-. When the m- precedes /p/, the /p/ is deleted. For example:
(12) M-ongoi okuh sid kadai. NomF-GO \(I(\mathrm{P})\) to town I'm going to town.
(13) Modsu (m-podsu) okuh poh.

NomF-BATHE \(I(\mathrm{P})\) yet
I'm going to take a bath.
(14) Induwo t-um-akad sid sokid.
twice *-NomF-CLIMB at hizl
You have to climb two hills.
Nominative Focus forms may be marked as "transitive" or "intransitive", the transitive verbs bearing the transitivity prefix poN-. The NomF morpheme mimmediately precedes the poN-, creating the merged prefix moN-. The final nasal N - assimilates to the point of articulation of the following consonant, if any. Before a vowel, \(N\) - is realised as a velar nasal /ng/.
N - merges with certain consonants in the following ways:
\[
\begin{array}{ll}
N+/ b, p, w / & \rightarrow / m / \\
N+/ t, s / & \rightarrow / n / \\
N+/ k / & \rightarrow / n g /
\end{array}
\]

Before the consonants /d,g,r,l,j/, an epenthetic vowel /o/ is inserted following the N -; thus poN- is realised as /pongo-/ before these segments. A rule of vowel harmony changes any /o/ in the prefix to /a/ when /a/ occurs in the following syllable. Note the following examples:
(15) Mangakan (m-poN-akan) koh-i do wogok oi?

NomF-trans-EAT you(P/sg)-emph nonP/indef pig Q
Do you eat pork?
(16) Aku oubas yokuh monigup (m-poN-sigup).
not. I accustomed \(I(\mathrm{P})\) NomF-trans-TOBACCO
I don't smoke.
(17) Mama'al (m-poN-wa'al) okuh do tinsod. NomF-trans-MAKE \(I(P)\) nonP/indef pig.pen
I'm building a pig-pen.
```

(18) Mongoguring (m-poN-guring) okuh do ranau.
NomF-trans-HARROW I(P) nonP/indef paddy.field
I am harrowing my paddy field.
(19) Obbulih koh mongoruang (m-poN-koruang) dogo }\mp@subsup{}{}{3}\mathrm{ oi?
can you(P/sg) NomF-trans-COMPANION me(nonP) Q
Can you accompany me?

```

The morpheme poN- marks "high transitivity" in the specialised sense of Hopper and Thompson (1980), rather than "transitive" in the traditional sense of "taking a direct object". Several of the parameters of transitivity discussed by Hopper and Thompson are relevant here. But again, the correspondence between form and meaning is not perfectly regular and is best discussed in terms of tendencies or prototypes.

AGENCY. The Actor of a NomF-transitive verb is always animate and almost always carries the semantic role of Agent. The Actor of a NomF-intransitive verb need not be animate. Verbs dealing with the weather and other natural phenomena are often marked as NomF-intransitive, as in the following examples:
(20) T-um-akad ih sarup.
*-NomF-CLIMB P/def wind
The wind blows from the west.
(21) S-um-ilau ih taddau.
*-NomF-RISE P/def sun
The sun is rising.
(22) T-um-onob noh ilo taddau.
*-NomF-SET already that(P) sun
The sun is setting.
The Actor of a NomF-intransitive verb may carry the semantic roles of Agent, Force (as in the examples above), Experiencer or Item (argument of a stative or change of state). Note the following examples of the Experiencer and Item usages:
(23) Nokuroh tu r-um-asang yalo? why for *-NomF-ANGRY he (P) Why is he angry?
(24) R-um-osi okuh dot apalid.
*-NomF-FEAR I(P) COMP Zost
I'm afraid of getting lost.
(25) Engin koh-i m-iyon sitihoi? like you(sg/nonP)-emph NomF-DWELL here \(Q\) Do you like living here?
(26) M-iyau poh ih tidi nuh oi? NomF-LIVE yet \(\mathrm{P} /\) def mother your Q Is your mother still living?
(27) Ih tanganak nopoh dih s-um-olusuk dirih... P/def child only REL *-NomF-GROW.UP this The children growing up these days ...

KINESIS. NomF-transitive verbs always encode an action, whereas NomF-intransitives may encode actions or such non-actions as states (miyau alive), emotions (rumosi afraid), etc.

PARTICIPANTS. The traditional distinction between transitive and intransitive verbs (i.e. the presence or absence of a direct object) is relevant to Kimaragang only as a general tendency. Not all NomF-transitive verbs require an overt "object" (i.e. Undergoer). In fact, many such verbs rarely occur with an overt Undergoer, because they are lexically specific to a particular Patient which need not be stated. Some examples are:
(28) Managad (m-poN-tagad) okuh. NomF-trans-FELL.TREE \(\quad I(P)\) I am felling trees.
(29) Mongurak (m-poN-urak) okuh. NomF-trans-GATHER.LOGS \(I(P)\)
I am gathering the unburnt Zogs.
(30) Monibor (m-poN-sibor) okuh. NomF-trans-DIKE \(\quad I(P)\)
I am building dikes in my rice field.
(31) Managou (m-poN-sagou) okuh. NomF-trans-FETCH.WATER \(I(\mathrm{P})\)
\(I\) am fetching water.
(32) Mongolumbid (m-poN-lumbid) okuh poh. NomF-trans-ROLL. SMOKE \(\quad I(P)\) yet I want to roll a cigarette.
(33) Pong-indad poh, monorimo (m-poN-torimo) okuh poh. trans-WAIT yet NomF-trans-COOK.RICE I(P) yet Wait a minute; I'ZZ cook some rice.

In certain contexts, the Undergoer of these verbs may be made explicit. However, there are a very few verbs with NomF-transitive marking which can never take an Undergoer, e.g. mamanau to walk/go, and mongiruk to act shy. The root panau walk, occurs in several other constructions, including Locative Focus (pana'on the distance walked). But mongiruk seems to be the only occurring form of what is presumably its root, *iruk, and is probably a fossilised form.

Just as the NomF-transitive verbs do not always require an overt Undergoer, some verbs marked as NomF-intransitive may occur with an Undergoer. However, the Undergoer of an intransitive verb is never affected by the action, never a true Patient (unlike the Undergoer of a transitive verb, which normally is affected). Note the following examples:
(34) S-um-ambat okuh dialo.
*-NOMF-MEET I (P) him(nonP)
I will go to meet him.
(35) Maya (m-waya) okuh dikau. NomF-FOLLOW \(I(\mathrm{P})\) you(nonP)
I will go with you.
(36) Lo-logot-i, s-um-u-su'ut okuh-i dikau.
dup-sZow-emph *-NomF-dup-FOLLOW \(I(\mathrm{P})\)-emph you (nonP/sg)
You go on ahead; I'Zl come along behind/after you.

Most verb roots can be classed as either transitive or intransitive, but a few roots may take either transitive or intransitive morphology. These roots occur as transitive-intransitive pairs like the following:
(37) Mangagamas (m-poN-gamas) okuh dih tumo kuh.

NomF-trans-GRASS.CUTTER \(I(P)\) nonP/def field my
I am weeding my rice field (cutting the grass between rice stalks).
(38) G-um-amas okuh sid tumo kuh.
*-NomF-GRASS.CUTTER \(I(P)\) in field my
I con cutting grass in my rice field.
(39) Abagos yalo k-um-araja.
industrious he(P) *-NOmF-WORK
He works hard.
(40) Mangaraja (m-poN-karaja) okuh do tana kondiri.

NomF-trans-WORK \(I(P)\) nonP/indef land own
I work my own land. (i.e. I'm a farmer)
(41) T-um-utud okoi.
*-NomF-BURN we (excl/p)
We are burning/going to burn (our fields).
(42) Monutud (m-poN-tutud) okuh dit tagad kuh.

NomF-trans-BURN \(\quad I(P)\) nonP/def field my
I an going to burn off my field.

\subsection*{2.2 Accusative focus (AccF)}

The Accusative Focus is marked by the suffix -on in non-past tense, and by \(-\emptyset\) in the past tense. The primary use of AccF is to signal that the focused NP, i.e. the Pivot, is the affected object (Patient) of a transitive verb (as in examples (43)-(47) below), or the object of a causative construction (as in example (48) \}.
(43) Tombir-on kuh ih pilat nuh.

SEW-AccF \(I\) (nonP) P/def wound your
I will put stitches in your wound.
(44) Kadung aa kou pendakod (po-indakod), tibas-on tekoo (kuh-ikoo)! if not you(pl/p) caus-CLIMB SLASH-AccF I(nonP)-you(pl/p)
If you don't let me come up, I'll slash you!
(45) Ong o-puriman-an nuh dot oruol, akan-on nuh i
if stat-FEEL-DatF you(nonP) COMP sick EAT-AccF you(sg/nonP) then
itih tubat.
this (P) medicine
Only take this medicine when you feel sick.
(46) Lapak-on kuh dati inoh tulu nuh!

SPLIT-AccF \(I\) (nonP) likely that(P) head your
I'Zl split your head open if you don't watch out!
P-in-atai- \(\varnothing\) dirih it wogok...
*-past-DIE-AccF this p/def pig
When the pig had been killed...
(48) Penumon (po-inum-on) ih tanak nuh ditih tubat. caus-DRINK-AccF P/def child your this (nonP) medicine Have your child drink this medicine.

Another use of \(A c c F\) is to encode the Range of verbal actions, i.e. that which is said (b-in-oros- \(\varnothing\) ), told (t-in-angon- \(\emptyset\) ), written (s-in-urat- \(\emptyset\) ), etc. Note, however, that the AccF form of the verb boros say, is ambiguous; it may point to either the utterance or the addressee. These different meanings of AccF may correspond to two distinct senses of the root, speak vs. tell, or may even point to distinct homophonous roots.
(49a) Isai ot boros-on nuh?
who P/indef SAY-AccF you/nonp
Who are you talking to?
(49b) Tongoh ot boros-on nuh? what P/indef SAY-AccF you/nonP What do you want to say?
(50) I sai b-in-oros- \(\emptyset ~ n u h ? ~\)
who *-past-SAY-AccF you(sg/nonP)
Whom did you tell?
(51) Tongoh ot b-in-oros- \(\emptyset\) dialo dikau?
what P/indef *-past-SAY-AccF he (nonP) you(sg/nonP)
What did he tell you?

\subsection*{2.3 Dative Focus (DatF)}

Dative Focus is signalled by the suffix -an. As noted above, DatF is semantically the most diverse focus type, but its primary (or prototypical) usage is to mark the Pivot as being either Recipient or Benefactive. These two uses were illustrated in examples (2) and (6) above; other examples are listed below.
(52) Nurud-an saw dit yoh it tanak dot samangkuk EXPRESS-DatF yet nonP/def spouse his P/def child nonp/indef one.bowl
ot gatas ...
P/indef milk
His wife squeezed out a bowlful of milk for the child ...
(53) Isai b-in-oli-an nuh ditih tubat ditih? who *-past-BUY-DatF you(nonP) this (nonP) medicine this Who did you buy this medicine for?
(54) Owit-ai okuh poh dot mangga!

TAKE-DatF/imper me(P) yet nonP/indef mango
Bring me some mangoes!
(55) N-a-lapak-an noh do niyuw it wogok oi? past-stat-SPLIT-DatF you(nonP) already nonP/indef coconut P/def pig Q Have you split some coconuts for the pigs (to eat) yet?

Another sense of the Dative related to the Benefactive sense is what may be called the Negative Benefactive: the participant who suffers a loss, an affliction, etc. For example:
(56) Napatayan (n-o-patai-an) yalo do tanak songinan. past-stat-DIE-DatF he (P) nonP/indef child one.body One of his children died. (He suffered the loss of a child.)
(57) Tudu poh, o-puun-an koh dati.
touch yet stat-TABOO-DatF you(P/sg) probably Touch it (the glass) so no curse will fall on you.
(58) Ih ta'ap kuh n-ongo-tilib, n-ajang-an do sarup. P/def roof my past-pl-BLOW.AWAY past-STOP.BY-DatF nonP/indef wind My roof was blown off by the wind.
(59) Sera poh norikatan (n-o-rikot-an) koh?
when yet past-stat-ARRIVE-DatF you(sg/P)
When did you have your last period?
(60) Ong o-tobpus-an koh noh do tumos, kada noh if stat-SQUIRT-DatF you(P/sg) already nonP/indef sweat don't already monongkumut. wear. blanket
If you break into a sweat, take off the blanket.
The common greetings and leave-takings listed below are probably best understood as Benefactive or Negative Benefactive senses: Will you suffer yourself to be visited/left/passed by?
(61) Tolib-an koh, ki?

PASS-DatF you(P/sg) okay
I an going past you(sg.).
(62) Endakadan (o-indakod-an) kou-i oi?
stat-CLIMB-DatF you(P/pl)-emph Q
May I come in?
(63) Eduan (o-idu-an) kou!
stat-LEAVE-DatF you(P/p1)
Goodbye, everyone!
Another important usage of DatF is to encode the Range (or Goal) of predicates of cognition, perception and emotion. Foley and Van Valin (1984) analyse verbs of sensation as being essentially locative, treating the Experiencer as the locus of the event. This would be quite consistent with marking the Experiencer as a Recipient (with dative case marking). However, Kimaragang morphosyntax uses DatF to point to the perceived object, rather than the Experiencer, apparently treating the Range (or "object") of the experience as the locus of the event. Note the following examples:
(64) Aso poh ot o-tutun-an kuh sitih. not.exist yet \(\mathrm{P} /\) indef stat-KNOW-DatF \(I\) (nonP) here I don't know anyone here yet.
(65) Aku o-tolunung-an ih ralan.
not.I stat-KNOW.WAY-DatF P/def trail
I don't know the trail.
(66) Siongoh ot ela'an (o-ilo-an) duyuh ot waro oh where P/indef stat-KNOW-DatF you(nonP/pl) P/indef exist P/indef
talipon sitih?
telephone here
Where around here do you know of a telephone?
(67) Amu a-sagka-an kuh ot ko-sogit.
not stat-ENDURE-DatF \(I\) (nonP) \(P /\) indef \(a b l e-C O L D\) I can't stand being cold.
(68) Okitanan (o-kito-nan)-i mari it balai.raya.
stat-SEEN-DatF-[emph] surely P/def balai.raya
You can see the balai raya (commity hall).
(69) Nunuh ot o-puriman-an nuh dinoh? what \(\mathrm{P} /\) indef stat-FEEL-DatF you(nonP) that What hurts? Where does it hurt?

With stative roots, Dative Focus conveys the sense of being affected by the quality named in the root. The Experiencer is in focus, as in the following examples:
(70) Adis agagayaan (o-ga-gayo-an) yalo dit ro'o dit kanas. my! stat-dup-BIG-DatF he nonP/def jaw of wild-pig My word! he was amazed at the size of the pig's jowbone.
(71) Apaganan (o-pagon-an) okuh ditih.
stat-DIFFICULT-DatF \(\quad I(\mathrm{P})\) this (nonP)
I find this (task) difficult.
The terms for thirsty and hot are further instances of this usage of DatF (example (72)). However, the corresponding forms of hungry and cold mark the Experiencer in the accusative \({ }^{4}\) (example (73)).
(72a)
0-tuuw-an okuh.
stat-DRY-DatF I (P)
I am thirsty.
(72b) Losuan (lasu-an) okuh. нот-DatF \(\quad I(P)\)
I feel hot.
(73a) Witil-on okuh.
HUNGER-ACcF \(I(\mathrm{P})\)
\(I\) am hungry.
(73b) Sogit-on okuh.
COLD-AccF \(I(\mathrm{P})\)
I feel cold.
Dative Focus is typically used for Undergoers of actions involving fire and water. The transitive verbs tutud burn, and pupu wash (clothing), require their Patients to be marked as dative.
(74) It botung kuh n-o-liyud-an, om n-olot-an

P/def paddy.field my past-stat-FLOOD-DatF and past-COVERED-DatF
do togis ih parai kuh.
nonP/indef sand \(P /\) def rice \(m y\)
My rice field was flooded, and my rice covered with sand.
(75) N -o-weeg-an \(\quad\) ih talun-alun silo id Rakit. past-stat-WATER-DatF P/def road there at Rakit The road is flooded at Rakit.
(76) Tutud-ai poh ilo karatas.

BURN-DatF/imper yet that(P) paper
Burn up that paper!
(77) N-o-pupu-an noh dialo dati. past-stat-WASH-DatF already he(nonP) likely
He has probably washed it.
There are other verbs which take dative Patients but which are more difficult to characterise or group into natural semantic classes. The verb tunuw roast, is marked for DatF when the Patient is in focus; this seems consistent with the observation above about actions of fire. However, the verbs for boil, steam and fry, like the generic term ansak to cook, mark the Patient as accusative. Note the following examples (and cf. example (129) below):
(78) Kukuoyon mangansak (m-poN-ansak) itih sada ditih? Rapa-on ko,
how NomF-trans-COOK this(P) fish this BOIL-AccF or
guring-on ko, tunuw-an?
FRY-AccF or ROAST-DatF
How should I cook this fish? Boil it, fry it or roast it?
(79) Topuru-on nopoh boh.

STEAM-AccF only [part]
Just steam it.
The verb posut whip, takes DatF (posutan) when the patient is in focus. But the verbs lapos whip severely and bobog beat (with a stick), take AccF when the Patient is marked as Pivot (loposon, bobogon).

For some roots, there is a semantic contrast between AccF and DatF forms. The expected distinction would be between Undergoer as Patient vs. Undergoer as Benefactive, as in examples (5) and (6) above and examples (46) (lapakon) vs. (55) (lapakan). Also notice the contrast between the dative (owitai) used in example (54) and the accusative in the following example:
(80) Owit-on kuh-i.

TAKE-AccF \(I\) (nonP)-[emph]
I'Zl take it.
In examples (10) and (11) above, both AccF and DatF forms of tobuk stab, focus on the Patient. The contrast involves an aspectual distinction related to the degree of transitivity.
The verb irak laugh, normally takes DatF when the object of the laughter is in focus. However, AccF is also possible, with a different connotation:
(81) Irak-on koh dih Lucy.

LAUGH-AccF you(sg/P) nonP/def Lucy
Lucy is laughing at you (for no reason).
I-ra-rak-an koh dot tulun. *-dup-LAUGH-DatF you(sg/p) nonP/indef person People are loughing at you.

The difference here is that the DatF form (example (82)) implies that you are doing or wearing something funny which provokes laughter: You are making everyone laugh. The AccF form implies that there is nothing funny about you; indeed, there may be something funny about Lucy: She is laughing at you for no reason (like a crazy person).

The distinction here seems to hinge on volitionality: the dative form is used for non-volitional laughter, the accusative for volitional (unprovoked) laughter. Thus, as in examples (10) and (11) above, the AccF form seems higher in transitivity than the DatF form.

A similar contrast is found with the root ondom remember. The usual form of this verb is in Dative Focus (andaman), with the Range (i.e. the thing remembered) in focus. This implies that the memory is there in the Actor's consciousness; he doesn't need to work at remembering. If the Accusative Focus form ondomon is used, the Range of the memory is still in focus. However, this form implies that the Actor must think hard to recall something which has been forgotten.

Once again the contrast seems to involve volitionality. The DatF form andaman remember, is non-volitional; the Actor remembers whether he wants to or not. The AccF form, ondomon try to remember, is volitional, and hence more transitive than the DatF. Interestingly, the NomF-transitive form of the verb, mongondom, used when the Experiencer is in focus, corresponds to the volitional sense conveyed by the AccF form. No form of this verb has yet been found with the Experiencer in focus which carries the non-volitional sense (corresponding to that of the DatF form).

The verb ogom sit, is used primarily as an intransitive. However, the transitive form mongogom is also used, meaning to sit on. In the intransitive sense, when the location of the sitting is in focus, a Locative Focus form (ogomon) is used which would be homophonous with AccF (see section 2.5 below). Therefore, DatF is used when the Patient of the transitive sense (the thing that gets sat on) is in focus:
(83) Siomoboh ot ogom-on kuh? where \(P /\) indef SIT-LocF \(I\) (nonP)
Where shall I sit?
(84) Nagaman (n-ogom-an) kuh it tupi nuh. past-SIT-DatF \(I\) (nonP) P/def hat your I sat on your hat.

Similarly, the intransitive verb odop sleep, normally uses the LocF form odopon to mark the Pivot as Location. But if the choice of sleeping place is high in volitionality, the DatF form is used:
(85) Adapan (odop-an) dogo itih walai kuh tu, kapayig okoi. SLEEP-DatF me(nonP) this(P) house my because go.out we (excl/P) Come sleep in my house for me because we are going away.
(86) Sid disai ot odop-on nuh?
at who(nonP) P/indef SLEEP-LocF you(sg/nonP)
Whose house will you sleep at?
The DatF form would also be used, for example, in daring something to sleep in a graveyard, a haunted place, etc.

As pointed out above, we have used traditional grammatical case labels for the three most common focus types of Kimaragang. Other analysts of Philippine languages have tended to use either semantic role labels (Actor, Goal, Beneficiary) or vague and somewhat arbitrary labels (Referent, Accessary, Concomitant).

The great advantage of the traditional grammatical labels is that they allow for the kind of semantic variation or irregularity discussed above. Very similar phenomena are common in the case systems of European and other languages where certain verbs or prepositions may require the dative (or other case) rather than the expected accusative. At the same time, the core areas of meaning of NomF, AccF and DatF in Kimaragang are clearly identifiable with the traditional meanings of nominative, accusative and dative.

\subsection*{2.4 Translative Focus (TF)}

Translative Focus is marked by the prefix i-. It is used primarily to indicate that the Pivot carries the semantic case Theme, i.e. the thing whose physical location is changed by the action.
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(87) N-i-atod dih Jaiwan itih sada ditih.
past-TF-BRING nonP/def Jaiwan this(P) fish this
These fish Jaiwan brought over.

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See also examples (3) and (7) above.
Sometimes the use of Translative Focus introduces an element of motion into verbs that do not normally involve motion. Note the following examples:
(88) Mamanau (m-poN-panau) itih pen ong i-tutud. NomF-trans-WALK this(P) pen if TF-BURN This pen will work if you stick the point into a flame.
(89) Intang-an tinoo it kumut dit n-i-sidang. WATCH-DatF soon P/def cloth REL past-TF-DRY Check on the clothes (I) put out to dry.

Normally the Patient of the verb to \(d r y\) (monidang) would take Accusative Focus (sidangon). The use of TF here conveys the idea of being 'put out to dry'. Similarly, compare the sense of TF in example (88) with the DatF used in example (76) above.

There is something inherently causative about the sense of Translative Focus. TF verbs encode actions that cause the physical location of the Theme (marked as Pivot) to change. The causative force of TF is seen even more clearly in certain verbs, especially intransitives, where the occurrence of Translative Focus is unexpected. For example:
(90)
\begin{tabular}{llll} 
Ong taak-an okuh dikau & do & siin, \(\{\) i-talib/ \\
if GIVE-DatF me (P) you(sg/nonP) & nonP/indef money & TF-PASS/ \\
potolibon (po-talib-on)\} kuh & ikau. & \\
caus-PASS-AccF & \(I\) (nonP) you(sg/p) & \\
If you give me money I will let you go past.
\end{tabular}
(91) N -i-odop kuh yalo sid dagai. past-TF-SLEEP \(I\) (nonP) him(P) at us (nonP) I invited him to sleep at our house.
\(N\)-i-odop-odop kuh \(\quad\) poh inoh tanak om n-i-sulung kuh
past-TF-dup-SLEEP \(I\) (nonp) yet that(P) child and past-TF-PUT.ON I(nonP)
nogi inoh soruwai.
then that(P) pants.
\(I\) laid the child down first, then put its pants on.
Note that italib in example (90) could equivalently be replaced by an overtly causative form potolibon (caus-PASS-AccF).
The duplication of the root odop sleep, forms odop-odop lie down. Thus the TF form niodop-odop in example (92) means caused to lie down.

Another example is the verb dagang buy. This verb is largely synonymous with the root boli buy (see examples (4)-(9) above). However, in the causative forms (formed by adding the causative prefix po-), there is a definite semantic distinction. Poboli means cause to buy, e.g. persuade or coerce someone to buy something. It implies that the person doing the persuading, the Causer, is not the person selling the item being purchased. Padagang, on the other hand, means simply to sell.

A related difference emerges in the Translative Focus forms of these two verbs. As seen in example (7) above, the \(T F\) form of boli marks the money which is spent as Theme. Idagang, on the other hand, marks the Pivot as that which is sold, as in the following example:
(93) I-dagang dialo ih kuda yoh sid dogo.

TF-BUY he (nonP) P/def horse his to me (nonP)
His horse he sold to me.
Note that for both verbs, Accusative Focus is used when the item purchased is in focus:
(94a) Nunuh oh boli-on / dagang-on nuh? what P/indef BUY-AccF / BUY-AccF you(nonP) What are you going to buy?
(94b) Nunuh oh b-in-oli- \(\varnothing\) / d-in-agang- \(\varnothing\) nuh? what P/indef *-past-BUY-AccF / *-past-BUY-AccF you(nonP) What did you buy?

Note that change of ownership is signalled differently from change of position. Verbs which involve transfer of ownership typically focus on the possessed item in the accusative, as in the above examples (94a,b); note also the following example with the verb olos borrow:
(95) Olos-on kuh poh it gampa dih Maradan. BORROW-AccF I (nonP) yet P/def machete of Maradan I will go borrow Maradan's machete.

The verb taak give, typically involves both a change of ownership and a change of location. But, as far as focus marking is concerned, the change of location appears to take precedence; note the use of TF , rather than AccF, in example (7) above. The Accusative forms (*taakon, *tinaak) are not permitted in

Kimaragang, though such forms reportedly occur in closely related languages, e.g. Rungus.

\subsection*{2.5 Locative Focus (LocF)}

Locative Focus is marked by a suffix identical to (or homophonous with) the Accusative Focus suffix -on. Note the following examples:
(96) Waro gam ot walai iyon-on do tulun ko-ri-rikot sitih? exist is.it P/indef house DWELL-LocF nonP/indef person imm-dup-COME here Is there a house where visitors can stay here?

Note also examples (83) and (86) above.
Locative Focus occurs primarily with intransitive stems, as in the examples cited above. A few transitive verbs, such as asok plant dry rice, are lexically so specific that their Patient is rarely stated. They virtually never occur in AccF, so the -on form can be used for LocF without ambiguity:
(97) M-in-ongoi noh yalo sid tosokon (t-asok-on) yoh.

NomF-past-GO already he (P) to nom-PLANT.RICE-LocF his
He already went to the field where he is planting rice.
Since -on marks AccF on transitive verbs and LocF on intransitives, it is tempting to collapse these two sets under a single category, i.e. to let Accusative Focus encode Location of intransitive verbs as one of its functions. However, this analysis is rejected here for two reasons. First, identifying forms like (83), (86) and (96) above as Accusative Focus would weaken the semantic unity of that focus type. Secondly, as was shown in section 2.2 above, the AccF marker -on is deleted (i.e. realised as \(-\emptyset\) ) in the past tense. This is not the case with the -on which encodes LocF.
The verb lapak split, occurs in both transitive and intransitive forms. The NomF-transitive form mangalapak is used for someone splitting coconuts, areca nuts, etc. The NomF-intransitive form lumapak is used of things like tyres, tops, wooden handles, etc. which are prone to split by themselves.

There are two possible forms with the Location of the event in focus, Locative vs. Setting Focus, corresponding to the intransitive and transitive senses:
(98) Siongoh l-in-apak-on dit tayar nuh? where *-past-SPLIT-LocF nonP/def tyre your Where did your tyre burst?
(99) Sera / Siomboh pangalapakan (poN-lapak-an) kitoh ditih niyuw? when / where SF-SPLIT-SF we(incl/du) this (nonP) coconut When/Where shall we split these coconuts?

Note that in the intransitive example, the LocF suffix -on co-occurs with the past tense infix -in-. This would be impossible if the -on here encoded Accusative Focus. Compare the AccF form used in example (46) above (lapakon) and in the following example:
(100) Orubat itih mija kuh, l-in-apak- \(\emptyset\) do tulun. wasted this (P) table my *-past-SPLIT-AccF nonP/indef person My table is ruined; someone chopped it in half.

\subsection*{2.6 Instrumental Focus (IF) and Setting Focus (SF)}

Instrumental and Setting Focus are considered oblique focus types in Kimaragang because they focus on elements which are marked as Oblique (as opposed to the nuclear cases, Actor, Undergoer and Referent) when not in focus. IF and SF forms make use of the transitive prefix poN-.

IF forms consist simply of poN- plus the verb root and are thus homophonous with the NomF-transitive imperative form of the same root (see section 3 below). IF indicates that the Pivot NP functions as Instrument. Only transitive verbs can occur in Instrumental Focus.
(101) Ong tagad dot tagayo, poring ot awasi do ponutud (poN-tutud). if field REL large bamboo P/indef good COMP IF-BURN For a large field, bamboo is the best thing to start the fires.
(102) Tongoh ot pamatai (poN-patai) nuh dit tasu? what P/indef IF-KILL you(sg/nonP) nonP/def dog What will you kill the dog with?
(103) Tongoh ot pomoli (poN-boli), aso siin kuh ditih. what P/indef IF-BUY not.have money my this What can we buy it with, I don't have any money.
(104) Mongowit (m-poN-owit) okuh poh do dangol tu pomubu (poN-bubu) NomF-trans-TAKE \(\quad I(P)\) yet nonP/indef machete because IF-CUT.OPEN do niyuw. nonP/indef coconut I'Zl take a machete along to cut holes in coconuts (to drink).

In example (103), the Pivot money is marked as the Instrument of the action (buying). Note the contrast with example (7) above, where the same Pivot is marked as Undergoer, and specifically Theme, in the sentence \(I\) spent my money on salt.

Setting Focus is used for the time or place of the action. It is morphologically the most diverse focus type. For most transitive verbs, \(S F\) is marked by a combination of the transitive prefix poN- with the DatF suffix -an as in the following examples:
(105) Osodu ot ponutudan (poN-tutud-an) nuh oi?
far P/indef SF-BURN-SF you(nonP) Q
Is the field you want to bum far away?
(106) Sera pomoliyan (poN-boli-an) nuh dot korita? when SF-BUY-SF you(nonP) nonP/indef car When are you going to get a car?
(107) Isai pinangalasan (p-in-oN-olos-an) nuh ditih gampa ditih? who(P) *-SF-past-BORROW-SF you(nonP) this(nonP) machete this Who did you borrow this bush knife from?
(108) Irih nopoh t-um-olud nga pomupusan (poN-pupus-an) dot this (P) only *-NomF-TRANCE but SF-END-SF nonP/indef mogondi.
sacrifice
The trance is the last step in the ritual sacrifice.
```

(109) Itih oh we'eg pomoogan (poN-woog-an) do longon, ki!
this (P) P/indef water SF-WASH-SF nonP/indef arm okay?
Here is water to wash your hands.
(110) Waro gam kadai pang-akan-an sitih?
exist is. it shop SF-EAT-SF here
Is there a restaurant (food stall) here?

```

A few other forms also occur that could be identified as Setting Focus. For example, the root intong look at, watch, requires an Undergoer but cannot take the transitive prefix poN-. The Nominative Focus form of this verb is mogintong (m-poG-intong). The prefix poG- is not well understood, but seems to indicate massive, diffuse or extended Undergoer. The combination pog- -an seems to encode SF for this verb, as in the following example:
(111) Siomboh ot pogintangan (poG-intong-an) nuh dot T.V.? where P/indef SF-WATCH-SF you(nonP) nonP/indef T.V. Where are you going to watch T.V.?

As mentioned in section 1.1 above, this is an area where the distinction between verbal and nominal forms, and between inflectional and derivational morphology, is very hazy. Other prefix-suffix combinations which seem to be derivational (i.e. nominalisers) sometimes encode meanings similar to SF. The SF forms discussed here could possibly be analysed as nominalisations, but it is interesting to note the following example, where a Setting Focus form occurs as an imperative:
(112) Pangalasai (poN-olos-ai) poh ih Pangadap do gampa. SF-BORROW-SF/imper yet P/def Pangadap nonP/indef machete Go see whether Pangadap will loan us a machete.

Hopefully some future study of Kimaragang derivational morphology will shed more light on this topic.

\section*{3. NON-FINITE FORMS}

Of the seven focus possibilities, three have corresponding non-finite forms: NomF, AccF and DatF. \({ }^{5}\) The primary uses of the non-finite forms are: (1) as imperatives; and (2) as the "narrative tense", i.e. the tense that marks mainline events in narrative discourse. For simplicity, the examples of non-finite forms below are limited to imperatives.

For NomF verbs, the prefix \(m\) - is deleted (or replaced by \(\emptyset-\) ) in non-finite forms. Thus NomF-transitive imperatives begin with poN-, while NomF-intransitive imperatives consist of a bare verb stem.
(113) Pomo'og (poN-wo'og) poh, miilang tokou mang-akan. trans-WASH yet together we (P/pl/incl) NomF.trans-EAT Wash your hands; let's eat!
(114) Ponginggat (poN-inggat) kou sitih, itih ot salapa. trans-BETEL you(P/pl) here, this(P) P/indef betel.case Have some betel; here is the box.
(115) Indakod!

CLIMB
Come in!
(116) Uli noh!

RETURN already
Go home now!
(117) Waya dialo m-uli!

FOLLOW him(nonp) NomF-RETURN
Go home with him!

In AccF verbs, the non-finite mood causes -on to be replaced by -0 , as in:
(118) Podsu-o poh ih tanak. BATHE-AccF/imper yet P/def child Give the child a bath!
(119) Lapak-o poh itih tinggaton!

SPLIT-AccF/imper yet this (P) areca.nut
Split this areca nut!
In non-finite mood, the DatF suffix -an is replaced by -ai.
(120) Bolingkogot-on okuh, onuw-ai we'eg

CAUGHT.IN.THROAT-ACcF \(I(\mathrm{P})\) FETCH-DatF/imper \(I(\mathrm{P})\) yet nonP/indef water
t-inum-on.
nom-DRINK-AccF
The rice is caught in my throat; get me a drink of water.
(121) Imuaw-ai poh itih walai, tu osupot.

SWEEP-DatF/imper yet this(P) house because messy
Sweep out the house; it is messy.
(122) Tuduk-ai okuh poh dot m-in-la-lanu

SHOW-DatF/imper \(I(\mathrm{P})\) yet COMP NomF-incep-dup-SING
Teach me how to sing.
In addition to encoding imperatives and narrative tense, the non-finite AccF and DatF forms also occur following the pro-verb man/nan \(d o / d i d\), as in the following examples:
(123) Man tekau (kuh-ikau) jarum-ai.
do I(nonP)-you(P) NEEDLE-DatF/non-fin
I will give you a shot.
(124) Nan okuh rosun-o dot tulun.
did \(I\) (P) POISON-AccF/non-fin nonP/indef person
Someone poisoned me.
(125) Nan okuh tinduk-o do wulanut.
did \(I(P)\) BITE-AccF/non-fin nonP/indef snake
I was bitten by a snake.
(126) Nan okuh iit-ai do tompolulu'u.
did \(I(P)\) BITE-DatF/non-fin nonP/indef scorpion
I was stung by a scorpion.
(127) Nunuh dot tubat nan nuh akan-o?
what nonP/indef medicine did you(nonP) EAT-AccF/non-fin
What kind of medicine did you take?

\section*{4. USES OF FOCUS}

The verbal focus system clearly functions as an important component of the discourse grammar of Kimaragang. However, no systematic study of Kimaragang discourse structure has yet been attempted, so nothing definitive can be said about pragmatic function at this point.

Focus is also important on the sentence level. Again, no detailed study of Kimaragang sentence patterns has yet been undertaken, but some preliminary observations can be made here.

Any NP which is topicalised, i.e. fronted to sentence-initial position, must be in focus. Nouns and full noun phrases are marked as Pivot, and the Pivot form of fronted pronouns will be preceded by a topicalisation marker \(i-\sim y-\). Note the topicalised NPs in examples (3), (58) and (74) above.

A special case of this type of topicalisation occurs in content questions (or queries). The question word (corresponding to the Wh- words in English) is usually fronted in content questions, and the focus marking of the verb relates to the semantic function of the participant/actant in question. Note the fronted question words in examples (8), (9), (49), (50), (51), (53), etc. above.

In some questions, the question word is not fronted but remains in its normal position in the clause. Then some other NP is marked as pivot, as in the following example:
(128) M-ongoi koh siongoh?

NomF-GO you(sg/P) where
Where are you going?
In relative clauses, the relativised \(N P\) must be marked as Pivot of the dependent (relative) clause, as in the following examples:
(129) Lingkosu-on duyuh-i oi it we'eg dot inum-on duyuh? BOIL-AccF you(nonP/pl)-[emph] Q P/def water REL DRINK-AccF you(nonP/pl) Do you boil your drinking water?
(130) Nunuh ot i-pa-akan nuh dot tanak do s-um-usu poh? what P/indef TF-caus-EAT you(nonP) nonP/indef child REL *-NomF-MILK yet What will you feed a child who is still nursing?
(131) A-tarom ih pe'es n-i-ta'ak dih kamaman sid dogon. stat-sharp P/def knife past-TF-GIVE nonP/def uncle to me (nonP) The knife my uncle gave me is sharp.
(132) Penumo (po-inum-o) dirih dih Majabou dit gatas, it nan caus-DRINK-AccF/non.fin this nonP/def Majabou nonP/def milk REL did urud-o dit sawo yoh sid mangkuk. EXPRESS-AccF/non.fin nonP/def spouse his in bowl Majabou let the child drink the milk which his wife had squeezed into the bowt.
(133) Waro noh tulun sirih dot s-in-um-ambat dih Majabou dot amu exist already person there REL *-past-NomF-MEET nonP/def Majabou REL not
```

mongoo (m-poN-oo) m-indakod ih Majabou sirih.
NomF-trans-YES NomF-CLIMB P/def Majabou there
There were people there who met Majabou and wouldn't let him climb up
there.

```

Notice that in examples (129) and (131), the relativised NPs (we'eg water, and pe'es knife) are Pivot of both the relative clause and the matrix (main) clause. In examples (130) and (132), however, the relativised NPs (tanak child, and gatas milk) are not in focus in the matrix clause, but only in the relative clause.

Comrie (1981:153) has noted a cross-linguistic correlation between limitations on relativisation and richness of voice systems. Kimaragang is a good example of a language with tight restrictions on relativisation - only the Pivot NP can be relativised. However, the voice system of Kimaragang is very rich; of the seven focus possibilities, at least five ( \(\mathrm{NomF}, \mathrm{AccF}, \mathrm{DatF}, \mathrm{TF}, \mathrm{LocF}\) ) can be used in relative clauses.

\section*{NOTES}
\({ }^{1}\) Note that the final -h in Kimaragang is an orthographic convention denoting the absence of final glottal stop. Thus words like do, which are written with final open vowels, are actually pronounced with a final glottal stop, [do'].

The determiners \(i h\), oh, dih and do have alternate forms ending in -t: it, ot, dit and dot. The conditioning environment for the final -t is not yet known, and there is considerable variation among individual speakers. However, -t can never occur before proper names. Thus the possibilities of occurrence are as follows:
\begin{tabular}{lcl} 
& PROPER NAME & \multicolumn{2}{c}{ COMMON NAME } \\
& & definite \\
Pivot & indefinite \\
Non-Pivot & dih & ih~it \\
dih~dit oh ot
\end{tabular}

Any of these forms can apparently function as a relative pronoun; many examples occur here, glossed as REL. Note that dih and do also serve as possessive markers in genitive constructions, e.g. walai dih Jaiwan Jaiwan's house.

The Pivot, non-Pivot and locative forms of the common deictics are shown below:
\begin{tabular}{llll} 
Pivot & non-Pivot & Locative & \\
itih & ditih & sitih & this, here \\
inoh & dinoh & sinoh & that, there (near hearer) \\
ilo & dilo & silo & that, there (distant) \\
irih & dirih & sirih & the aforementioned \\
at & dat & - & the (unique)
\end{tabular}
\({ }^{2}\) The non-focus actor pronouns listed here do not have the phonological properties of clitics. They do not affect the stress pattern of the word which they follow. However, these pronouns seem to have clitic-like positional properties, occurring in clause-second position. This normally means that they will follow the verb but if a negative or (non-topic) question word precedes the verb, these pronouns also precede the verb, as in example (5) above.

Topicalisation (or fronting) of an NP or question word does not affect the position of the non-Pivot Actor pronouns; they remain in postverbal position.

Note that the variation between \(k u h\) and dogon, etc. cannot be explained merely in terms of position, as shown by sentences like example (84) above. The variation in the second person Pivot forms, however, is determined by position rather than case. The forms koh and kou are used whenever there is no other nominal preceding them in the clause, whether or not they represent the Actor. They always occur in clause-second position. Note examples (15), (19), (44), (55), (59), (61), etc. above, and the following example:
Sera koh koo-uli?
when you(sg/p) imm-RETURN
When did you get back?
\({ }^{3}\) The forms dogon and dogo appear to fluctuate somewhat freely, though native speakers have strong preferences for one or the other in certain environments.
\({ }^{4}\) The root witil is a verb root rather than a stative, and so would not be expected to use the DatF in the manner illustrated in examples (70)-(72). The root sogit is arguably either a stative or a verb. The transitive NomF form monogit to cool down ritually (i.e. to perform a sacrifice), and the related noun sogit ritual sacrifice, are at least as commonly used as the adjective osogit cold.
\({ }^{5}\) The Setting Focus imperative shown in example (112) is so unusual that it can hardly be said to represent a regular pattern in the same way that the nonfinite forms of NomF, AccF and DatF do.

\section*{LIST OF ABBREVIATIONS USED}
\begin{tabular}{|c|c|c|c|}
\hline able & = habilitative & NomF & \(=\) Nominative Focus \\
\hline AccF & = Accusative Focus & non.fin & = non-finite mood \\
\hline CAPS & = verb root & nonp & \(=\) non-Pivot \\
\hline caus & = causative & P & = Pivot \\
\hline COMP & = complementiser & part & = particle \\
\hline DatF & = Dative Focus & past & = past tense \\
\hline def & = definite & pl & = plural \\
\hline dup & \(=\) reduplication & Q & = question marker \\
\hline emph & = emphasis marker & REL & \(=\) relative clause linker \\
\hline excl & = exclusive & SF & = Setting Focus \\
\hline IF & = Instrumental Focus & sg & = singular \\
\hline imm & \(=\) immediate past & stat & = stative \\
\hline imper & = imperative & TF & = Translative Focus \\
\hline incep & = inceptive & Top & = topicalised \\
\hline incl & = inclusive & trans & = transitivity marker \\
\hline indef & = indefinite & *- & = initial consonant of stem split \\
\hline LocF & \(=\) Locative Focus & & by infix \\
\hline nom & = nominaliser & \(\varnothing\) & = zero allomorph \\
\hline
\end{tabular}

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\title{
CASE MARKING IN KIMARAGANG CAUSATIVE CONSTRUCTIONS
}

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}

\section*{1. INTRODUCTION}

Kimaragang is a Dusunic language spoken by approximately 10,000 people living in the Kota Marudu and Pitas districts of Sabah, East Malaysia. This paper discusses the morphology of causative constructions in Kimaragang in relation to Comrie's proposed hierarchy of case marking.

Comrie (1981:169) proposes the following hierarchy of accessibility for the case marking of the Causee in clauses involving morphological causatives:
(A) Subject > Direct Object > Indirect Object > Oblique Object

The accompanying rule, which Comrie states as a strong cross-linguistic tendency, is that "the causee occupies the highest (leftmost) position on this hierarchy that is not already filled" (i.e. not filled in the corresponding noncausative clause).

In Kimaragang, the case marking of the nominals associated with a morphological causative, as reflected by the focus marking of the causative verb, operates along a very similar hierarchy:
(B) Nominative > Accusative > Translative/Locative \({ }^{1}>\) Dative

However, the rule governing the operation of the hierarchy in Kimaragang is very different from that described by Comrie. Hierarchy (A) relates only to the case marking of the Causee, while hierarchy (B) operates like a push-down stack involving all the arguments of the causative verb. The basic pattern in Kimaragang is that the Causer takes Nominative Focus (NomF). This forces the demotion of the Agent from Nominative to Accusative Focus (AccF), as Causee. The Patient in turn is demoted from Accusative to Translative Focus (TF); and further demoted from Translative to Dative Focus (DatF) in secondary (indirect) causation.
These shifts are illustrated here with the transitive root akan eat. Notice that the clause constituents are labelled in capitals above each example. The Pivot (to be defined in section 1.1 below) is indicated by the tag PIV- before the constituent label, as well as by the \(P\) in the morpheme-by-morpheme gloss underneath. Non-Pivot constituents are followed by a case tag in parentheses which indicates the focus type which that constituent would take if it were in focus. The case marking of the Pivot, as explained below, is shown in the focus affix on the verb to which it relates.

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AGENT: NOMINATIVE TO ACCUSATIVE
(1)
\begin{tabular}{ll|l} 
& & PIV-AGENT \\
Mangakan (m-poN-akan) poh & ih Jaiwan. \\
NomF-trans-EAT & yet & P.def Jaiwan
\end{tabular}

Jaiwan is still eating.
(2)


\section*{PATIENT: ACCUSATIVE TO TRANSLATIVE TO DATIVE}
(3)
\begin{tabular}{l|l|l}
\begin{tabular}{l} 
PIV-PATIENT
\end{tabular} & ot akan-on & \begin{tabular}{l} 
AGENT(Nom) \\
Nunuh
\end{tabular} \\
\begin{tabular}{l} 
dit tanak nuh? \\
what
\end{tabular} & \begin{tabular}{l} 
P. indef EAT-AccF
\end{tabular} & nonP.def child your \\
What will your child eat?
\end{tabular}
(4)
\begin{tabular}{|c|c|c|c|c|}
\hline \begin{tabular}{l}
PIV-PATIENT \\
Nunuh \\
what
\end{tabular} & \(\begin{array}{lc}\text { ot } & \text { i-pa-akan } \\ \text { P.indef } & \text { TF-caus-EAT }\end{array}\) & CAUSER (Nom) nuh you (nonP) & \begin{tabular}{l}
CAUSEE (Acc) \\
do \\
nonP.indef
\end{tabular} & tanak dot child ReL \\
\hline \multicolumn{5}{|l|}{s-um-usu poh?} \\
\hline \multicolumn{5}{|l|}{NomF-MILK yet} \\
\hline What will you & feed a child that is & still nursin & & \\
\hline
\end{tabular}
(5)
\begin{tabular}{l|ll|l|} 
& & \\
Ong waro & PIV-PATIENT & ot & oolu \\
if exist & P.indef remainder your & NomFakan, & pa-akan-an \\
& caus-EAT-DatF
\end{tabular}

CAUSEE (ACc)
dialo.
him(nonP)
If there is any left when you are done eating, let him eat it.

Intransitive and ditransitive stems also follow this pattern for Causer (Nominative) and Causee (Accusative). The case marking of other participants is discussed below.

\subsection*{1.1 Focus and case}

The Dusunic language family is classified by Dyen (1965) as belonging to the Philippine Hesion of North-west Austronesian. Like most Philippine-type languages, verbs in Kimaragang carry affixes which signal what is generally referred to as the focus of the clause. Focus corresponds roughly to voice, but with a richer set of possibilities than is typical of voice systems: seven focus types in Kimaragang, vs. two voices in English (active and passive).

The focus affixes of Kimaragang are described in detail in my other paper in this volume. As pointed out there, while focus in Kimaragang is in one sense parallel to voice in English, the grammatical and pragmatic functions of the two systems are quite different. Focus can best be viewed as a displaced case marking system. Schachter (1976) describes the focus affixes of Tagalog as
"case marking affix(es) on the verb, which (indicate) the case role of the topic noun phrase."

Without rehashing the terminological arguments, I will adopt the term Pivot for the NP which Schachter (and many others) call Topic: the one noun phrase in a clause whose grammatical case is indicated by the focus marking of the verb. The Pivot of a clause is marked by a special determiner (ih/it for definite NPs, oh/ot for indefinite), or by Pivot forms of pronouns and deictics.
There are seven focus possibilities in Kimaragang: Nominative (marked by the verbal prefix \(\mathrm{m}-\) ); Accusative (marked by -on in the non-past, \(-\emptyset\) in past tense); Dative (-an); Translative (i-); Locative (-on); Instrumental (poN-); and Setting (poN- -an). Note that Locative Focus is homophonous with Accusative, but is not deleted in the past tense; moreover, Locative Focus occurs only with intransitives.

Focus affixes on the verb indicate the grammatical case of only one \(N P\), the Pivot. Non-Pivot NPs are marked for case, \({ }^{2}\) but with a reduced set of possible cases: Actor, Undergoer, Referent and Oblique. Actor includes Agents, Experiencers, etc. which would take Nominative Focus as Pivot. Undergoer includes the following semantic roles: the Patient of a transitive verb, which generally takes Accusative Focus, but for some verb stems takes Dative Focus; the Theme of a ditransitive verb, which takes Translative Focus when marked as Pivot; and Benefactive, which takes Dative Focus. Referent includes the Location of an intransitive verb, which takes Locative Focus, and the Goal or Recipient of a ditransitive, which takes Dative Focus.

While only one NP in a given clause could be indicated by any one focus type, Kimaragang does allow more than one Undergoer in some clauses (cf. section 3.4).

It is the focus marking on causative verbs that will primarily concern us here. When we refer to a Causee taking the accusative case, it is a shorthand way of saying that, when the Causee is marked as Pivot, the verb takes the Accusative Focus affix.

\subsection*{1.2 Causative verbs}

As Comrie (1981) points out, a causative situation involves two events; the cause and its effect (or result). The result, viewed as a separate event, involves a particular number of participants: one for intransitive verbs, two for transitives, etc. In causative constructions, an additional participant is introduced, namely the Causer. The Actor of the result-event becomes the Causee of the cause-event.
The valence \({ }^{3}\) of a causative verb is one higher than the valence of the corresponding non-causative, due to the addition of the Causer. The Causer is generally encoded as the subject of the causative verb. The Causee, which would normally be subject of the corresponding non-causative verb, must be demoted to some other position. How this is handled has proved to be a fruitful area for cross-linguistic comparison.

Kimaragang causative verbs are formed by adding the prefix po- to the verb stem. When the Causer is marked as Pivot, the verb carries no overt focus marker. However, when the Causer is not Pivot, it is marked as Actor. This fact, together with semantic considerations, indicates that the bare causative form which occurs when the Causer is Pivot should be identified with Nominative Focus. In other words, these forms are considered to carry a zero allomorph of the

Nominative Focus marker. Notice that the Nominative prefix m- also reduces to \(\emptyset\) - in non-finite forms such as imperatives.

The Causee is demoted from Nominative (as original Actor) to Accusative. There are two possible forms of the verb when the Causee is in focus, depending on the affectedness of the Causee (see section 2.2 below); but both of these forms include the Accusative Focus suffix.

\section*{2. CASE ASSIGNMENT PATTERNS}

\subsection*{2.1 Causer, Causee and Patient}

As stated in section 1.2, the causative verb takes the zero allomorph of the Nominative Focus marker when the Causer is in focus. Note the following examples:
(6)
\begin{tabular}{l|l|ll|l} 
& PIV-CAUSER & CAUSEE (Acc) & & LOCATION(Dat) \\
\(\emptyset\)-Po-suwang & okuh & do & parai & sid kadut. \\
NomF-caus-ENTER & \(I(P)\) & nonP.indef rice & in sack
\end{tabular}

I am putting rice in sacks.
(7)

Ogom poh sinoh, \(\emptyset\)-po-odop
\begin{tabular}{l|l|ll} 
PIV-CAUSER & & CAUSEE (Acc) & \\
\begin{tabular}{l} 
okuh
\end{tabular} & poh & ditih & tanak. \\
\(I(P)\) & yet & this (nonP) & child
\end{tabular}
sit yet there NomF-caus-SLEEP \(I(\mathrm{P}) \quad\) yet
this (nonP) chizd
Have a seat while I put the baby to sleep.
(8)
\begin{tabular}{ll|l|ll} 
& & PIV-CAUSER & & \\
Kadung aa & kou & pendakod ( \(\varnothing\)-po-indakod), tibas-on \\
if & not & you(P.pl) & NomF-caus-CLIMB & SLASH-ACCF
\end{tabular}
tekoo (kuh-ikoo)
I (nonp)-you (P.pl)
If you don't let me up there, I'Zl slash you all to pieces!
When the Actor of the result event (Causee of the causative event) is in focus, Nominative Focus is no longer available. The Causee is "demoted" from Nominative to Accusative Focus, as in the following examples:
(9)
\begin{tabular}{ll|l|ll} 
& PIV-CAUSEE & & \\
Po-odop-on & poh & inoh & tanak & om mituturan (m-pi-tuturan) nogi. \\
caus-SLEEP-AccF yet & that(P) child & and NomF-recip-STORY
\end{tabular}

Put the baby to sleep first, then we'Zl talk.
\begin{tabular}{l|l|l|l|l} 
& PIV-CAUSEE & & CAUSER (Nom) \\
Amu & okuh & po-ongoy-on & dih moleeng kuh & ong amu \\
\(I(P)\) & caus-GO-AccF & nonP.def parents my & if not
\end{tabular}
ka-talib poh it mogondi.
able-PASS yet P .def sacrifice
My parents won't let me go until the ritual period is over.
(11)
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{l}
PIV-CAUSEE \\
ilo sawo nuh \\
that(P) spouse your
\end{tabular} & poolion (po-uli-on) caus-RETURN-AccF & \begin{tabular}{l}
CAUSER (Nom) \\
yah \\
we(nonP.excl)
\end{tabular} & noh. already \\
\hline
\end{tabular}

We have already let your wife go home.
(12)

Potolibo (po-talib-o) poh caus-PASS-AccF.imper
PIV-CAUSEE
yalo,
him(P)
```

po-suwang-o
caus-ENTER-AccF.imper

```

CAUSER (Nom)
dikoo.
you(nonp.pl)
Let him past, let him go in!
All of the above examples involve intransitive verb stems. When causatives are formed from transitive stems, the same case marking (Accusative) is used to indicate that the Causee is in focus. However, the normal causative prefix pois replaced by the transitive marker, poN-, producing forms like the following:
(13)

\begin{tabular}{|c|c|}
\hline CAUSER (Nom) nuh & \[
\begin{aligned}
& \text { PIV-CAUSEE } \\
& \text { yalo }
\end{aligned}
\] \\
\hline you(nonp) & he ( P ) \\
\hline
\end{tabular}
dot kakal poh REL still yet
s-um-akit?
*-NomF-SICK
Why do you make him harvest rice when he is still sick?
(14)
\begin{tabular}{l|l|ll} 
& PIV-CAUSEE & PATIENT(TF) \\
Pangal apako (poN-lapak-o) & yalo & dinoh & niyuw. \\
trans-SPLIT-AccF.imper & he (P) & that (nonP) coconut
\end{tabular}

Get him to split those coconuts.
(15)
\begin{tabular}{l|l|l|l} 
PIV-CAUSEE & & CAUSER (Nom) & PATIENT (TF) \\
Isai & ot pong-owit-on & nuh & dit \\
who & P.indef trans-BRING-AccF & you(nonP) & nonP.def letter
\end{tabular}

The Patient of (most) transitive verbs takes Accusative marking in simple (noncausative) constructions. When a causative verb is formed, Accusative is assigned to the Causee, displacing the Patient to the next lower level on hierarchy B, Translative Focus (TF). Note the following examples:
(16)
\begin{tabular}{l|ll|ll|} 
& CAUSER (Nom) & CAUSEE (Acc) \\
I-po-omot & dit & tidi & kuh & do \\
TF-caus-HARVEST & nonP.def mother my & nonp.indef person of hizl
\end{tabular}

PIV-PATIENT
it parai yah.
P.def rice our

My mother will get some people from the hills to harvest our rice.
(17)
\begin{tabular}{l|l|l|l} 
& CAUSER (Nom) & CAUSEE (Acc) & PIV-PATIENT \\
N-i-pa-lapak & kuh & dih ama & it niyuw \\
past-TF-caus-SPLIT & \(I\) (nonP) & nonP.def father & P.def coconut
\end{tabular}
tu, amu l-in-apak- \(\emptyset\) dih iyai.
because not *-past-SPLIT-AccF nonP.def mother
I got Dad to split the coconut, because Mum wouldn't split it.
(18)
\begin{tabular}{l|l|l|l} 
& CAUSER (Nom) & CAUSEE(ACc) & PIV-PATIENT \\
N-i-po-owit & kuh & dih Janama & inoh surat. \\
past-TF-caus-BRING & \(I\) (nonP) & nonP.def Janoma & that(P) letter
\end{tabular} I had Janama deliver the letter.
(19)
Ipapatai (i-po-patai)
TF-caus-KILL
\begin{tabular}{l|l|ll} 
CAUSER (Nom) & CAUSEE (Acc) & \multicolumn{2}{|l}{ PIV-PATIENT } \\
kuh & dih Janama & ilo tasu \\
\(I\) (nonP) & nonP.def Janama & P.def dog
\end{tabular}
tu, minanabpo (-in-m-poN-tabpo) dit peyak yah.
because *-past-NomF-trans-CATCH nonP.def chick our
I will have Janama kill that dog, because it killed our chicks.
\begin{tabular}{l|l|l|l} 
& & Agent (Nom) & PIV-PATIENT \\
N-o-tutud-an & nuh & noh & it n-i-po-tutud \\
past-stat-BURN-DatF & you(nonP) & already & P.def past-TF-caus-BURN \\
CAUSER (Nom) & CAUSEE (ACc) & \\
kuh & dikau & oi? \\
\(I\) (nonP) & you(nonP) & Q \\
Did you burn what I told you to burn yet?
\end{tabular}

Notice that in example (20), the causative verb nipotutud itself functions as the Pivot of the main clause: that which I caused you to burn (the root tutud burn, assigns its Patient to the dative). This method of using verbs as nouns, usually by inserting a determiner (in this case it), is quite common in Kimaragang. It is a process of nominalisation, rather than relativisation, as there is no head noun to be relativised. This phenomenon makes it difficult to distinguish categorically between nouns and verbs when dealing with many derived forms; see the discussion in my other paper in this volume relating to the oblique focus types, Instrumental and Setting.

\subsection*{2.2 Affected vs. non-affected Causee}

In the preceding section, we noted that the affixation of the causative verb with the Causee in focus depends on whether the verb stem is transitive or intransitive. The possible forms are po- -on for intransitives, and poN- on for transitives. However, example (2) above offers a counter-example to this rule: the transitive root akan eat, takes the po- -on form. Some other transitive verbs also take the "intransitive" affixation, e.g.:
\begin{tabular}{l|l|l} 
Po-sigup-o & \begin{tabular}{l} 
PIV-CAUSEE \\
okuh
\end{tabular} & poh! \\
caus-SMOKE-AccF.imper & \(I(P)\) & yet
\end{tabular}

Give me a cigarette.
\begin{tabular}{l|l|l} 
& PIV-CAUSEE & \\
Poopugo (po-apug-o) & okuh & poh! \\
caus-LIME-AccF.imper & \(I(\mathrm{P})\) & yet \\
Give me some lime, please.
\end{tabular}
(23)
\begin{tabular}{l|l} 
Penumon (po-inum-on) & \begin{tabular}{l} 
PIV-CAUSEE \\
ih \\
caus-DRINK-AccF
\end{tabular} \\
P.def child your
\end{tabular}
\begin{tabular}{ll} 
PATIENT(TF) \\
ditih & tubat, \\
this (nonP) medicine
\end{tabular}
iso one
```

oh sonduk tokodok.
P.indef spoon small
Give your child one teaspoonful of this medicine.

| Pentongo (po-intong-o) poh | PIV-CAUSEE <br> ih Janama | RANGE(TF) <br> do |
| :--- | :--- | :--- | :--- |
| caus-LOOK.AT-AccF.imper yet | P.def Jomamar nuh. | nonp.indef picture your |
| Show Janoma your pictures! |  |  |

```

Examples (21)-(24) make it clear that the variation of po- with poN- is not conditioned by simple transitivity. What is involved here is a contrast between affected vs. non-affected Agent as Causee.

Saksena (1980) has described how the case marking of the Causee-Agent in Hindi causatives depends on whether or not the Agent is affected by the action. The Agent is affected with verbs like see, drink, run away, learn, run, jump, etc. The Agent is unaffected with verbs like tear, scour, wash, ask, look for, plant, etc. In non-causative clauses, the agent always takes the same case marking (Agentive), whether or not it is affected. However, in causative constructions, affected agent Causees take one case marker (which Saksena calls "dativeaccusative"), while non-affected agent Causees take another (instrumental). Some Hindi verbs allow the use of either case marking to signal such semantic distinctions as direct vs. indirect causation, or contrastive intentions of the Causer.

In Kimaragang, the Accusative case is used whenever the Causee is in focus. When that Causee is an affected Agent, the normal causative prefix po- occurs. When the Causee is a non-affected Agent, as in examples (13)-(15) above, the causative prefix is replaced by the transitivity marker, poN-.

This use of the transitivity marker is consistent with Saksena's claim that transitive verbs prototypically involve an affected Patient and a non-affected Agent. Verbs involving non-affected Agents are higher in transitivity than those involving affected Agents, and carry explicit transitive marking in Kimaragang causatives.

As in Hindi, there are various secondary uses of the affected Agent causative form in Kimaragang. Some of these are not strictly causative in meaning; see section 4 below.

A few Kimaragang verbs allow a contrast between affected and non-affected Agent marking. Sometimes the distinction corresponds to transitive vs. intransitive senses of the root, as in the following examples:
\begin{tabular}{l|ll|l|l} 
PIV-CAUSEE & & CAUSER(Nom) & PATIENT(Acc) \\
Isai & oh & pamatayon (poN-patai-on) & nuh & dit \\
who & P.indef trans-KILL-AccF & you(nonP) & nonP.def
\end{tabular}
tasu nuh?
dog your
Who will you get to kill your dog?
(26)
\begin{tabular}{ll|l} 
Papatayon (po-patai-on) & -i & \begin{tabular}{l} 
PIV-CAUSEE \\
yalo dinoh! \\
caus-DIE-AccF
\end{tabular} \\
Just let him die! & - emph & he(P) that
\end{tabular}

Examples (25) and (26) illustrate the contrast between the transitive and intransitive senses of the root patai. The corresponding simple (non-causative)

Nominative Focus forms are mamatai (m-poN-patai) kiZZ, and matai (m-patai) die.
\begin{tabular}{l|l|l|l} 
& (PATIENT) & PIV-CAUSEE & \\
Ong obongol & ilo \(\quad\) tanak nuh, & isai & ot \\
if naughty & that(P) child your & who & P.indef \\
\\
pangarasangon (poN-rasang-on) & \begin{tabular}{l} 
CAUSER(Nom) \\
nuh?
\end{tabular} \\
trans-ANGER-AccF & you(nonP)
\end{tabular}
(28)

Who do you get to scold your child when he is naughty?
\begin{tabular}{ll|l} 
& & PIV-CAUSEE \\
Pa-rasang-o & poh & yalo! \\
caus-ANGER-AccF & yet & he(P) \\
Make him angry! & (e.g. a fighting cock)
\end{tabular}

The parentheses around the tag "PATIENT" in example (27) indicate that the corresponding NP (your child) is not an explicit element of the clause for which the label applies. The child is explicit subject of the stative predicate naughty, and implicitly the Patient of the causative verb cause to scold. The semantic distinction in examples (27)-(28) corresponds to the difference between the intransitive form rumasang angry, and the transitive form mangarasang to scold.

The intransitive root tu'un (Nominative Focus form tumu'un) means to jump or leap down from a high place. This root has no transitive form, but in causative forms with the Causee in focus, there is a distinction between the affected and non-affected Agent markings. The affected Agent form (example (29)) indicates that the Causer physically pushes or forces the Causee over the edge. The nonaffected Agent form (example (30)) signals merely verbal causation, e.g. a request or command to jump.
(29)
\begin{tabular}{l|l|l|l} 
& CAUSER (Nom) & PIV-CAUSEE & \\
Po-tuun-on & kuh & ikau & silo! \\
caus-DROP-AccF & \(I\) (nonP) & you(P.sg) & there
\end{tabular}

I am going to push you over the edge.
(30)

Ponuunon (poN-tuun-on)
trans-DROP-AccF
\begin{tabular}{l|l|l} 
CAUSER (Nom) & PIV-CAUSEE & \\
kuh & ikau & silo. \\
\(I\) (nonP) & you(P.sg) & there
\end{tabular}

I am going to send you down there (over the edge).

The Agent of the transitive verb akan eat, is generally affected by the act of eating. Causatives derived from this root mark the Causee as an affected Agent (as in example (2) above) when the Patient (that which is eaten) is a full meal or a form of medicine: something which affects the Agent by making him full or by healing him. When the Patient involved is some particular item of food, rather than a complete meal, the Causee is marked as a non-affected Agent:
\begin{tabular}{l|l|l} 
Amu & CAUSER(Nom) & \\
kuh & pang-akan-on \\
not & \(I\) (nonP) & trans-EAT-AccF
\end{tabular}
\begin{tabular}{l|l}
\begin{tabular}{l} 
PATIENT (TF) \\
do gula-gula
\end{tabular} & PIV-CAUSEE \\
ilot \\
nonP.indef candy & that(P)
\end{tabular}
tanak kuh.
child my
I don't let my children eat candy.

A second use of this distinction is when the thing eaten is something harmful or repulsive, in which case the non-affected Causee-focused form pangakanon carries the meaning forced to eat. Similarly, the non-affected form ponginumon may mean forced to drink, as in the following examples:
\begin{tabular}{ll|l|l} 
& PIV-CAUSEE & PATIENT(TF) \\
Pang-akan-o & poh & yalo & do \(\quad\) tana! \\
trans-EAT-AccF.imper yet & he (P) & nonP.indef earth
\end{tabular} Make him eat dirt!
(33)


While drinking poison clearly affects the Agent, this use of the prefix poN- is consistent with its general meaning of increased transitivity. The Causer in example (32) has more complete control of the situation than the Causer in example (2); thus the form pangakanon is higher in transitivity than the form paakanon.

\subsection*{2.3 Location}

The Locative Focus morpheme, -on, signals the Location of non-causative intransitive verbs as being in focus. As indicated in hierarchy B, in causative constructions the Location takes Dative Focus. Note the following example:
\begin{tabular}{|c|c|c|c|c|}
\hline Siomboh where & PIV-LOCATION ot piroong P.indef cliff & \begin{tabular}{l}
po-tuun-an \\
caus-DROP-DatF
\end{tabular} & CAUSER (Nom) kuh \(I\) (nonP) & CAUSEE (Acc) ditih this (nonP) \\
\hline
\end{tabular}
korita?
car
Which cliff should I drive this car over?
The verb ogom sit, is generally used as an intransitive, but there is a corresponding transitive form, mongogom to sit on. When the Location of sitting (in the intransitive sense) is in focus, the verb is marked for Locative Focus:
\begin{tabular}{l|ll|l} 
PIV-LOCATION & & & ACTOR (Nom) \\
Siomboh & ot & ogom-on & kuh? \\
where & P.indef & SIT-LocF & \(I\) (nonP)
\end{tabular}

The patient of a transitive verb normally takes Accusative Focus. However, the Patient of the transitive action sit on takes Dative rather than Accusative marking: \({ }^{5}\)
(36)
\begin{tabular}{l|l|ll} 
& AGENT (Nom) & PIV-PATIENT \\
Nagaman (n-ogom-an) & kuh & it tupi nuh. \\
past-SIT-DatF & \(I\) (nonP) & P.def hat your
\end{tabular} I sat on your hat.

In causative constructions based on ogom, the case marking patterns summarised in hierarchy \(B\) and discussed in section 2.1 above preserve the distinction between the transitive and intransitive senses. The Location of the intransitive (where someone is caused to sit) takes the Dative, while the Patient of the transitive (what someone is caused to sit on) takes Translative Focus:
(37)
PIV-LOCATION
Siomboh
where
```

CAUSER (Nom)
tokou
we(nonP.incl.pl)

```

CAUSEE (Acc) dih nonp-def
Y.B.?
assemblyman
Where shall we seat his honour the Assemblyman?
\begin{tabular}{l|l|l|l} 
PIV-PATIENT & & CAUSER(Nom) & CAUSEE (Acc) \\
It bangku kuh & n-i-po-ogom & kuh & dih Janama. \\
P. def chair my & past-TF-caus-SIT & I (nonP) & nonP.def Janama \\
I made Janoma sit in my chair (save my seat).
\end{tabular}

The verb odop sleep, behaves similarly. The transitive form of the verb, mongodop, means to guard (a place) at night by sleeping there. Again, Dative Focus is used for the Undergoer of the transitive verb, the place guarded, while Locative Focus marks the Location of the intransitive sense.
\begin{tabular}{l|l|l|l} 
& BENEFACTIVE & PIV-PATIENT & \\
Adapan (odop-an) & \begin{tabular}{ll} 
dogo \\
itih walai kuh & tu, kapayig \\
SLEEP-DatF & me (nonP)
\end{tabular} & this(P) house my & because go.out
\end{tabular}
okoi.
we ( \(\mathrm{P} . \mathrm{excl}\) )
Come sleep in my house for me because we are going away.
(40)
\begin{tabular}{l|ll|l} 
PIV-LOCATION & & ACTOR (Nom) \\
Sid disai & ot & odop-on & nuh? \\
at who (nonP) & P.indef SLEEP-LF & you(nonP.sg)
\end{tabular}

Whose house will you sleep at?
The causative poodop can mean either put to sleep, e.g. a baby (as in example
(7) above), or invite to sleep, e.g. at one's house, as in the following example:
(41)
\begin{tabular}{ll|l|l} 
& & PIV-ACTOR & LOCATION \\
Mobpongodop (m-poG-poN-odop) & mari & ih Mejit & sid dih \\
NomF-??-trans-SLEEP & surely & P.def Mejit & at nonP.def
\end{tabular}

Pangadap, aso p-in-o-odop.
Pangadap |not.exist *-past-caus-SLEEP
Mejit just decided to sleep over at Pangadap's house, no one invited him.
When the Causee (the sleeper) is in focus, he or she may be marked as either affected or non-affected Agent. Affected Agent marking (as in example (9) above) corresponds to the intransitive sense, indicating that the Causee is being put to sleep. Non-affected Agent marking corresponds with the transitive sense, one who is asked to guard something.
(42)
Ong ka-payig koh \begin{tabular}{l} 
PIV-CAUSEE \\
issai \\
if able-GO.OUT you(P.sg) \\
who
\end{tabular}\(\quad\)\begin{tabular}{l} 
ot pong-odop-on \\
P.indef trans-SLEEP-ACcF
\end{tabular}

A third possibility for marking the Causee as Pivot is the use of simple (noncausative) Translative Focus. This corresponds to the sense of invite to sleep, e.g. invite to spend the night. Translative Focus signals a lower degree of control on the part of the Causer, as compared with the affected Agent form ("invite" rather than "put to sleep"); but less agency on the part of the Causee as compared with the non-affected Agent form (focusing on the night watchman).
(43)
\begin{tabular}{l|l|l|l} 
& CAUSER & PIV-CAUSEE & LOCATION \\
N -i-odop & kuh & yalo & sid dagai. \\
past-TF-SLEEP & \(I\) (nonP) & him(P) & at us (nonP) \\
\(I\) invited him to sleep at our house.
\end{tabular}

Causative uses of Translative Focus will be discussed further in section 4.2 below.

\subsection*{2.4 Ditransitive causatives}

Ditransitive verbs typically involve three participants: an Agent-Source, a Theme, and a Recipient or Goal. When causative verbs are formed from ditransitive stems, the valence increases from three to four, and the Agent-Source becomes the Causee. The case marking shifts accompanying this change in valence are partially similar to those described above for transitive verb stems. They are illustrated here with two roots: taak give, and isu smear.

In non-causative forms, the Agent-Source takes Nominative Focus (examples (44)(45)), the Recipient or Goal takes Dative Focus (examples (46)-(47)), and the Theme takes Translative Focus (examples (48)-(49)):
(44)

Minanaak (-in-m-poN-taak)
*-past-NomF-trans-GIVE
\begin{tabular}{lllll} 
PIV-AGENT & & THEME (TF) & \\
ih & kamaman & kuh & do & pe'es \\
P. def uncle & \(m y\) & nonp.indef & knife
\end{tabular}

GOAL (DatF)
sid dogon
to me (nonp)
My uncle gave me a knife.
(45)
\begin{tabular}{l|l|l|l} 
PIV-AGENT & & GOAL(DatF) & THEME (TF) \\
\begin{tabular}{ll} 
Isai
\end{tabular} & minongisu (-in-m-poN-isu) & dikau & dot \\
who & *-past-NomF-trans-SMEAR & you(nonP.sg) & nonP.indef soot
\end{tabular}

Who smeared soot all over you?
(46)
\begin{tabular}{l|l|ll|ll} 
& PIV-GOAL & AGENT (Nom) & THEME (TF) \\
T-in-aak-an & okuh & dih \(\quad\) kamaman kuh & do & pes. \\
*past-GIVE-DatF & \(I(P)\) & nonP. def uncle my & nonp.indef knife \\
\(I\) was given a knife by my uncle.
\end{tabular}
(47)
\begin{tabular}{l|l|ll|} 
& PIV-GOAL & THEME (TF) & \\
\(\mathrm{N}-\mathrm{isu-an}\) & okuh & do \(\quad\) tubat \\
past-SMEAR-DatF & \(I(P)\) & nonP.indef medicine
\end{tabular}

AGENT (Nom) do boboliyan. nonP.indef priestess The priestess rubbed medicine on me.
(48)
\begin{tabular}{l|l|l|ll} 
PIV-THEME & & AGENT (NOM) & GOAL(DatF) \\
Itih pe'es & n-i-taak & dih \(\quad\) kamaman kuh & sid dogon. \\
this (P) knife & past-TF-GIVE & nonP.def uncle my & to me (nonP) \\
This knife was given to me by my uncle.
\end{tabular}
(49)

Nokuroh.tu n-i-isu
why past-TF-SMEAR
Why did you smear that oil on my book?

PIV-THEME
\begin{tabular}{l|ll} 
AGENT (Nom) & PIV-THEME \\
nuh & inoh & t inasak \\
you(nonP.sg) & that(P) oil
\end{tabular}

GOAL (Dat) sid buuk kuh? to book my

Note that in rare circumstances, the Goal of isu may take accusative rather than dative marking. The use of Accusative Focus (isu'on) would mark the Recipient as being totally affected by the action, e.g. covered from head to toe with medicine. The dative form generally implies local application.

As with Agents of transitive verbs, the Agent-Source of a ditransitive causative verb is demoted from Nominative to Accusative, and marked as a non-affected Agent.
(50)

\section*{Panaako (poN-taak-o) poh} trans-GIVE-AccF.imper yet
\begin{tabular}{l|ll} 
PIV-CAUSEE & THEME (TF) & \\
yalo & do & panambang (poN-tambang) \\
he (P) & nonP.indef & IF-FARE
\end{tabular}
tu, magago okoi.
because hurry we (P.pl.excl)
Make him pay his fare, we are in a hurry!
(51)


The root isu exhibits a contrast between the non-affected Agent form (as in example (51) above) and the affected Agent form. The affected Agent form, pesuon, carries a reflexive sense, signalling that the Agent is also the Goal of the action, as in example (53) below. Notice the contrast of meaning with the non-causative dative form in example (52), which also signals that the Goal is in focus.
(52)
\begin{tabular}{l|l|l|ll} 
& PIV-GOAL & THEME(TF) & \\
ISU-an & okuh & poh & dit & tubat nuh. \\
SMEAR-DatF & \(I(P)\) & yet & nonP.def medicine your
\end{tabular}
(53)
\begin{tabular}{l|l|l|ll} 
& & PIV-CAUSEE & & THEME(TF) \\
Pesuon (po-isu-on) & okuh & poh & dit & tubat nuh. \\
caus-SMEAR-AccF & \(I(P)\) & yet & nonP.def medicine your \\
Let me rub some of your medicine on myself.
\end{tabular}

This contrast between the reflexive sense of example (53) and the purely transitive sense of example (51) fits quite naturally into the general pattern of affected vs. non-affected Agent distinctions. Another usage of the affected Agent form pesuon is discussed in section 4 below.

The Goal of the ditransitive takes the Dative case in causatives, just as it does in non-causative forms. Since Dative is the lowest position in hierarchy \(B\), the Goal cannot be demoted.
\begin{tabular}{l|l|l} 
PIV-GOAL & & THEME(TF) \\
Isai & ot & pa-taak-an \\
who & nonP.indef caus-GIVE-DatF & nonP.indef money \\
Who is collecting the contributions? & (e.g. at a funeral)
\end{tabular}
(55)
\begin{tabular}{l|ll|l|l|} 
& & & CAUSEE(Acc) \\
Ong oruol & (PIV-GOAL) & inoh \(\quad\) takod nuh, & pesuan (po-isu-an) & do \(\quad\) dorisa \\
if hurt & that(P) leg your & caus-SMEAR-DatF & nonP.indef dresser
\end{tabular}

THEME (TF)
dot tubat.
nonp.indef medicine
If your leg hurts, get the dresser to rub medicine on it.
The Theme of a ditransitive verb in causative constructions takes Translative Focus, just as in non-causatives. In terms of hierarchy \(B\), with the Goal in the Dative position, there is no place for the Theme to be demoted to.
(56)
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{l}
1-pa-taak \\
TF-caus-GIVE
\end{tabular} & CAUSEE (Acc) dogon \(m e\) (nonp) & CAUSER (Nom) dit sawo kuh nonP.def spouse my & \begin{tabular}{l}
PIV-THEME \\
itih tanak yah this(P) child our
\end{tabular} \\
\hline \multicolumn{4}{|l|}{GOAL (DatF)} \\
\hline sid tobpinee & h nga, a & kuh koyu'u. & \\
\hline to sibling & is but not & (nonP) can.part.w & \\
\hline \multicolumn{4}{|l|}{My husband wants me to give this child of ours to his brother, but I can't} \\
\hline
\end{tabular}

It will be helpful to summarise our discussion to this point with a simple chart. In Figure \(C\), the top line (containing the column labels) is a restatement of hierarchy B.

The chart summarises the case assignments of clause constituents for noncausative intransitive, transitive and ditransitive clauses. The labels \(S\) for Subject of an intransitive, A for Agent of a transitive, and \(P\) for Patient of \(a\) transitive, are from Comrie 1981, modifications of labels used by Dixon (1979).

The arrows show the shifts in assignment for causative constructions. These shifts may be summarised in the following rule, a more precise formulation of the rule stated for hierarchy \(B\) in the introduction:

Rule: All constituents shift one position to the right unless blocked by another constituent.

Figure C: Summary of focus shift in direct causatives
\begin{tabular}{|llllll|}
\hline & \begin{tabular}{c} 
NomF \\
\((\mathrm{m}-)\)
\end{tabular} & \begin{tabular}{l} 
AccF \\
\((-\mathrm{on})\)
\end{tabular} & \begin{tabular}{l} 
TF \\
\((\mathrm{i}-\mathrm{i})\)
\end{tabular} & \begin{tabular}{l} 
LocF \\
\((-\mathrm{on})\)
\end{tabular} & \begin{tabular}{l} 
DatF \\
\((-\mathrm{an})\)
\end{tabular} \\
\hline Intrans. & \(\mathrm{S} \rightarrow\) & - & - & Loc. \(\rightarrow\) & - \\
Trans. & \(\mathrm{A} \rightarrow\) & P & - & \(\star\) & Ben. \\
Ditrans. & \(\mathrm{A} \rightarrow-\) & Theme & \(\star\) & Goal \\
\hline *LocF available only to intransitive verbs. \\
\hline
\end{tabular}

For non-causative intransitive verbs, the Subject takes NomF and the Location takes LocF. In causative constructions, the Subject becomes Causee and shifts according to the rule stated above, to AccF. The Location shifts to DatF.

For transitive clauses, the Agent takes NomF, the Patient takes AccF, and the Benefactive takes DatF. In causative constructions, the Agent becomes Causee and shifts to AccF. The Patient shifts one position from AccF to TF . The Benefactive can not move to the right, and remains in DatF (as in example (127)).

For ditransitive clauses, the Agent takes NomF, the Theme takes TF, and the Goal takes DatF. Neither Theme nor Goal can move to the right, since the LocF position is available only to intransitives. So the only shift in causative constructions is that of the Causee-Agent to AccF.

\section*{3. SECONDARY (INDIRECT) CAUSATION}

Indirect causation in the simplest terms means that one person gets a second person to cause a third person to do something. We can label the first participant (the initiator of the causal chain) as Causer \({ }_{1}\); the second participant (the intermediary) as Causee \({ }_{1}\)-Causer \(_{2}\); and the third participant as Causee \({ }_{2}\). If the action to be performed by Causee (corresponding to the meaning of the verb stem) is transitive, there is a fourth participant, the Patient.

Morphological double causatives (i.e. forms bearing two causative prefixes, po-po-STEM) are very rare in Kimaragang. Only a few roots can be affixed in this way, e.g. popoodop cause to put to sleep, and popelo (po-po-ilo) cause to inform (lit. cause to cause to know). Note that these examples seem to involve lexicalised causative forms; but not even all lexicalised causatives can take double causative marking.

However, the case marking patterns for single-causative verbs do reveal a morphological distinction between direct (simple) and indirect (or mediated) causation. The patterns for intransitive, transitive and ditransitive verb stems are different. But in each case, the distinction is marked only when the nuclear \({ }^{6}\) participant occupying the position lowest on hierarchy B is in focus: ActorCausee for intransitives, Patient for transitives, and Goal for ditransitives.

\subsection*{3.1 Intransitive stems}

Indirect causatives with intransitive stems can be formed only when the Causee \(_{2}\) is in focus. Indirect causation is signalled by the use of Translative Focus,
rather than the Accusative Focus form used for direct causatives when the Causee is in focus.
\begin{tabular}{|c|c|c|c|c|}
\hline & \(\mathrm{CAUSER}_{1}\) & CAUSEE \(_{1}\) CAUSER & PIV-CAUSEE 2 & LOCATION (Dat) \\
\hline 1-po-suwang & dialo & dogon 2 & inoh wogok & sid tinsod. \\
\hline TF-caus-ENTER & he (nonP) & \(m e(n o n P)\) & that(P) pig & to pig.pen \\
\hline
\end{tabular} He wants me to get that pig into its pen.
(58)


You told your wife to put the baby to sleep.
(59)
\begin{tabular}{|c|c|c|c|}
\hline Ipelo (i-po-ilo) & CAUSER \(_{1}\)
kuh & PIV-CAUSEE 2
ikau & \[
\begin{aligned}
& \operatorname{CAUSEE}_{1} \\
& \text { CAUSER }_{2} \text { tanak kuh } \\
& \text { dit }
\end{aligned}
\] \\
\hline TF-caus-KNOW & \(I\) (nonP) & you(P.sg) & nonP.def child my \\
\hline \multicolumn{4}{|l|}{m -uli okuh noh.} \\
\hline NomF-RETURN \(I\) ( P ) & ready & & \\
\hline I will have my son & inform & when I con & ng home. \\
\hline
\end{tabular}

Examples (57)-(59) show that the Causer \({ }_{1}\) is marked as Actor while the Causee \(1^{-}\) Causer \(_{2}\) is marked as Undergoer. Compare the non-Pivot Actor pronoun kuh in (59) with the non-Pivot non-Actor form dogon in (57). These examples also show that the valence of the indirect causative verb is three, as compared with two for the direct causative (cf. examples (6)-(12)) and one for the corresponding non-causative intransitive verb.

Note that the Translative Focus form is identical to that used for direct transitive causatives when the Undergoer is in focus. This means that for stems which have both a transitive and an intransitive sense, the Translative Focus causative form would be ambiguous. However, it appears that in every case the direct transitive sense takes precedence over the indirect intransitive sense, as in the following example (repeated from (38) above):
(60) PIV-PATIENT
\begin{tabular}{ll|l|l|l} 
It \(\quad\) bangku kuh & n-i-po-ogom & CAUSER & CAUSEE \\
P.def chair my & past-TF-caus-SIT & \(I\) (nonP) & dih & nonP.def Janama.
\end{tabular}

I made Janoma sit in my chair (save my seat).
(not *I made Janama cause my chair to sit.)
Another such stem is uli return. The intransitive sense go home is the most common use of this stem, either in Nominative (muli) or Locative (ulion) Focus. The transitive form monguli means to return something that has been borrowed, or to return a person's change after a purchase.

As expected, the affected Agent accusative form po-uli-on corresponds to the intransitive sense (cause to go home as in example (11)), the non-affected form poN-ulion to the transitive (cause to give back). The Translative Focus causative marks direct causation with the Undergoer of the transitive sense in focus, rather than mediated causation in the intransitive sense:
(61)
\begin{tabular}{l|l|ll|l} 
& CAUSER & CAUSEE & PIV-UNDERGOER \\
Ipooli (i-po-uli) & kuh & dih & James & it \begin{tabular}{l} 
teep
\end{tabular} \\
TF-caus-RETURN & \(I\) (nonP) & nonP. def James & P.def tape.recorder my
\end{tabular}\(|\)

Interestingly, the Dative Focus causative form is ambiguous. The meaning corresponding to the transitive sense (example (62)) indicates indirect causation, according to the pattern described in section 3.2 below. The meaning corresponding to the intransitive sense (example (63)) should signal Location as being in focus, but seems to have neither a Causer nor any possible explicit Pivot (the implicit Pivot is home). The best translation for this form is something like on the way home.
(62)
\begin{tabular}{|c|c|c|}
\hline Poolian (po-uli-an) poh dinoh caus-RETURN-DatF yet that & \(\begin{array}{lr}\text { CAUSEE }_{2} & \\ \text { dih } & \text { Janama } \\ \text { nonP. def Janoma }\end{array}\) & \[
\begin{aligned}
& \text { PIV-UNDERGOER } \\
& \text { it buuk dit } \\
& \text { P.def book REL.def }
\end{aligned}
\] \\
\hline n-olos- \(\varnothing\) dialo sid & gon. & \\
\hline past-BORROW-AccF he (nonP) at & ( nonp ) & \\
\hline \multicolumn{3}{|l|}{Tell Janama to return the book he borrowed from me. (speaker \(=\) Causer \(_{1}\); hearer \(=\) Causee \(_{1}\)-Causer \(_{2}\) )} \\
\hline
\end{tabular}
(63) Poolian (po-uli-an) noh dati dialo irih. caus-RETURN-DatF already likely he (nonP) this He must be on his way home.

\subsection*{3.2 Transitive stems}

When the Patient of a transitive causative verb is in focus, as described in section 2.1 above, the verb normally takes Translative Focus. However, when the causation is indirect or mediated, the verb takes Dative Focus. This pattern is illustrated in the following examples:
(64)
\begin{tabular}{l|l|l|l} 
Papatayan (po-patai-an) & \begin{tabular}{l} 
CAUSER \(_{1}\) \\
dialo \\
caus-KILL-DatF
\end{tabular} & \begin{tabular}{l} 
CAUSEE \(_{2}\) \\
dikau
\end{tabular} & \begin{tabular}{l} 
PIV-PATIENT \\
it (nonP) tasu yoh,
\end{tabular} \\
you(nonP.sg) & P.def dog his
\end{tabular}
it minanabpo (-in-m-poN-tabpo) dit manuk nuh. REL.def *-past-NomF-trans-CATCH nonP. def chicken your He wants you to kill his dog that caught your chicken.
(speaker \(=\) Causee \(_{1}\)-Causer \(_{2}\) )
(65)
\begin{tabular}{l|l|l} 
& CAUSEE \(_{2}\) & PIV-PATIENT \\
Pa-lapak-ai nuh & inoh niyuw. \\
caus-SPLIT-DatF.imper & dih nonP.def father your & that(P) coconut \\
Get your father to split that coconut.
\end{tabular}
(66)
\begin{tabular}{|c|c|c|c|c|}
\hline Peduan (po-idu-an) caus-REMOVE-DatF & CAUSER \(_{1}\) dih Jaiwan nonP.def Jaiwan & mari surely & \begin{tabular}{l}
CAUSEE \(_{2}\) \\
dikau you(nonP)
\end{tabular} & \[
\begin{aligned}
& \text { PIV-PATIENT } \\
& \text { it tali } \\
& \text { P.def rope }
\end{aligned}
\] \\
\hline
\end{tabular}
```

    dit nokosogilit.
    REL.def wrapped.around.stake
    Jaiwan wants you to go free the rope that (the buffalo) has wound around
    the stake.
    (speaker = Causee}\mp@subsup{1}{1}{}-\mp@subsup{\mathrm{ Causer }}{2}{}
    ```

```

kuh.
my
Have my brother bring me my bush knife.
(speaker $=$ Causer $_{1} ;$ hearer $=$ Causee $_{1}$-Causer $_{2}$ )

```
(67)

Compare the indirect Dative Focus forms used in these examples with the direct forms (ipapatai, ipalapak, ipoowit) in examples (17)-(19).

The Causee \({ }_{1}\)-Causer 2 is most commonly either the speaker or the hearer, as in all four of the above examples, and so can be inferred from the pragmatic context. Imperative causatives with the Patient in focus are apparently always marked as indirect, since they necessarily involve mediated or secondary causation: the speaker tells the hearer to cause some third participant to act.
It is apparently impossible for the intermediary ( Causee \(_{1}\)-Causer \({ }_{2}\) ) to appear as an explicit element of a clause involving transitive or ditransitive verb stems. For this reason, there is no direct evidence of an increase in valence in the indirect causative as opposed to the corresponding direct causative form. However, there is some indirect evidence of increased valence which will be discussed in section 3.4 below.

The semantic distinction between the direct and indirect causative forms is shown in the following example:
```

(68) PIV-PATIENT
l|lll}\begin{array}{lll}{\mathrm{ Tongoh }}\&{\mathrm{ ot (i-po-owit / *po-owit-an}}}<br>{\mathrm{ what }}\&{\mathrm{ P.indef }}\&{TF-caus-BRING / caus-BRING-DatF}
CAUSEE (Acc)
dogo?
me (nonp)
What do you want me to bring?
Since there can be no intermediary between the second person Causer and first person Causee, the indirect form poowitan is impossible.
There are some contexts where the semantic distinction between direct and indirect causation does not involve the presence or absence of an intermediary (Causee $1_{1}$-Causer $)_{2}$. In such cases, when the Patient of the transitive verb is in focus, the direct and indirect causative forms may be equally grammatical, and the semantic contrast hard to pin down.
Mohanan (1983) describes indirect causation as being non-agentive, while direct causation is agentive. This distinction is helpful for understanding the uses of indirect causative forms which do not involve mediated causation, as in the following examples:

```
```

(69) Ong amu omot-on dikoo, {(a) i-po-omot / (b) pa-amat-an}
if not HARVEST-AccF you(nonP.pl) TF-caus-HARVEST caus-HARVEST-DatF
CAUSER (Nom) CAUSEE (Acc)
yah do tulun.
we (nonP.excl) nonP.indef person
If you won't harvest (our rice), we'Zl (a) get someone else to do it;
(b) let someone else do it.

```

The Translative Focus form (a) (corresponding to direct causation) implies that the owner of the field will keep the harvested rice; the harvesters will work for wages or shares. The dative form (b) (corresponding to indirect causation) implies that the harvesters will be free to keep what they harvest, if they want it. The Translative Focus form is more agentive and entails greater control on the part of the Causer than the Dative Focus.
A further semantic complication is that the Dative Focus (indirect causative) form may also be used when the Causee is in focus:
\begin{tabular}{|c|c|c|c|c|c|}
\hline (70) & \begin{tabular}{l}
PIV-CAUSEE \\
Isai who
\end{tabular} & \[
\begin{aligned}
& \text { po-owit-an } \\
& \text { caus-BRING-DatF }
\end{aligned}
\] & \begin{tabular}{l}
CAUSER (Nom) \\
nuh \\
you(nonP.sg)
\end{tabular} & \begin{tabular}{l}
\[
m-u l i
\] \\
NomF-RETURN
\end{tabular} & \begin{tabular}{l}
PATIENT (TF) \\
dinoh \\
that (nonP)
\end{tabular} \\
\hline & sada nuh? & & & & \\
\hline & fish your & & & & \\
\hline & Who will you & ask to take your & fish home for & & \\
\hline
\end{tabular}
\begin{tabular}{l|l|lll} 
PIV-CAUSEE & & & \\
\begin{tabular}{l} 
Isai
\end{tabular} & pong-owit-on & ditihn (TF) & dialo & do tayad? \\
who & trans-BRING-AccF & this (nonP) he (nonP) poss share
\end{tabular}

Who can we send to take his share to him?
The semantic difference between forms like (70) and (71) involves difficulty of selection. The dative indicates that many possible Causees are available, or that the choice of Causee is irrelevant, while the normal accusative (nonaffected Agent) form may indicate that it is hard to find a suitable or willing causee. Again, the dative form here seems to signal reduced agency rather than mediated causality.

\subsection*{3.3 Ditransitive stems}

Ditransitive causatives normally assign Translative Focus to the Theme and Dative Focus to the Goal or Recipient. But when the Goal/Recipient is in focus, Translative Focus can be used to signal indirect causation.



Again, some instances of the indirect causative form do not involve mediated causation. The precise semantic distinction between the (indirect) Translative Focus form in the following example and the corresponding (direct) Dative Focus form in example (55) above is not known. It presumably relates to the agency of the Causer, e.g. ask him to rub medicine on it vs. let him rub medicine on \(i t\).


THEME
dot tubat.
nonP.indef medicine
If your leg hurts, get the dresser to rub medicine on it.
As stated above, indirect causation is morphologically marked only when the nuclear clause constituent lowest on hierarchy \(B\) is in focus: Causee-Actor for intransitives, Patient for transitives, and Goal/Recipient for ditransitives. To express mediated causation when other elements are in focus, explicitly biclausal constructions must be used, such as the following:

(76)
\begin{tabular}{|c|c|c|c|}
\hline ```
PIV-CAUSEE 
    CAUSER2
    Isai
who
``` & \begin{tabular}{ll} 
ot & \(s-i n-u u-\emptyset\) \\
P.indef & *-past-SEND-AccF
\end{tabular} & \[
\begin{aligned}
& \text { CAUSER }_{1} \\
& \text { nuh } \\
& \text { you(nonP) }
\end{aligned}
\] & \[
\begin{aligned}
& \text { popelo (po-po-ilo) } \\
& \text { caus-caus-KNOW }
\end{aligned}
\] \\
\hline \multicolumn{2}{|l|}{\begin{tabular}{ll|l} 
CAUSEE \(_{2}-\) CAUSER \(_{3}\) & \\
dih & sawo & nuh
\end{tabular}\(|\)\begin{tabular}{l} 
po-po-odop \\
nonP.def spouse your
\end{tabular}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{```
CAUSEE3
    dit tanak?
    nonP.def child
t the baby to sleep
```}} \\
\hline & nd to tell your wife to p & & \\
\hline
\end{tabular}

To summarise the shifts involved in indirect causation, a revised version of Figure \(C\) is repeated here.

Rule 1 (direct causation) : All constituents shift one position to the right unless blocked by another constituent (i.e. no doubling).

Rule 2 (indirect causation): The rightmost nuclear constituent in each row shifts, regardless of doubling. Shift right one position, but from lowest (rightmost) position in hierarchy shift left one position.

Figure D: Summary of focus shift in causatives
\begin{tabular}{|c|c|c|c|c|c|}
\hline & \[
\begin{aligned}
& \text { NomF } \\
& (\mathrm{m}-)
\end{aligned}
\] & \[
\begin{aligned}
& \text { AccF } \\
& (-o n)
\end{aligned}
\] & \[
\begin{aligned}
& \mathrm{TF} \\
& (\mathrm{i}-)
\end{aligned}
\] & \begin{tabular}{l}
LocF \\
(-on)
\end{tabular} & \[
\begin{aligned}
& \text { DatF } \\
& (-a n)
\end{aligned}
\] \\
\hline Intrans. Trans. Ditrans. &  &  &  & Loc. 즈줄 *- & Ben. Goal \\
\hline \multicolumn{6}{|l|}{```
*LocF available only to intransitive verbs.
    = Rule 1 (direct causation)
-- = Rule 2 (indirect causation)
```} \\
\hline
\end{tabular}

\subsection*{3.4 A note on doubling}

Comrie (1976, 1981) stated his Case Hierarchy in terms of grammatical relations (see Hierarchy A above). In Dusunic languages, neither the morphological cases (i.e. focus types) nor the syntactic cases (Actor, Undergoer, Referent, Oblique) correspond precisely to the grammatical relations Subject, Direct Object, Indirect Object, etc.
This paper deals with shifts in focus assignment involved in causative formation, which parallel Comrie's hierarchy in interesting ways. The shift in non-Pivot (i.e. syntactic) case assignment is also consistent with Comrie's paradigm, though far simpler than the shift in focus types: the Causer is marked as Actor, while Causee is "demoted" to Undergoer.

Comrie (1976) showed that the syntax of causativisation in a given language depends to a great extent on the possibility of doubling on certain syntactic positions. It appears that in Kimaragang, the process of causative formation itself affects the acceptability of doubling, both in focus types and in syntactic case assignment.
In non-causative constructions, no doubling of focus types is possible. The same is true for direct causatives, which explains why the Theme of a ditransitive verb is "blocked" from shifting to Dative Focus (see Figure C above). DatF is assigned to the Goal, which cannot shift, being at the lowest position on the hierarchy. Thus the constraint against double assignment of focus types forces the theme to remain in Translative Focus.
However, in indirect causation, this constraint is weakened. For both transitive and ditransitive stems, indirect causation is marked by a focus type already assigned to another element of the clause. The Patient of a transitive verb takes DatF in indirect causatives, merging with the Benefactive; and the Goal or Recipient of a ditransitive shifts to Translative Focus, merging with the Theme.

Even in non-causative constructions, there is a limited form of doubling allowed on the sytactic case Undergoer. One such instance was seen in example (45), where the Goal and Theme of the ditransitive verb are both marked as Undergoer. Transitive and ditransitive verbs may also take a Benefactive NP, which is
marked as Undergoer when not in focus. Since the Patient of a transitive and the Theme of a ditransitive are also marked as Undergoer, there is a potential double assignment here.

However, it is very rare for both Benefactive and Patient to occur as non-Pivot elements of the same clause. Only non-Pivot NPs are marked for syntactic case, and the rules of focus assignment prevent the Agent of an independent transitive verb from being selected as Pivot if there is another definite NP in the clause. Under normal circumstances when both Benefactive and Patient are present, one of them would almost certainly be definite, and thus selected as Pivot.

In causatives, the Causee is marked as Undergoer when not in focus, creating three potential Undergoers in a transitive causative construction (Causee, Patient, and Benefactive).

In indirect causatives formed from intransitive roots, the Causee \({ }_{1}\)-Causer 2 is also marked as Undergoer (Causee \(_{2}\) is always in focus, hence not marked for syntactic case). This may explain why the Causee \({ }_{1}\) Causer \(_{2}\) is never an explicit element of an indirect causative construction involving a transitive stem - its presence would introduce a fourth potential Undergoer.

Even though the Causee - Causer \(_{2}\) cannot appear explicitly with transitive stems, the process of indirect causative formation does seem to affect the potential for explicit doubling (or tripling) of Undergoer in a single clause. It is easier to insert a Benefactive into an indirect causative construction than the corresponding direct causative construction. Compare the following examples:
\begin{tabular}{l|l|ll|l} 
Po-owit-an & \begin{tabular}{ll} 
BENEFACTIVE \\
dogo
\end{tabular} & \begin{tabular}{ll} 
CAUSEE \(_{2}\) \\
dih
\end{tabular} & Majudil & it PATIENT \\
caus-BRING-DatF & me (nonP) & nonP.indef Majudil kuh. & P.def shoe my \\
Have Majudil bring me my shoes.
\end{tabular}
(78)
\begin{tabular}{ll|ll|ll} 
& & CAUSEE (Acc) & & PIV-PATIENT \\
I-po-owit & (??dogo) & dih & Majudil & it & tompa kuh. \\
TF-caus-BRING & (me) & nonP.indef Majudil & P.def shoe my
\end{tabular}

Have Majudil bring (me) my shoes.

The presence of dogo in example (78) is at least highly unnatural, if not ungrammatical. If accepted as grammatical, it seems to imply that the Causee (Majudil) already knows about the request. The presence of dogo in example (77), however, is entirely natural and carries no such implication. \({ }^{7}\)

Further evidence relating to potential for doubling of Undergoers is seen in the following two examples:
(79)

sid tanak kuh.
to child my
Please have Janama bring this money to my son for me.
(80)
```

N-i-po-owit
past-TF-caus-BRING

```
\begin{tabular}{l|l|} 
CAUSEE (Acc) & CAUSER (Nom) \\
dogon & dih \(\quad\) Janama \\
me (nonP) & nonP.def Janama
\end{tabular}
\begin{tabular}{ll|l} 
PIV-PATIENT & \\
itih & si in & i-taak \\
this (P) money & TF-GIVE
\end{tabular}
sid dikau.
to you(nonP.sg)
Jancoma asked me to bring you this money.
The non-focus elements dogon and dih Janama are identical in the two sentences, but the interpretation varies depending on the form of the verb. In example (79), the indirect causative form is used. This makes it possible for both nonPivot elements to be interpreted as Undergoers: dogon as Benefactive and dih Janama as Causee \(_{2}\). However, the direct causative form in example (80) allows for only one Undergoer. Since dogon ( \(\sim\) dogo) is a non-Actor pronoun form, it must be the Undergoer, and dih Janama must be interpreted as the Actor, i.e. Causer. Thus dogon is interpreted as the Causee.

It may be that this phenomenon relates to a constraint on the number of clausal elements (i.e. valence) rather than a constraint on doubling as such. Consider the following ditransitive examples involving direct causation:
(81)


In example (81), the Recipient is encoded as Referent, a nuclear clause element marked by the particle sid to. However, when a Benefactive (dogon) is inserted, as in example (82), the Recipient must be shifted to a subordinate clause by the insertion of the verb paka'a. Apparently the total number of explicit nonoblique elements of a simple clause must not exceed three.

However, note that in indirect causation it is possible for four explicit elements to occur in the same simple clause, as in example (72) above. This would support the hypothesis that the greater acceptability of Benefactives in indirect causative constructions as opposed to direct causatives is a consequence of the increase in valence associated with the shift from direct to indirect causation.

\section*{4. INSTRUMENT AND THEME}

\subsection*{4.1 Instrumental causatives}

Instrumental Focus on non-causative verbs is indicated by the prefix poN-, as in the following examples:
(83)

PIV-INST
Tongoh what
What can we buy it with, I don't have any money.
(84)

pangalapak (poN-lapak) do niyuw.
IF-SPLIT nonP.indef coconut
I'Zl take a bush knife along to split coconuts with.
Generally speaking, only transitive verbs with non-affected Agents involve the use of Instruments. With causative forms of such verbs, the Causee-Agent will be marked as non-affected when it is in focus. When the Instrument is in focus, it takes the affected Agent marking. This provides further examples of contrast between affected vs. non-affected Agent forms such as the following:
(85)

Pomoliyo (poN-boli-o) poh trans-BUY-AccF.imper yet
\begin{tabular}{ll|l|l} 
PATIENT (TF) & \multicolumn{2}{|l|}{ PIV-CAUSEE } & \\
do & tasin & ih & Wati
\end{tabular} tu,
aso noh tasin tokou.
non.exist already salt us(pl.incl)
Send Wati to buy some salt, we are all out.
(Causee \(=\) non-affected Agent)
(86)
\begin{tabular}{ll|l|ll} 
& & PATIENT(Acc) & PIV-INST \\
Po-boli-o & poh & dot & kuui & it siin nuh! \\
caus-BUY-AccF.imper yet & nonP.indef cake & P. def money your \\
Spend (the rest of) your money on cakes!
\end{tabular}
(87)
\begin{tabular}{l|ll|ll} 
& & \\
Ong koo-titip & (PIV-INST) & dongol, & kada'ai pa-lapak-o \\
if imm-FORGE & nonP.indef bush.knife & don't & caus-SPLIT-AccF.imper
\end{tabular}

PATIENT
dot niyuw.
nonP.indef coconut
Don't try to split coconuts with a newly forged bush knife.
(Instrument \(=\) affected Agent)
(cf. example (14))
(88)

ditih, \({ }^{\text {ong }}\) atarom ko amu.
this if sharp or not
I will try harvesting with your knife to see whether it is sharp. (Instrument \(=\) affected Agent)
(cf. example (13))
Semantically, the Instrumental case carries an inherently causative component of meaning: the Agent causes the Instrument to affect the Patient. The Instrument is, in this analysis, a kind of Causee-Agent, but with little or no volitionality or control over the event. Thus it seems perfectly natural to mark the

Instrument as an affected Causee-Agent, while the true Agent is marked as nonaffected Causee. \({ }^{8}\)

Notice that examples (86)-(88) above are formally causative, but do not convey an explicitly causative meaning. Semantically, no new participants are introduced by the causative form - the Agent does not become a Causee - though syntactically the valence is altered by incorporating the oblique Instrument into the clause nucleus.

The primary usage of the po- on form, i.e. for focusing on an affected Agent Causee, is semantically as well as morphologically causative. The secondary, non-causative usage in examples (86)-(88) will be referred to as the instrumental causative, to distinguish it from the true causative (affected Agent) sense.

The Theme of ditransitive clauses, which normally takes Translative Focus, may also take the instrumental causative form when it is in focus, as in the following example:
(89) PIV-THEME

Nunuh sontubat ot pesuon (po-isu-on)?
what a.medicine P.indef caus-SMEAR-AccF
Which medicine do you want rubbed on?
This example is part of a more general pattern which will be discussed in the following section.

\subsection*{4.2 Translative Focus and causativity}

Many intransitive verbs take on an explicitly causative sense when they are marked for Translative Focus, even without the use of the causative prefix po-. Such Translative Focus forms are often equivalent to the intransitive (i.e. affected Agent) Causee-focused forms:
(90)

Ong taak-an okuh dikau siin, \{potolibon (po-talib-on) if GIVE-DatF me(P) you(nonP.sg) nonP.indef money caus-PASS.BY-AccF
\begin{tabular}{l|l|l} 
& CAUSER & PIV-CAUSEE \\
/ i-talib\} & kuh & ikau. \\
/ TF-PASS.BY & \(I\) (nonP) & you(P.sg)
\end{tabular}

If you give me money I will let you go past.
(91)

(92)
\begin{tabular}{l|l|l|l} 
& CAUSER & PIV-CAUSEE & \\
\{I-tuun / po-tuun-on\} & kuh & itih korita & silo-d piro'ong. \\
TF-DROP / caus-DROP-ACcF & \(I\) (nonP) & this (P) car & there-at cliff \\
I am going to drive this car over that cliff.
\end{tabular}

Examples (93) and (94) below are extracted from a folktale. Notice the equivalence of the causative form posowito in (93) with the Translative Focus nisawit in (94). The root sawit is an intransitive, meaning to hang (as a picture hangs). Again, the parentheses around the constituent tag "PIV-CAUSEE" indicate
that the label relates to the clause following the one of which the labelled NP is an explicit element.
(93)

Kobobos nopoh yalo mongimpuros satisfied only he(P) examine

\section*{(PIV-CAUSEE)}
dit roo dit kanas, nonP.def jow of wild.pig

\section*{CAUSER \(\mid\) LOCATION dialo sid tayup.} he (nonP) on post Caus-HANG-AccF.nonfin already he was tired of excomining the jawbone of the pig, he hung it on the post of his trap.
(94)
Jadi, pamanau noh dirih mogintong
so walked already this look.at
(PIV-CAUSEE)
Jadi, pamanau noh dirih mogintong dit tulang dit roo dit
\[
51
\]
\[
\begin{array}{l|ll|l|l}
\text { kanas, } & \text { it } \quad n-i-s a w i t & \text { CAUSER } \\
\text { dih }
\end{array} \text { kusai } \begin{aligned}
& \text { LOCATION } \\
& \text { sid tayup yoh. }
\end{aligned}
\] wild.pig REL.def past-TF-HANG nonP.def man on post his So they went to look at the jawbone of the wild pig, which the man had hung on the post of his trap.

When the Causee is animate, the contrast between Translative Focus and the affected Agent form may reflect the degree of agency on the part of the Causer. For instance, in examples (9) and (43) above, the causative form poodopon (put to sleep) is more agentive than the Translative Focus form niodop (invited to sleep).

Notice that semantically all of the above Translative Focus examples involve an element of physical motion. If there is no such semantic component in the basic meaning of the stem, e.g. with sleep and hang, the use of Translative Focus introduces it.

In the same way, transitive stems which normally mark their Patients in the accusative (or, like tutud burn, in the dative) take on an added sense of motion when the Patient is marked with Translative Focus.
\begin{tabular}{l|l|l} 
& \begin{tabular}{ll} 
(PIV-PATIENT-THEME) \\
Mamanau (m-poN-panau) & itih pen \\
NomF-trans-WALK & this(P) pen
\end{tabular} & ong i-tutud. \\
if TF-BURN
\end{tabular}

This pen will work if you hold the point in a flame.
(96)
\begin{tabular}{l|l|ll} 
& \multicolumn{2}{|c|}{ (PIV-PATIENT-THEME) } & dit \\
Intang-an tinoo & it & kumut & n-sidang \\
WATCH-DatF soon & P.def cloth & REL.def past-TF-DRY \\
Check on the clothes (I) put out to dry.
\end{tabular}
(97)
\begin{tabular}{l|l|l|l} 
N-i-suun & AGENT & PIV-PATIENT-THEME & tu aralom ilo \\
past-TF-CARRY & \(I\) (nonP) & it tanak kuh & tu child my
\end{tabular} because deep that(P)

For stems that do not generally involve an Instrument, the instrumental causative form may be equivalent to the Translative Focus form. Compare the instrumental causative in the following example with the synonymous Translative Focus in example (97):
```

(98)

```


As seen in example (95) above, the Translative Focus form itutud merely entails poking something into the fire. However, the instrumental causative form of burn, potutudon, definitely involves setting fire to an Instrument of some type: something that gives light or something to transmit the fire with.
(99) \begin{tabular}{l|ll} 
Po-tutud-o poh & PIV-PATIENT-INST \\
itih lampu! \\
caus-BURN-AccF.imper yet & this (P) lamp \\
Light this Zamp!
\end{tabular}
(100)
\begin{tabular}{l|l|l|l} 
Po-tutud-on & AGENT & PIV-PATIENT-INST & \\
caus-BURN-ACcF & you(nonP.sg) & inoh poring & om owit-on sitih. \\
that(P) bamboo & and BRING-AccF here
\end{tabular}

As discussed above, non-causative Translative Focus forms of some intransitive stems can be used to convey an overtly causative meaning. The converse is true for ditransitive stems: the Theme may sometimes be marked as an affected Causee, even when no causation is involved. Again, the instrumental causative in the following example is synonymous with the Translative Focus form in example (49).
(101)
\begin{tabular}{ll|l|l|l} 
& & AGENT & PIV-THEME & GOAL \\
Nokuroh.tu pesuon (po-isu-on) & nuh & inoh \begin{tabular}{l} 
tinasak
\end{tabular} & sid \\
why & caus-SMEAR-AccF & you(nonP.sg) & that(P) oil & on
\end{tabular}
buuk kuh?
book my
Why did you smear that oil on my book?
(cf. example (49) above)
However, the following two examples are not quite perfect synonyms:
\begin{tabular}{l|l|l|l} 
(102) & BENEFACTIVE & PIV-THEME & GOAL \\
& Pa-taak-on & dogo & itih siin \\
caus-GIVE-ACcF & me (nonP) & this (P) money & to nonP.def Maralin. \\
\\
Give this money to Maralin for me.
\end{tabular}
(103)
\begin{tabular}{l|l|l} 
PIV-THEME & & AGENT \\
Itih siin & i-taak & nuh \\
this (P) money & TF-GIVE & you(nonP.sg)
\end{tabular} \begin{tabular}{l} 
sid dih nonP.def Maralin. \\
Give this money to Maralin for me.
\end{tabular}

The use of a causative form in example (102) instead of simple Translative Focus as in example (103) functions as a softened command. Pataakon in example (102) sounds like a polite request, while itaak sounds rude and possibly even suspicious ("Be sure you give this money to Maralin and don't steal it!").
To summarise, there is a general tendency for Translative Focus forms and affected Causee forms to be equivalent. For intransitive stems, this means that

Translative Focus forms take on causative meanings. For ditransitive verbs, the instrumental causative form can be substituted for the simple Translative Focus form, both forms conveying non-causative senses. For transitive verbs not involving an Instrument, both Translative Focus and affected Causee forms convey non-causative senses involving change of position. In all of these cases, the object whose location is affected is in focus.

\section*{5. CONVERSIVES}

Lexicalised causatives are causative forms which have taken on idiomatic noncausative meanings. A special type of lexicalisation of causative forms in Kimaragang involves the words for borrow and buy, and their converse actions, lend and sell.

\section*{5.1 'Borrow' and 'lend'}

The root olos means borrow. It is used for things like tools, clothing, etc. which can be returned, as opposed to money and rice, which must be repaid and so take the Malay loanword utang owe, rather than olos.

The converse action, lend, is expressed by the causative form poolos, literally cause to borrow.

Mongolos (m-poN-olos) NomF-trans-BORROW
\begin{tabular}{l|ll|l}
\begin{tabular}{l} 
PIV- \\
BORROWER
\end{tabular} & THEME & \\
\begin{tabular}{ll} 
okuh
\end{tabular} & dit & tompa dih Jaiwan & tu, \\
\(I(P)\) & nonP.def shoe of Jaiwan & because
\end{tabular}
pakay-on kuh mibola.
WEAR-AccF \(I\) (nonP) play.ball
I will borrow Jaiwan's shoes to wear when I play soccer.
(105)
\begin{tabular}{l|l|l} 
Po-olos & \begin{tabular}{l} 
PIV-LENDER \\
koh-i \\
caus-BORROW
\end{tabular} & \begin{tabular}{l} 
THEME \\
dit (P.sg)-emph
\end{tabular} \\
kon? tomp \\
nonP.def shoe
\end{tabular}

In the non-causative forms meaning borrow, the borrower (as Agent) takes Nominative Focus, as in example (104). The borrowed items (the theme) takes Accusative Focus as in the second clause of example (105) and both clauses of example (106). The Source (or lender) appears in a possessive form, as in examples (104) and (106), or in Setting Focus, as in example (107) below.
(106)

\begin{tabular}{l|l|l|l}
\begin{tabular}{l|l} 
PIV-SOURCE \\
Isai \\
who
\end{tabular} & \begin{tabular}{l} 
pinangalasan (-in-poN-olos-an) \\
*-past-SF-BORROW-SF
\end{tabular} & \begin{tabular}{l} 
BORROWER \\
nuh \\
you(nonP)
\end{tabular} & \begin{tabular}{l} 
THEME \\
ditih \\
this (nonP)
\end{tabular} \\
gampa ditih? \\
bush.knife this
\end{tabular}\(|\)\begin{tabular}{l} 
Who did you borrow this bush knife from?
\end{tabular}

Dative Focus is possible when a Benefactive is in focus, i.e. someone on whose behalf a thing is borrowed:
(108)


Viewing the event as a lending, rather than a borrowing, the lender is encoded as Causer. The bare causative form (considered an allomorph of Nominative Focus) is used when the lender is in focus, as in example (105) above. The lendee (borrower), formally encoded as Causee, takes Accusative Focus, and is marked as an affected Agent (by the use of the prefix po- rather than poN-):


Please loan me your bush knife.
The loaned item takes simple (non-causative) Translative Focus, contrasting with the accusative marking of a borrowed item. Note the TF marking in the following example, in contrast to the AccF marking in example (106) above, even though the Theme is in focus in both cases.
\begin{tabular}{l|l|l|ll} 
& LENDER & LENDEE & THEME \\
N-i-olos & kuh & dih & Janama & it \\
past-TF-BORROW & \(I\) (nonP) kuh. & nonP.def Janama & P.def shirt my \\
\(I\) Zoaned Janama my shirt.
\end{tabular}

In the previous section, we discussed the tendency for simple Translative Focus forms to have (or allow) meanings equivalent to affected Agent causative forms. Indeed, a secondary use of iolos is possible which seems equivalent to pooloson; compare the following example with example (110) above.
\begin{tabular}{lll|l|l} 
& & PIV-LENDEE & THEME \\
Ara'at ih Jumin, amu n-i-olos & it tanak kuh & do \\
bad & P.def Jumin not past-TF-BORROW & P.def child my & nonP.indef
\end{tabular}
```

gampa.
bush.knife
Jumin is a nasty person, he wouldn't loan my son a bush knife.

```

The affected Agent form pooloson used when the lendee is in focus ((109)-(110) above) marks the lendee as filling the Causee slot formally. The non-affected Agent form pongoloson is used for a true Causee, someone who is literally caused (i.e. sent) to borrow something:
(113)


Tosong \(\mid\) tu, saka'an (sako-an) tokou t-um-alob. Tosong because MOUNT-DatF we (incl) *-NomF-MARKET Have Janama borrow a car from Tosong for us to go to market in.

The Translative Focus and Dative Focus causative forms, ipoolos and paalasan, can both be used to focus on the item loaned. They seem to signal varying degrees of volitionality and control on the part of the lender. In the following examples, the non-causative form niolos (example (114)) implies that the borrower requested the loan, and the lender merely agreed; the causative form nipoolos (example (115)) implies that the borrower did not request the loan, but the lender spontaneously offered it:


The contrast is seen even more clearly if the result is negated. In the causative form, the negation implies that the offer was refused. In the non-causative form, the negation implies that the borrower changed his mind or was somehow prevented from using the car:
(116)
\begin{tabular}{l|l|l|ll|l} 
& LENDER & LENDEE & PIV-THEME & \\
N-i-olos & kuh & dih \(\quad\) Jaiwan & itih & korita kuh, & nga \\
past-TF-BORROW & I (nonP) & nonP.def Jaiwan & this car my & but
\end{tabular}
amu n-olos- \(\varnothing\) dialo.
not past-BORROW-AccF he (nonP)
I agreed to let Jaiwan borrow my car, but he didn't get to use it.
(117)
\begin{tabular}{l|l|l|lll} 
& LENDER & LENDEE & PIV-THEME \\
N-i-po-olos & kuh & dih & Jaiwan & itih korita kuh, \\
past-TF-caus-BORROW & \(I\) (nonP) & nonP.def Jaiwan & this(P) car my
\end{tabular}

The semantic distinction in these examples is roughly agree to lend (iolos) vs. offer to lend (ipoolos). A third possible form focusing on the loaned item is the Dative, paalasan. This seems to imply even higher volitionality on the part of the lender. In the following example, the Dative form implies: "I'm going to Zoan him my shoes whether he wants them or not!"
(118)
\begin{tabular}{l|l|l|l|l} 
& LENDER & LENDEE & PIV-THEME & \\
Pa-alas-an & kuh & poh & dialo & itih tompa kuh \\
caus-BORROW-DatF & \(I\) ong \\
r-um-ilik & nonP) & yet & he (nonP) & this(P) shoe my
\end{tabular}

This example also carries the sense of a loan with no strings attached, no matter if the shoes are damaged, lost, or stolen by the borrower.

\section*{5.2 'Buy' and 'sell'}

There are two words for buy in Kimaragang, boli and dagang. In non-causative forms, the two seem to be perfect synonyms, and have the same focus properties. For both roots, Accusative Focus is used for the item purchased (example (119)), and Dative Focus for the Benefactive (example (120)):
```

(119) Nunuh oh {boli-on / dagang-on} nuh?
what P.indef BUY-AccF BUY-AccF you(nonP)
What are you going to buy?
(120) {Boli-ai / dagang-ai} okuh poh do tasin!
BUY-DatF.imper me(P) yet nonP.indef salt
Buy me some salt!

```

However, in the causative forms there is a definite semantic distinction. Poboli means cause to buy, e.g. persuade or coerce someone to buy something. It implies that the person doing the persuading, the Causer, is not the person selling the item being purchased. Padagang, on the other hand, means simply to sell.

A related difference emerges in the Translative Focus forms of these two verbs. The Translative Focus form iboli (or the equivalent instrumental causative pobolion) marks the money which is spent as Pivot, as in example (121). Idagang, on the other hand, marks that which is sold as Pivot, as in example (122).
(121) \(N\)-i-boli kuh it siin kuh dot tasin. past-TF-BUY \(I\) (nonP) P.def money my nonP.indef salt I spent my money on salt. (cf. example (86) above)
(122) \{I-dagang / pa-dagang-on\} dialo ih kuda yoh. TF-BUY / caus-BUY-AccF he (nonP) P.def horse his He is selling his horse.

In causative constructions, boli seems to follow the transitive pattern while dagang follows the ditransitive pattern. In both cases the Causee is marked as non-affected Agent (see example (85) above).

Translative Focus is used for both the item purchased (as Patient of a transitive; ipoboli, (123)) and the item sold (as Theme of a ditransitive; ipadagang, (124)).
(123) Amu kuh boli-on dara itih sada ditih nga, n-i-po-boli not \(I\) (nonP) BUY-AccF would this(P) fish this but past-TF-caus-BUY
dih Akub.
nonP. def \(A k u b\)
I wouldn't have bought this fish, but Akub made me buy it.
(124) I-pa-dagang dih Janama ilot karabau odih.

TF-caus-BUY nonP. def Janama that(P) buffalo over.there
Tell Janoma to sell that buffalo over there.
The dative causative form padagangan focuses on the person to whom something is sold, as the Goal of a ditransitive (example (125)). Poboliyan has two uses. It may mark the Pivot as being the Benefactive of a purchase (example (126)); or it may mark the Patient (item purchased) in an indirect causative form (example (127)), according to the transitive pattern discussed in section 3.2 above.
(125) Isai pa-dagang-an kuh ditih kuda kuh? who caus-BUY-DatF \(I\) (nonP) this (nonP) horse my Who can/should I sell my horse to?
(126) Po-boli-an kuh dih jaul do ih Sarah nga, amu caus-BUY-DatF \(I\) (nonP) nonP.def Paul nonP.indef watch P.def Sarah but not
b-in-oli-an dialo.
*-past-BUY-DatF he (nonP)
I asked Paul to buy Sarah a watch, but he wouldn't.
(127) Po-boli-an dogon dih apa ilo jaam dilo nga, amu caus-BUY-DatF me (nonP) nonP. def father that (P) watch that but not
kuh b-in-oli-ø.
\(I\) (nonP) *-past-BUY-AccF
Dad asked me to buy that watch, but I didn't buy it.
The verb tu'un jump down (see examples (29)-(30) and (34) above), has an interesting idiomatic sense. The causative form potuun may be used as a synonym for padagang sell. However, potuun is used only for produce sold by the sackfull, especially rice, rice powder and copra.

As noted above, tu'un is an intransitive root. However, in this secondary sense, tu'un (like dagang) follows the ditransitive pattern in causative forms. Translative Focus marks the Theme (that which is sold) (example (128)), Dative Focus marks the Goal (example (129)).
(128) l-po-tuun dialo it parai yoh tu aso siin TF -caus-DROP \(I\) (nonP) he (nonP) P.def rice his because not.exist money dialo nga, amu dialo n-i-tuun. he (nonP) but not he (nonP) past-TF-DROP I told him to sell his rice because he is out of money, but he didn't sell it.
Sid disai do kadai po-tuun-an ditih parai?
at whose poss shop caus-DROP-DatF this (nonP) rice
Which shop should we sell this rice to?

\section*{6. CONCLUSION}

The changes in focus marking associated with morphological causatives in Kimaragang are quite complex. However, the basic patterns discussed above make it clear that Kimaragang does not fit the pattern described by Comrie (1981), i.e. with the Causee filling the highest available level on hierarchy \(A\). In Kimaragang, the Causee always takes accusative marking, while other participants (Patient, Theme, Goal, Location) are distributed between Dative and Translative Focus.

In the preceding discussion, it has proved essential to classify verb stems as intransitive, transitive or ditransitive (while recognising that some stems have distinct transitive and intransitive senses). For non-causative constructions, such a classification is much less helpful, leaving as much variation unexplained as it accounts for. Indeed, the classification of verb stems in Philippine-type languages in general is a very difficult problem. However, based on the causative data discussed here, the distinction between intransitives, transitives and ditransitives seems to be an important starting point for Kimaragang.
Two instances have been noted where case distinctions marked in non-causative verb morphology are lost in causative constructions. The Location of an intransitive and the Goal of a ditransitive are distinct in non-causative verbs (Locative vs. Dative Focus); but both take Dative Focus in causatives. In the same way, Patients of transitives (Accusative or Dative Focus in non-causative forms) shift to Translative Focus in causatives, merging with the Themes of ditransitive verbs.

This loss of case distinctions is natural, in view of the valence changes associated with causative verbs. When Nominative Focus is assigned to the Causer, there are fewer possible forms to which the other participants can be assigned.

The reduced set of focus possibilities for causative verbs is isomorphic with the set of non-oblique syntactic cases described in section 1.1 , except for the addition of the Causer in Nominative Focus. Accusative Focus causatives focus on the Causee, and correspond to Actor of the non-causative (result) event. Translative Focus, marking Patients of transitive causative verbs and Themes of ditransitive causatives, corresponds to non-causative Undergoer. Dative Focus, marking Location of intransitive causatives and Goal of ditransitive causatives, corresponds to the non-causative Referent.
This set of correspondences is summarised in Figure E below.

Figure E: Focus marking of causatives in relation
to the non-causative event
\begin{tabular}{|lllll|}
\hline Focus morpheme: & \(\emptyset-\) & -on & i- & -an \\
Intrans. & Causer & Causee & --- & Location \\
Trans. & Causer & Causee & Patient & --- \\
\begin{tabular}{ll} 
Ditrans. & Causer
\end{tabular} & Causee & Theme & Goal \\
\begin{tabular}{l} 
Non-causative \\
constituent:
\end{tabular} & -- & ACTOR & UNDERGOER & REFERENT \\
\hline
\end{tabular}

Finally, the possible focus types for both causative and non-causative verbs are summarised in the following matrix. The top row shows the focus-marking affixes, while the left-most column lists the prefixes discussed in this study: poN'transitive', and po- 'causative'.

Figure F: Summary of focus-marking affixation for Kimaragang verbs
\begin{tabular}{|c|c|c|c|c|c|}
\hline & \(\emptyset\) & m- & -on & i- & -an \\
\hline \(\emptyset\) & - & \begin{tabular}{l}
m- \\
Nominative \\
Focus \\
(intr.)
\end{tabular} & \begin{tabular}{l}
-on \\
1. Acc.Focus (trans.) \\
2. Loc.Focus (intr.)
\end{tabular} & \begin{tabular}{l}
i- \\
Translative \\
Focus
\end{tabular} & \begin{tabular}{l}
-an \\
Dative \\
Focus
\end{tabular} \\
\hline PoN- & \begin{tabular}{l}
poN- \\
Instrumental \\
Focus
\end{tabular} & \begin{tabular}{l}
m-poN- \\
Nominative \\
Focus \\
(trans.)
\end{tabular} & \begin{tabular}{l}
poN- -on \\
Causee (non- \\
affected)
\end{tabular} & - & \begin{tabular}{l}
poN- -an \\
Setting \\
Focus
\end{tabular} \\
\hline Po- & \begin{tabular}{l}
po- \\
Causer
\end{tabular} & - & \begin{tabular}{l}
po- -on \\
1. Causee (affected) \\
2. instr. causative
\end{tabular} & \begin{tabular}{l}
i-po- \\
1. secondary caus. \\
(intr.) \\
2. Patient (trans.) \\
3. Theme/ secondary caus. (ditran.)
\end{tabular} & \begin{tabular}{l}
po- -an \\
1. Location (intr.) \\
2. secondary caus. (trans.) \\
3. Goal (ditran.)
\end{tabular} \\
\hline
\end{tabular}

\section*{NOTES}
\({ }^{1}\) Translative case in Kimaragang is roughly equivalent to the semantic case-role Theme. Translative Focus is used when the Pivot is the Theme of a ditransitive verb or otherwise undergoes a change of location due to the action of the verb.

Translative and Locative are considered to occupy the same position on hierarchy B, but cannot be ordered with respect to each other; see Figure C below.
\({ }^{2}\) The case marking devices used for non-Pivot NPs are described in my other paper in this volume. They include: Actor vs. Undergoer forms of first and second person (non-Pivot) pronouns, both singular and plural; different non-focus determiners (dih/do for Actor and Undergoer, sid for Referent); and word-order (a preference for Actor to precede Undergoer, which precedes Referent; however, other ordering principles take precedence over this one, e.g. pronouns occur before nouns).
The case marking system for non-focused NPs could be referred to as syntactic case, in contrast to the focus system, which could be said to mark morphological case. Kimaragang grammar distinguishes four syntactic cases but, in noncausative constructions, seven morphological cases (or focus types).
\({ }^{3}\) The valence of a verb is the number of nuclear participants associated with that verb: one for intransitives, two for transitives, three for ditransitives.
\({ }^{4}\) The verb intong look \(a t\), is another transitive which assigns the Undergoer (in this case the Range, that which is seen) to the Dative in non-causative forms. In causatives, intong follows the regular transitive pattern of assigning the Undergoer to Translative Focus.
\({ }^{5}\) Since the Locative suffix is homophonous with Accusative Focus, the use of the dative here serves to maintain the transitive-intransitive distinction which would be lost if the Patient of the transitive verb to sit on took Accusative Focus. Dative Focus is used in the same way with other transitive verbs derived from intransitive roots, e.g. the transitive verb sleep at; guard discussed below.
\({ }^{6}\) The term nuclear is used here to refer to the obligatory constituents of the simple clause, i.e. those which define the valence of the verb. Thus Agent and Patient are nuclear constituents of a transitive clause, while Benefactive is not.

The concept of a clause nucleus, used by Pike and Pike (1982) and Dik (1978, cited in Foley and Van Valin 1984), is comparable to the term core used by Foley and Van Valin. However, it is not yet clear whether a simple two-way distinction between the nucleus (or core) and periphery of a clause is possible in Kimaragang.
There is a clear distinction between what I have called here oblique constituents, which must be governed by a subordinate verb or verbal preposition, and the non-oblique constituents, which are elements of the simple clause. However, the status of the non-oblique, non-nuclear constituents Location (of an intransitive) and Benefactive (of a transitive) remains in question. There seems to be no morphosyntactic distinction between these elements and those I have classed as nuclear, except for the fact that the nuclear elements are obligatory while Location and Benefactive are optional.
\({ }^{7}\) Although examples (77)-(78) are glossed as having equivalent meanings, there is a semantic distinction between the direct and indirect causative forms. Example (77) (the indirect form) carries the sense of, "Go find Majudil and
have him bring my shoes to me". Example (78), on the other hand, is based on the assumption that Majudil will be going to the hearer's house: "Send my shoes back with Majudil, when/if he comes to see you". Thus in (77), the hearer is both \(^{\text {Causee }} 1\) (being sent to find Majudil), and Causer 2 (getting Majudil to carry the shoes). In example (78), the hearer is more nearly a simple Causer.
\({ }^{8}\) The semantic analysis outlined above also finds a parallel in non-causative verb morphology. When the Agent of a non-causative transitive verb is in focus, the verb carries the Nominative Focus morpheme, m-, plus the transitivity prefix, poN-. When the Instrument is in focus, the verb carries only the transitivity prefix; Instrument carries the same marking as Agent, except for the Nominative affix. We could interpret this to mean that Instrument is marked as an Agent but not an Actor, hence an Agent without volitionality.

\section*{LIST OF ABBREVIATIONS USED}
\begin{tabular}{|c|c|c|c|}
\hline able & = habilitative & nonP & \(=\) non-Pivot \\
\hline AccF & = Accusative Focus & P & = Pivot \\
\hline CAPS & \(=\) verb root & part & = particle \\
\hline caus & = causative & past & = past tense \\
\hline DatF & = Dative Focus & pl & = plural \\
\hline def & = definite & poss & = possessive \\
\hline dup & \(=\) reduplication & Q & = question marker \\
\hline emph & = emphasis marker & recip & = reciprocal \\
\hline excl & = exclusive & REL & = relative clause linker \\
\hline IF & = Instrumental Focus & SF & = Setting Focus \\
\hline imm & = immediate past & sg & = singular \\
\hline imper & = imperative & stat & = stative \\
\hline incl & = inclusive & TF & = Translative Focus \\
\hline indef & = indefinite & trans & = transitivity marker \\
\hline LocF & \(=\) Locative Focus & *- & = initial consonant of stem split \\
\hline NomF & = Nominative Focus & & by infix \\
\hline nonfin & \(=\) non-finite mood & \(\emptyset\) & = zero allomorph \\
\hline
\end{tabular}

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