

EXPRESSIVES IN KEDAH MALAY

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Through the years several books and articles have been written about Malay grammar. Some specifically deal with the problem of Malay morphology. Yet very few of these studies have touched upon the question of Malay expressives and the rules that relate to them. In fact, some authors have mistakenly identified certain expressives as 'verbal roots'.¹ The cause of these errors and oversights is unclear since expressives appear with considerable frequency in spoken Malay. The fact that they seldom appear in written Malay may explain why earlier writers, whose analyses were primarily textual, failed to concern themselves with these phenomena. Then, too, the standard languages of Malaysia and Indonesia, both variant forms of Malay, are essentially based on written Malay. Hence, modern studies of standard Malay likewise omit reference to this part of the language. Diffloth (1972) also observed:

The fact that ideophones are semantically unfamiliar (the majority of linguists alive today do not have ideophones in their respective mother tongues) and also difficult to observe for sociological and stylistic reasons can explain this neglect.

For whatever reason, analysis of the ideophones of Malay is sadly lacking. Some forms are cited in dictionaries, particularly those forms which are onomatopoeic. Studies of Malay dialects sometimes mention expressives, particularly with regard to the appearance of nasal vowels (Collins 1976; Wilding 1972; Brown 1927). Forty years ago there was considerable discussion regarding "the directional qualities and tones" of Malay sounds (Maxwell 1936). While there was spirited debate about the premise that all of the sounds of Malay words are based on onomatopoeia (Wilkinson 1936; Gonda 1940), no effort was made to isolate expressives from the rest of the vocabulary. Discussion about the role

of iconic language in Malay has been clouded because those forms which are exclusively iconic, expressives, have not been carefully analysed. While the expressive system of at least one other Austronesian language, Javanese, has been preliminarily defined and described (Uhlenbeck 1971), this is not the case for the expressives of Malay.

The assertion that "there is no clear-cut boundary between expressives and non-expressives" (Carr 1966) is not true. This paper hopes to provide an introductory description of expressives in Malay. The description is based on the Malay spoken in one area of West Malaysia, namely Kedah,² because, as has been mentioned, expressives rarely appear in the standard national languages of Malaysia and Indonesia. The paper is divided into five sections: a brief review of the theory about expressives and iconicity, analyses of Malay expressives and of their relations to what they signify, to other signs in the language system and to the speakers including some remarks regarding iconicity in Malay.

1. EXPRESSIVES AND ICONICITY

The category of words referred to here as expressive has been observed and noted for a long time. Brandstetter (1916:39-40) suggested that in Austronesian languages there were three kinds of "interjections": 1) those evoked by internal psychological processes; 2) those elicited by some external event; and 3) those which express a complete judgement. Those of the second group he further subdivided into words which are imitative of sudden events and those which are not imitative or not related to sudden events. It is this second group with all its subdivisions which constitutes the expressive system of a language. Brandstetter was right to distinguish these expressives on the basis of their relationships to real, external events and, yet, he was correct, too, to group them under the cover term "obscure formations of the emotional impulses". As Jakobson (1965) remarked, "An expressive signals the presence of certain sensations in the speaker."

Brandstetter's use of the term "interjection" for both exclamations and expressives is unfortunately misleading. There is an inherent connection between the expressive and the related event. This connection is one which exclamations do not have. Since Brandstetter's observation there has been some refinement of theory and terminology. Doke (1935) has proposed a semantic definition of the "ideophone"; others (Voeltz 1970, Baker 1938, 1939) suggest syntactic categories for them. There seems to be an accepted typology of the expressive (Johnson 1974). While there is some disagreement as to the scope of the relationship, most authors agree that expressives are in some sense imitative of the

event that evokes them. An expressive belongs to that kind of linguistic sign called icon. "An icon is a non-arbitrary intentional sign - that is, a designation which bears an intrinsic resemblance to the thing it designates" (Pierce 1931).

An expressive, then, conveys in a linguistic sign a sensate experience of sound, sight, touch or feeling in a way which resembles the external event which evokes the perception. There is a correspondence between the word and the perceived event or, rather, "between an acoustic image and a conceptual one, between phonetic and ideational values" (Friedrich 1976). As such, these words are distinct from the elements of language which are arbitrary or conventional correspondences of sound and meaning.³

Exactly how this relationship is effected remains obscure. Few experiments about the nature of iconic language have been undertaken (Wisseman 1954; Brown 1955; Markel and Hamp 1961). Current theories are based on data drawn from various languages and variant interpretations of these data. Often these data do not convincingly demonstrate the validity of any semantic or grammatical approach to expressives (Grossman 1975). At this point, this paper adopts the sound-symbolic approach which insists on the iconic relation of word and perceived event (Diffloth 1973). To what extent this position is justified with respect to the expressives of Malay will be considered later in this paper.

2. EXPRESSIVES AND THEIR SHAPES

As in many other languages, expressives in Malay can be recognised both by their peculiar phonetic qualities as well as by the existence of certain paradigmatic processes restricted to them. What these phonetic and organisational factors are will be discussed in this section.

There are at least two phonetic peculiarities of Malay expressives which mark them off from the rest of the vocabulary: nasal vowels and trilled [r]. It must be admitted that not all expressives involve either of these phenomena. Furthermore there are a few, very rare occurrences of both nasal vowels (in non-predicted environments) and trilled [r] in other parts of the lexicon.⁴ While such phenomena are extremely rare in other parts of the lexicon, they are quite common in the expressive vocabulary.

In general Malay has no 'phonemic' nasal vowels; any nasalisation that takes place is due to the phonetic environment of the vowel. [Riŋɪt] 'dollar'; [kəmɪʔ] 'dented'; [m:ləh] 'to slaughter some animal

with proper Islamic ritual'; [akãʔ] 'root'. Nasalisation occurs immediately after nasal consonants /m, n, ŋ/ or after nasal plus liquid or glide. It also occurs preceding the pharyngeal fricative [ʕ].⁵ In short, nasalisation is predictable - except for the nasal vowels of expressives.

- [pʂʔ] 'of a stone tossed against a tree trunk'
 [tīt tīt] 'of a chick when it is near its mother'
 [siāp siāp] 'of moving very quickly like lightning'
 [kuēʔ kuēʔ] 'of writhing movements (snakes in water, fish in mud)'
 [biū biū] 'of swinging fists (that do not hit the mark)'

In these examples there are no conditioning environments to explain the appearance of nasal vowels. Here nasal vowels are an essential part of the expressives.

Malay spoken in Kedah has no trilled liquid; [R], an uvular fricative, occurs as well as its allophone in final position, [ʀ] (Asmah 1975 and 1977). In expressives, however, both [r] and [R] occur - particularly in words of onomatopoeic character.

- [prep prep] 'of paper being crinkled and crushed'
 [kroʔ kraʔ] 'of brittle objects knocking against each other like water buffaloes horn to horn, wooden floats of a net colliding with each other when a school of fish enters the net, stones in a coconut shell'
 [gren gren gren] 'of a motor scooter warming up'
 [braw braw] 'of heavy rain especially on tin roofs'
 [praŋ] 'of a single piece of crockery falling on cement and shattering'
 [Rop Rop Rop] 'of walking on dry moss in a fallow rice field'
 [cRĕ:] 'of oil sizzling in a heated cauldron'
 [sRop sRāp] 'of new batik brushing against itself when worn'

Something more will be said about the appearance of [r] and [R] in intervocalic position but at this point let it be noted that the appearance of [r] is highly unusual in the non-iconic vocabulary of Malay and yet rather frequent in iconic vocabulary.

Besides these two striking phonetic peculiarities of many expressives there are clear word-building processes for expressives; one might say 'morphology'. There are two main processes: affixation and reduplication including vowel and consonant alternation. These two processes often interact.

In the early part of this century Brandstetter mentioned some of the affixes associated with onomatopoeic words in Malay: [də-, kə-]. Both

Maxwell (1936) and Wilkinson (1936) have noted this affixation process and assigned functions to the affixes.

- (i) the sound: tok; bak; dam;
- (ii) making the sound: kětok; dēbak; lēbak; rēdam;
- (iii) repeating the sound: kělětok; kērětok; gělēbak; kērēdam.

(Wilkinson 1936:75)

Based on the data from Kedah it seems appropriate to sort out two, possibly three, kinds of affixes. There is an affix which indicates changed quality or intensity of the sound (or feeling) perceived - not "making the sound" as Wilkinson suggested. When it appears initially, this affix is [dē-]. It is prefixed to an expressive base.⁶

- [pūt pūt] 'of repeated, 'sucking' pain as of an infected wound'
- [dēnūt] 'of a heart beat or pulse'
- [bum] 'of a ball being hit'
- [dēbum] 'of feet hitting the surface of the water while swimming'

There is another affix which represents preliminary or auxiliary perceptions in addition to the main perception or, perhaps, repetition of that main perception. This affix appears in words that deal with sound perceptions only. When it appears immediately preceding the expressive bases, it is (usually) [kə-].⁷

- [taŋ] 'of a metallic object falling'
- [kətaŋ] 'of cans being rattled against each other; of typewriter keys being hit too hard'
- [cāp] 'of lips smacking'
- [kəcāp] 'of repeatedly chomping on food'

These two affixes, [kə-, dē-], can appear in the same word. The order invariably is /kə+dē+BASE/. This form represents repeated audial phenomena of varying sound quality often with accompanying sounds.⁸

- [kədəkəŋ] 'of a very serious, probably fatal cough' (Note: [kəŋ] 'of hitting someone's head')

When these affixes appear in combination, however, their phonetic appearance often varies: [kə- ~ gə-]; [dē- ~ rə- ~ lə- ~ tē-].⁹ The form [gə-] always precedes the forms with affix [dē-] or, rarely, [rə-]. [-dē-] always precedes bases with initial voiced stops.

- [gədəbaŋ] 'of a small drum; gunfire'
- [gədəbum] 'of a full bucket falling down in a well'
- [gədəbu?] 'of a coconut falling on (wet) sand; of any fruit falling'

Before bases beginning with [p], [-lə-] or [-rə-] appear.

[kələpɔŋ] 'of an empty bucket placed on a stone'

[kələpuʔ] 'of thumping on wood'

[kərəpǎʔ] 'of a raga (ball made of plaited rattan) being kicked'

Before bases beginning with [k], any form may appear.

[kətəkɛŋ kətəkɛŋ] 'of metal struck to metal'

[kətəkam] 'of wood hitting wood (doors slamming)'

[kərəkāt] 'of horse-shoes tossed on cement'

[kədəkɔŋ] 'of a serious cough'

In addition to these affixes and combinations of them, there is possibly a third affix, the infix [Rʋr].

[kiŋ] 'of a small stone tossed against a metal phone pole'

[kriŋ kriŋ] 'of coins shaken in a pocket; of a bicycle bell'

[baŋ] 'of a single piece of crockery falling'

[braŋ] 'of several dishes rattled together, shaken or set down hard; of thunder; of a net (with weights) tossed'

[sit] 'of deep drags taken from a cigarette'

[sRit] 'of a snake moving (in grass?)'

[cīt cīt] 'of a chick near its mother'

[cRīt cRīt] 'of repeated sobbing'

While informants seem to be able to isolate the function of [-r-] as an indication of a continuity of uneven sound,¹⁰ it is unclear that this segment is an affix. Perhaps it is a meaning-bearing element in the composition of the expressive. Although with fairly complete accuracy we can predict that [r] will appear after non-continuant obstruents and [R] will appear after continuant obstruents, that is, there is seemingly allophonic predictability, it is not clear that the two have the same function. Brandstetter (1916:27) commented on a similar dilemma:

In Sundanese and Gayo there are interjections beginning with a mute and a liquid, e.g. Sund. drel, an interjection used of the rattling of musketry fire. At a pinch one might regard the -r- as the infix discussed in #86, in which case the root would only have three sounds, but the r seems to us so essential to the symbolic representation of the sound of rattling that we must decline on this occasion to take it for an infix

This comment as well as the data presented here suggests that within the expressive system the distinction between morphological paradigms and meaning-bearing elements is none too clear. It is hard to say that the 'morphological' affixes in the expressive system are not in themselves iconic. This point will be taken up later.

In addition to affixation, expressives undergo another change in form, reduplication. Some examples have already been cited. They include complete reduplication as well as partial reduplication with

changes in certain vowel and consonant segments. Reduplication indicates a repeated event or, in the case of repetition with different vowels and consonants, two events of different sensate quality. In some cases the expressive is repeated twice, perhaps to stress the continuity of the event.

Simple reduplication:

- [ciēp ciēp] 'of a chick far from its mother'
- [diʔ diʔ] 'of a steady, slowly falling rain; of a stiffening penis'
- [ŋɔŋ ŋɔŋ] 'of quick, straightforward strides'
- [sose sose] 'of spoken English'
- [s^əRaʔq s^əRaʔq] 'when brushing past leaves'
- [dəbum dəbum] 'of a dog swimming'
- [kətəʔ kətəʔ] 'of the waddle of a duck'
- [kələtiŋ kələtiŋ] 'of coins rattled in a bottle'
- [prɔʔ prɔʔ prɔʔ] 'of rattan cables being grasped while scaling a cave wall'

Reduplication with vowel change (and, in one case, [-r-] insertion):

- [klən klən] 'of Thai being spoken',¹¹
- [tup tap tup tap] 'of a light rain on a tin roof'
- [bum bam bum bam] 'of flailing in the water, arms and legs raised above the water and coming down again and again',¹²
- [gedəbaŋ gedəbuŋ] 'of the rhythmic interplay of two drums of different size'
- [prup präp] 'of wet pants cuffs'
- [kən kriŋ] 'of the small pestle and tube (gobek) used to soften betel preparations for toothless elders'

Reduplication with consonant change:

- [ŋũʔ ŋũt] 'of walking with a slow gait while nodding the head'
- [pro prit] 'of many different bird noises'

Reduplication with consonant and vowel change (and [-R-] insertion):

- [waŋ win] 'of oscillating objects (cradles, weaving drunks)'
- [cuʔ cRīt] 'of a broken-down bicycle with too little oil'
- [cuʔ cRāt] 'of walking in a flooded ricefield',¹³

Expressives display certain phonetic peculiarities and have a distinctive system of affixation and reduplication. In what way can these factors be related to the perceived events they represent? Do the sounds have a connection with the perceived experience?

3. EXPRESSIVES AND EVENTS

So far in describing the data I have followed van der Tuuk (1971) in attaching affixes to a base that is usually monosyllabic. But this approach obscures the role that each sound has in conveying a nuance of meaning. Many authors (including Brandstetter 1916, Wilkinson 1936, and Gonda 1949) have commented on the role of vowels in expressing different qualities: largeness/smallness, lightness/heaviness, etc. A few examples are given here.

- [tīt tīt] 'of a chick near its mother'
- [tōt tōt] 'of a telegraphic receiver'
- [piŋ] 'of a stone thrown at a telephone wire'
- [paŋ] 'of a slap'
- [pōŋ] 'of a gendang (kind of drum) struck once'
- [puŋ] 'of gunfire'
- [pri:p] 'of a small bird (Ploceidae like sparrows and munias)'
- [prɛp] 'of paper being crinkled'
- [prap] 'of a school of fish swimming near the surface with tails rising in and out of the water'
- [prup] 'of a crisp food (fried fish, crackers, keropok) being eaten'

Similarly in reduplicated forms vowel difference is indicative of different events in combination or in sequence.

- [bum bam bum bam] 'of thrashing about in the water with arms and legs'
- [gədəbaŋ gədəbuŋ] 'of two drums, small and large, being played'
- [ŋōŋ ŋēŋ] 'of mosquitoes at ears; of a radio with static'
- [nūt nāt] 'of a repeated 'stabbing' pain, severe itchiness' (Compare to [nūt nūt] above)

Nasalised vowels appear before stops when a louder, more resonant quality is signified. Nasalisation also seems to be associated with quick movements. Does its simultaneous superposition on other sounds convey speed?

- [wēt wēt] 'of repeated rapid, back and forth movements of the fingers'
- [siāp siāp] 'of the rapid movement of lightning'
- [cēt] 'of a mosquito bite or medical injection'

There can be no argument that vowel variation conveys a meaning: higher pitched sounds, more resonant sounds, more intense feeling. The vowels reflect a perceived event. Do consonants have similar correspondence to the events?

In final position consonants do seem to have some connection with the event. While nasals, fricatives and stops contrast in use, within each of these classes there is no clear distinction of use among the segments. Final nasals, predominantly /ŋ/ and secondarily /m/, are associated with resonant events. This is connected with the quality of the sound produced by nasal aperture. /m/ seems more associated with explosions and sounds in the water; whereas /ŋ/ appears with metallic, humming and drum sounds. The explanation for this seems unclear.¹⁴

Final stops /ʔ, t, p/ mark abrupt conclusion of sound or sensation in general, in some cases indicating contact. Again the articulatory process involved in the production of these sounds is one of contact and closure. To propose a connection of perceived event and sound seems acceptable.

Final [ɕ] occurs rarely but is always associated with light, hardly touching contact with friction as in the following:

[səRaʔɕ səRaʔɕ] *'of brushing against leaves'*

[buʔɕ buʔɕ] *'of a light breeze'*

Here too there seems a possible connection between the slight somewhat friction-filled contact in the event and the articulation.

Ø in final position is quite rare. The preceding vowel is invariably nasalised and often lengthened. Sounds which fade away are often represented this way; for example, [piũ piũ] *'of swinging fists'*.

Events with abrupt beginnings are described by words with stops in initial position. One can discern some meaning conveyed by choice of voiced or voiceless stop:

[plup] *'of a round object going into a space'*

[blup] *'of feet in and out of mud; of sexual intercourse'*

[pʔʔ] *'of a stone hitting a tree trunk'*

[bʔʔ] *'of a log hitting a wet mound'*

[praŋ] *'of a single dish fallen on cement and shattered'*

[braŋ] *'of several dishes rattled and shaken together but not broken'*

The voiced stop is associated with events involving greater resonance, a quality which distinguishes it from its voiceless counterpart.

Nasals appear initially often with onomatopoeic words describing humming sounds. But why are /p/ and /ŋ/ the initial sounds in words dealing with locomotion? Why is /p/ the initial sound in words dealing with kinds of pain?

[pʔŋ pʔŋ] *'of a straightforward gait'*

[ŋũʔ ŋũt] *'of a slow gait with a bobbing head'*

[pūt pūt] *'of repeated 'sucking' pain'*

It is not clear that this choice of /p/ and /ŋ/ is iconic.¹⁵

Initial frictional continuants /s, c/ mark the beginning of a brushing movement where some contact is made with some friction.

[cu? cRāt cu? cRāt] *'of the contact between feet and mud while walking through flooded ricefields'*

[kēcāp kēcāp] *'of repeatedly chomping on food'*

[cRēt] *'of something being crushed'*

[sRop sRap] *'of new batik brushing against itself when worn'*

The same applies to initial /R/, that is, some contact with friction.

[Rot Rīt] *'of a bicycle without oil'*

[Rop Rop Rop] *'of walking on sand or the dry moss of a fallow ricefield'*

In these cases then there seems to be some perceived connection between the abrasive contact and the sounds made with friction.

Initial /w/, a sound made with both lips, is found in words describing back and forth or oscillating movements.

[weō weō] *'of things or persons moving back and forth rapidly'*

[waŋ win] *'of oscillating movements (like cradles, drunks, etc.)'*

[wēt wēt] *'repeated, rapid back and forth movement of the fingers'*

In earlier parts of the paper attention has been drawn to the role of medial sounds, that is liquids. /r/ and /R/ both seem to have iconic functions in the words they appear in (see p.384). Furthermore, there are indications that the choice of [d, l, r, t] in affixation may also be related to iconicity (see note 9).

In general the sounds which appear in expressives seem to be related to the experienced events they describe. Similarly the sequence of sounds within an expressive is often (?) iconic.

[cu? cRāt] *'of walking in a flooded ricefield'*

[c], initial abrasive contact with the water;

[u], resonance as foot sinks into the mud;

[?], abrupt halt as foot reaches firmer bottom;

[c], friction as foot is withdrawn from clinging mud;

[R], continued friction with mud;

[ā], resonant quality as foot is released from mud (with suction?);

[t], abrupt conclusion as foot is free of mud and water.

[prit] *'of cloth being torn'*

[p], initial tear of cloth;

[r], continued ripping;

[i], with a high pitched sound (this sound is different when the cloth is wet);

[t], abrupt conclusion as cloth is torn through.

(Note this expressive also refers to spitting in small globules, urinating in dribbles and the sound of a referee's whistle)

[braw braw] *'of a heavy rain on a tin roof'*

[b], initial contact of rain on a tin roof;

[r], persistent roaring noise as rain increases in intensity;

[aw], resonant quality.

In non-iconic language, sounds, word-shapes and word-order are distinguishable. In iconic language the word is meant to portray a perceived event (or, better, one's reaction or interpretation of an event). In such a word, each sound bears a meaning. The choice of sounds is not arbitrary; each sound as a relationship to the perceived event. As such it is difficult to distinguish possible 'morphemes' from 'phonemes'; note the dilemma regarding infixed /r/.

The arrangement of sounds within an iconic word is related to a perceived series of events. Neither the individual sounds nor the order in which they are arranged is arbitrary. On the other hand, neither are they exact duplicates of the event. There is scope for variety among the speakers within some range of conformity. More will be said on this subject in section 5 of this paper.

While it is convenient to use a monosyllable stem or base as a starting point for the description of expressives, in fact, each segment in that base conveys a meaning about the perceived event. In most cases that communication is iconic. In some cases the iconic connection is not transparent. It could be that in those cases the connection is conventional.¹⁶ It could be equally true that there is an iconic relationship. The production of sounds is a complex process involving many physical movements and many internal sense experiences. Some features of those movements and sensations may be selected as the acoustic parallel of the perceived event. While there is no evidence to support either possibility, the fact that most of the phonetic segments of expressives in Malay are immediately, patently iconic lends some weight to the possibility that all of the segments are iconic, perhaps in ways not so immediately obvious to the non-native speaker. In short, there is considerable evidence to support the notion that sound-symbolism is central in expressive language.

4. EXPRESSIVES WITHIN THE SYSTEM

In the course of this paper, the terms 'iconic language' and 'non-iconic' or 'logical' language have been used almost as if they represented two different languages. Of course this is not the case. Human language seems to be organised along a spectrum; there is a range spreading from the expressive and emotive to the rational and notional (Brandstetter 1916; Carr 1966). Although iconic and logical elements are different from each other, they seem to complement each other. It seems safe to say that no language is without either component and there are shadings and gradations between them. European literary languages, for various socio-cultural reasons, display minimal use of expressives; whereas Bantu, Korean and Aslian languages seem particularly rich in expressives. The point to be stressed here is that expressives are part of the total language system. As such they share resemblances with the non-iconic element and they interact with that element to form the basis for communication.

Certain phonetic peculiarities have been noted in Malay expressives. It was admitted, though, that while the frequency of occurrence of these peculiarities was unusually high within the expressive component, such peculiarities do occur in the rest of the language, albeit extremely rarely. The range of sounds found in expressives is contained within the total 'phonemic' inventory of the language. Furthermore the constraint on consonant clusters other than occlusive plus liquid that is apparent in expressives is one which operates in the non-expressive items of Malay.

Similarly it seems likely that certain sound changes which occur in Kedah Malay in general also occur within the expressive system. Final /s/ reconstructed for many Austronesian words and appearing in most dialects of Malay appears in Kedah Malay with the phonetic form [ɸ]. (Other authors, for example Asmah 1977, treat this sound differently.)

One could postulate a rule, perhaps diachronic, to explain this divergence:

$$(1) \begin{bmatrix} +\text{continuant} \\ +\text{strident} \\ +\text{anterior} \end{bmatrix} \rightarrow [-\text{anterior}] / __\#$$

For example: *halus → [haluɸɸ] 'fine, delicate'

*tirus → [tiRuɸɸ] 'tapered (especially of tails)'

Expressives like [buɸɸ buɸɸ] ('of a gentle breeze') probably have undergone this same rule. (In other dialects not subject to this sound change the cognate form is [bus bus].)

In Kedah Malay as well as in other dialects, namely Patani and Kelantan Malay (Wilding 1972; Asmah 1975), final stops converge to [ʔ].

(2) [-continuant] → Ø [+glottal] ____#

For example: /kəjaʔp/ → [kəjaʔ] 'firm, fixed'

*kələntiʔt → [kələntiʔ] 'clitoris'

Expressives like [cɛʔ ~ cɛt] ('of an injection or a mosquito bite') as well as [ŋuʔ ŋut] ('of walking with a slowly bobbing head') probably reflect this sound change. Just as in the rest of the language the change from glottalised occlusive to glottal occlusive is not universal and represents a direction the language is heading.¹⁷

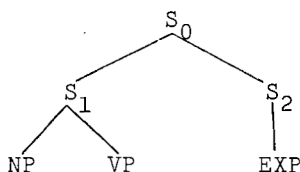
While the affixes used with expressives are unique within the language system,¹⁸ they too follow the restriction imposed on all affixation in Kedah Malay. There are no suffixes. All affixation is with prefixes. In reduplication which involves change in consonant form, the change will take place in the first occurrence of the reduplicated item.

Expressives, then, are subject to the limitations and constraints of the total language system. They must also interact within that system. They must occur within or with the syntax of the language. Most often expressives appear immediately preceding or following the sentence.

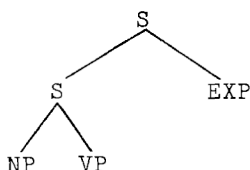
- (1) [hujan tuRun braw braw]
rain, descend, 'of a heavy rain on a tin roof'
'The rain fell with a tremendous uproar.'
- (2) [pəlampon belaga kruʔ krãʔ]
float, MID+behave, 'of brittle things knocking together'
'The floats (on the net) rattled against each other.'
- (3) [bisui aku sakit put put]
boil, I, sick, 'of a steady 'sucking' pain'
'My boil is throbbing with pain.'
- (4) [səRuʔq səRuʔq aku tariʔ kayn di ataq pasiaʔ]
'of something dragged', I, pull, cloth, at, above, sand
'I was dragging some cloth across the sand.'
- (5) [kuaʔ kədəgay kutip anaʔ]
'of hasty collection of objects', collect, offspring
'(We) collected the young (birds) one after the other.'

In these sentences the expressive is in a sort of appositional or, better, equational relation with the logical statement. The two statements, iconic and notional, seem to say the same thing. The one explains the other. In (2) the first part tells exactly what happened: 'floats

were moving'; the second part expresses the rattling sound as well as the turbulent, erratic quality of that moving. A diagram of their syntactic relationship might be:



This implies that the expressive itself is a sentence. Maybe this is so but just as the labels 'phoneme' and 'morpheme' have dubious value in describing expressives the label 'sentence' is equally misleading. While it is true that an entire concept is being expressed, it is not exactly clear what is being predicated of what. Only circumstances can make that clear. This will become more apparent when speaker attitudes are discussed. For the time being it seems best to present as a tree diagram the following:



We are reluctant to specify a label for the node dominating the expressive.

Sometimes the expressives occur after the word /bupi/ ('sound') or /kəna/ ('experience (something unpleasant)').

- (6) [buah macan luRuh bupī gedəbu?]
 fruit, mango, drop, sound, 'of a fruit falling through branches to the ground'
 'A mango dropped through the leaves to the ground.'
- (7) [kəmaRin lan kəna piʔəp]
 yesterday, Lan, experience, 'of a rotan cane passing through the air'
 'Yesterday Lan got it with the cane.'

Note that in (6) it is possible to delete /bupī/ and the sentence remains acceptable. /bupī/ then functions as a sort of connector¹⁹ between iconic and logical statements. It is with this connector that some expressives make their way into written Malay.²⁰ In (7) the situation is different. In this sentence the format is perhaps closer to that suggested for (2). The sentence [kəmaRin lan kəna] ('yesterday, Lan, experience') can usually stand alone with the meaning 'Yesterday Lan got it.' [piʔəp] serves to express the quality of that unfortunate

experience with a word quite vivid, emotional and specific for most Malay schoolboys.

There are some instances where an expressive occurs in the middle of a sentence.

- (8) [bila dia pa:ŋ kena baRu lah təkəpəh kəpəh təketaʃ ketaʃ]
when, III, 'of a slap', experience, new, EMPH, INAD+shake-shake, INAD+shiver-shiver

'When he gets it good, then he'll shake and shiver with fear.'

Certainly in meaning this construction is similar to (7) only the expressive has been placed before the word /kena/ ('experience'). This may represent a transformation whereby the expressive is optionally moved closer to a relevant item for stylistic purposes. It is possible to postulate a further transformation for the following sentence.

Speaking of a minor scrape a car received,

- (9) [dia cẽʔ]
 III, *'of slight abrasive contact'*
'It just nicked (it).'

One might suppose a series of transformations:

- */dia kena cẽʔ/
 */dia cẽʔ kena/ I. *'expressive placement'*
 /dia cẽʔ/ II. *'/kena/ deletion'*

On the other hand, it may not be necessary to propose a hypothetical 'standard' deep structure for sentences with expressives. Since expressives seem to be outside the scope of a sentence they can be fitted in where they seem to the speaker to be appropriate. This kind of analysis is pleasing but it does not account for the tendency of expressives to become adjectival.

In addition to sentences like (9) where, without the analysis proposed here, it would be difficult to classify [cẽʔ] as other than verbal, sentences like (10) also occur.

- (10) [apa bunɪ prɪt prɪt tu]
what, sound, 'of ripping cloth', that
'What's that ripping noise?'

Here the appearance of the deictic [tu] provides somewhat convincing evidence that the expressive has become a verbal or functions as a verbal. The fact that the affixes which indicate verbal relationships are often not used in spoken Malay facilitates the movement of expressives into the logical system of language.²¹

- (11) [aku pi pantay anin may buʋq buʋq]
I, go, seashore, wind, come, 'of a light breeze'
'I went to the beach; the wind blew gently.'

In this sentence it is difficult to determine if the expressive stands in an equational relation to the sentence /aŋin may/ or if it is a kind of verbal. This ease with which expressives fit into the notional patterns of the language is all the more apparent when expressives appear with verbal affixes.

- (12) [dia sakay jit sampay mənəRʂh]
 III, *strike violently, Aziz, reach, INTR+'of a low rumbling like snoring, groaning and distant thunder'*
'He beat Aziz until he groaned.'
- (13) [anaʔ ayam tu bəcRʂt]
offspring, chicken, that, MID+'of something animate being crushed'
'That chick was crushed.'
- (14) [ulaʃ tu təkuʂʔ kuʂʔ jalan di aiāʃ]
snake, that, INAD-'of writhing movements', move, at, water
'That snake slithered away in the water.'

In these sentences the expressives appear marked by the peculiar characteristic of vowel nasalisation but they are affixed by the verbal markers: /mən-/ for intransitive verbs; /bə(R)-/ for middle voice; /tə(R)-/ for inadvertant actions. The expressive has been drawn into the notional system of language. It may happen that such an expressive loses its vivid force for the speakers. In (15) this may be the case.

- (15) [buRəŋ tu kukʂʃ krʂʔ krʂʔ]
bird, that, coo, 'sound of raspy bird noises'
'The bird cooed, cooed and trilled.'

Apparently kukur ([kukʂʃ]) was not sufficiently vivid for the speaker so he felt the need to add a fresh, patent expressive.²² On the other hand, this may be a string of expressives, the one more specific than the other.

In general it may be said that expressives function in apposition to the logical description of the event which they describe. In some cases the expressive is drawn into the elastic, 'omnivorous' Malay verbal system. While retaining its iconic force, it assumes verbal affixes and a verbal function within certain sentences. Since language includes a spectrum of emotive and notional components, it should not be surprising that there are phenomena that seem to partake of both components. It seems likely that the Malay expressive for the sound of spoken Thai [kləŋ kləŋ] developed from [kləŋ] the Thai word (southern dialect) for 'language'. Few, if any, monolingual speakers of Malay would be aware of that connection. Hence, it seems there is a two-way movement between the two poles of language. This movement and the failure to perceive its dynamic, unstable character is at the root of the unacceptable explanations of Malay word-building found in C.N. Maxwell's writings.

5. EXPRESSIVES AND EXPRESSERS

In this section, a brief summary of the attitudes of the speakers of Malay towards expressives is noted. Most speakers have definite opinions about the relationship of expressives and the perceived events they portray. Some speakers have commented on the position of expressives in the total language system. Perhaps following the clues of these informant attitudes we can evaluate the findings of the earlier sections.

There was a consensus that the words had a clear connection with the perceived event. In the case of onomatopoeia, the words were said to be based on the sound of the event. In fact, one should use the expressive only at the moment the event occurs. One informant was certain that it was incorrect to use the word out of context or to use it in a circumstance that was inappropriate to the expressive. All agreed there was some difference of interpretation both of the perceived event and of the way to express it. Animal noises were thought to be clear-cut; they speak for themselves and so only certain orders of sounds can represent them. The facts, however, seem to bear out the comment of one young informant who said that the sounds of the expressive are relevant at the moment of reaction and that each person's reactions are different.

This became increasingly clear in the course of the study. When asked to identify a sound one speaker would offer one expressive; in another instance another speaker might offer another expressive.

[di? di?]
[tup tap tup tap]} } 'of a light rain'

If a speaker spontaneously inserted an expressive in his speech and was asked to identify exactly what the expressive referred to, there often was denial that the expressive was ever used. Otherwise there was considerable reflection as to what was being captured by the word. When that word was presented to another speaker and he was asked what it referred to - a common enough procedure for other vocabulary items - the response would sometimes be that the other person invented the word. At other times the speaker would give a meaning almost exactly the same as the first speaker. For example:

[cu? cRīt] Speaker 1: 'of an old bicycle'
Speaker 2: 'of a bicycle that needs oil'

On other occasions an expressive might elicit an entirely different meaning. For example:

[di? di?] Speaker 1: *'of a light rain fall'*

Speaker 2: *'of a slowly stiffening penis'*

When further cross-checked with other speakers, the response would often be: "Of course, that just the word for it! What a fine way to express it!" The creative speaker was admired for his ability to catch some nuance of sensation with a few appropriate sounds. Some speakers were noted as being particularly prone to use expressives or particularly good at using them. On other occasions people would discount another speaker's use of an expressive for a certain circumstance as being inconsistent with the actual sounds or perceptions.

The general impression is that there is a broad range of interpretation and inventiveness. Some expressives are rather commonplace and heard often; [pru?] *'of a rattling noise'* is used frequently and is coming to mean *'place something down coarsely'*. Other expressives seem to be part of an expressive vocabulary that is rather stable. But this may not be the case for all expressives. Some seem to be passing out of the range of acceptability. A recorded narrative of an 80 year old man was punctuated by many expressives. One of them caused confusion and later laughter when played for younger informants.²³ Some expressives are new, spontaneous inventions created on the iconic principles outlined in section 3. There are criteria for judging the appropriateness of a given expressive to a given circumstance but everyone admits that it is still dependent on how the speaker feels - that is, what aspect of the event he focuses on.

Expressives are recognised as a class. Speakers have variously referred to them as *bahasa runcit*, *bahasa serpihan* and *bahasa saduran*. These reflect three different qualities of the expressive system. The first is that expressives exist in great quantity; there is an unlimited supply of many different kinds of these words. There will always be one suited to the particular needs of a circumstance.²⁴ The second phrase refers to another quality of iconic language. Expressives are fragments. They are not complete in themselves. In Malay expressives obligatorily appear with logical sentences which specify the locus of the emotions conveyed. Expressives do not constitute a complete language system in themselves. This is further evidenced by the third quality captured in these phrases. Expressives are the gilding of the total language system. While they do not stand by themselves, they constitute the colourful, rich coating on the surface of logical language. They contribute a vivid, sparkling quality to spoken sentences and, in that sense, sentences too can not stand apart. Iconic and notional language are fused together and inseparably important to each other.

N O T E S

I have to say thank you to Gérard Diffloth who first drew my attention to expressives over three years ago. He also provided an informal, informative atmosphere in his lectures on Semai expressives. The research upon which this paper is based took place on Langkawi, Malaysia. The people there showed their good nature and sense of humour as I sorted out their language. Osman Mahmud was especially patient. A note on symbols: final stops in Kedah Malay are glottalised; in this paper that glottalisation is not ordinarily indicated. Although standard Malay orthography inserts /ə/ e between occlusive and liquid, that insertion seems predictable and is not noted in the paper except in certain verbal affixes.

1. In Abdullah Hassan's work (1974:237-8) one can find: *debap*, *decit*, *degam*. These 'verbal roots' come from iconic bases: /bap, cit, gam/ respectively.

2. More specifically the data are drawn from fieldwork done in Padang Matsirat, Langkawi. There are some limitations to the use of only the material I collected there in a two-three month period. The amount of expressives noted is rather small and mostly representative of audial sensation. These may reflect the language of a small subgroup of Malay speakers so the use of Malay in the title and elsewhere is questionable. However, to my knowledge there is no reliable source for the study of expressives in Malay. Dictionaries do not ordinarily mark them as a class and sometimes offer misleading information. I tried to verify some of these expressives among other speakers of Kedah Malay and Malay dialects in other parts of the peninsula. I was amazed at the number of cases of correspondence of meaning for words that have never found their way into a dictionary.

3. Friedrich (1976) distinguishes between conventional and arbitrary signs. Conventional signs cannot be said to be arbitrary.

4. In Collins 1976 I cite a few of these instances. /siã/ 'small, stackable containers for transporting food'; /trit/ 'the thread of a screw'. These borrowings as well as cross dialectal borrowings, e.g. /goreŋ/ ('fry'), sometimes reflect these phonetic peculiarities.

5. See Abdullah Hassan 1967 for a complete discussion of predictable nasalisation in Kedah Malay.

6. In his study of Toba Batak van der Tuuk (1971) suggested that in certain onomatopoeia words the form originated from a monosyllabic stem preceded by h or g with the infixation of um and ar. It is interesting to note that many forms similar to those of Batak appear in Malay dictionaries, for example, gemercing, gemerlap, etc. Forms like these do not occur in Kedah Malay.

7. There is one recorded instance of /gədum gədum/. Choice of /g/ over /k/ may be dictated by the following voiced stop of dum.

8. Informants have stressed the presence of auxiliary noises. Fruit falls with a thud (/buʔ/) but it is preceded by snapping leaves and branches so /gədəbuʔ/.

9. Because of the limited data it seems impossible to determine if these variations can be predicted on some clear phonetic grounds in all cases. Siti Hawa (1970:243) notes that /k/ and /g/ often are interchangeable in Kedah Malay; some of the forms she cites are expressives (gerisik: kerisik). Note too that /də, tə, lə, rə/ share the same articulatory position. Manner of articulation differs. It is possible that choice of the specific consonant of this affix has an iconic (and therefore somewhat idiosyncratic) underpinning. /r/ is for rattling noises like horse-shoes on pavement; /t/ is for abrupt noises like hard objects hitting each other; /d/ for resonant staccato noises like a serious cough. Two forces intersect here: the one phonetic assimilation, e.g. voiced stop before voiced stop; the other iconicity, e.g. trills for rattling noises.

10. He actually said bunyi yang bergulung-gulung, sounds which continuously roll.

11. /kleŋ/ in the dialect of Thai spoken in certain villages on the north coast of Langkawi means 'language'.

12. In this word the initial base /bum/ is repeated with vowel change to indicate changed audial quality. Then that reduplication is reduplicated to show repeated action. Informants insisted that the variation reflected the difference in sound created by raising arms and legs in the water. This seems reasonable compared to other forms cited in the paper, namely /bum, dəbum, dəbum dəbum/.

13. Here again the informant was insistent that /cu?/ represented the step down and /cRāt/ the movement of the foot upward.

14. Interestingly enough the tendency of the dialect is for final N to be realised as /ŋ/ rather than /m, ŋ/. Is this another peculiarity of the expressive system?

15. Grossman (1975:35) suggested that the resonance created in the nasal cavity by /ŋ/ is "an oral counterpart to the physical quality of movement or rippling of shape". Perhaps it is this factor which is involved in selecting nasals for the description of locomotion. It might be possible to consider that the slight movement involved in producing /ŋ/ is associated with the onset of pain.

16. See the results of Markel and Hamp's (1961) experiments.

17. These two rules might be more elegantly represented in Ladefoged's (1971) feature system. (A binary notation is used here rather than a multi-valued notation; this divergence is not too significant.)

(2) $\left[\begin{array}{l} +\text{stop} \\ -\text{back} \\ +\text{glottalic stricture} \end{array} \right] \rightarrow [+back] / __\#$

(1) $\left[\begin{array}{l} +\text{sibilance} \\ +\text{tension} \end{array} \right] \rightarrow [-\text{tension}] / __\#$

In particular the change from glottalised stop to glottal stop is better represented this way because then this is a case of coarticulation not a case of a sequence of two articulations as might be inferred from the notation on p.391.

18. /kə-/ does in fact occur as both a verbal affix and a nominal affix. However in both cases it is ordinarily accompanied by the suffix /-an/. Of course, these remarks are limited to standard Malay. While

I have not recorded any occurrences of verbal /kə-/ in Kedah Malay, there are a few cases of the nominal /kə-/. In these cases it occurs without the suffix /-an/, for example, /kələŋka?/ 'equipment'.

19. Grossman (1975) might say 'frame' as in the English sentence: 'The wind went whoosh.' Here 'went' is considered a frame for the onomatopoeic expressive 'whoosh'.

20. Zainu'l Ahmad (1927) cites a number of cases especially p.330.

21. But even here note that it is possible to move the expressive out of the apparent NP. So, [apa prit prit buni itu] and [apa buni itu prit prit] are acceptable. Verbals cannot be moved in a similar fashion.

[apa buni besaʔ tu]
what, sound, big, that
'What was that loud noise?'

This sentence cannot be similarly shuffled: *[apa buni itu besaʔ] and *[besaʔ apa buni tu] are clearly not acceptable.

Furthermore evidence exists that the expressives are not absorbed into the verbal system. They cannot be negated with the verbal negative: tidak, dak. If negation is possible at all, the non-verbal negative is used: bukan. Even in this case, though, negation is only possible as a comment on someone else's choice of expressives. For example:

- A. [buah macaŋ luRuh buni gədəbuʔ] (cf. #6)
 B. [bukan gədəbuʔ; dia buni laŋn, puʔ]
 NEG, 'of falling fruit', III, sound, other, 'of falling fruit'
 'Not gedebuk! It sounded different: puk.'

What is being negated is another's opinion, the preceding statement of the discourse. The scope of the negation is not the expressive itself but the entire statement. It is impossible to open a discourse with a sentence like:

(6a) [buah macaŋ luRuh bukan (buni) gədəbuʔ] (cf. #6)

Expressives themselves are not subject to negation either as verbals (with [tidaʔ]) or non-verbals. What is their status then in the language?

22. If it is true that kukur lost its vividness for that speaker it might be related to the sound change that final /r/ undergoes in Kedah Malay, *r → ʔ / ____#. The effect of the trill or fricative is lost when the sound pharyngealises.

23. The expressive /kua? kədegay/ was recorded in a narrative about collecting edible birds' nests in neighbouring islands (see sentence (5)). This industry was common some 40-50 years ago. When this narrative was played for highschool students in the village, some could not identify it as an expressive at all and most were amused. It is likely that this expressive belongs to an older 'genre' of expressives. Or perhaps it was an idiosyncratic creation which was not well-received. In any case the point remains the iconic base that led the old man to use/create this expressive was not the same basis that would be acceptable to speakers 60-70 years his junior.

24. Since runcit could have an overtone of petty and unimportant, I specifically asked for clarification. He said he did not consider those words trivial, only exceedingly numerous.

BIBLIOGRAPHY

ABDULLAH HASSAN

- 1966 *Perbandingan tatabunyi antara dialek Kedah dan dialek Perak*. Latihan ilmiah (S.M.) Universiti Malaya.
- 1974 *The Morphology of Malay*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

ASMAH HAJI OMAR

- 1975 Language in Minority/Majority Group Relations: The Case of the Diversity of the Malay Dialects. Paper read at the Workshop on Linguistic Problems in Minority/Majority Relations, Bangkok.
- 1977 *The Phonological Diversity of the Malay Dialects*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

BAKER, J.A.

- 1938 'Notes on the Meanings of some Malay Words II'. *JMBRAS* 16/2:47-50.
- 1939 'Notes on the Meanings of some Malay Words, Part III. (Kedah Words)'. *JMBRAS* 17/1:107-20.

BLAKE, F.R.

- 1977 'Reduplication in Tagalog'. *American Journal of Philology* 38:425-31.

BOLINGER, D.L.

- 1950 'Rime, Assonance, and Morpheme Analysis'. *Word* 6:117-36.

BRANDSTETTER, R.

- 1916 *An Introduction to Indonesian Linguistics*. (Translated by O. Blagden). London: Royal Asiatic Society.
- 1917 *Die Reduplication in den indonesischen, indischen und indogermanischen Sprachen*. Luzern.

BROWN, C.C.

- 1927 *Kelantan Malay*. Singapore: Government Printing Office.

BROWN, R.W.

- 1955 Review of *Untersuchungen zur Onomatopoeie ...* by Heinz Wisseman. *Language* 31:84-91.

CARR, Denzel

- 1966 'Homorganicity in Malay/Indonesian in Expressives and Quasi Expressives'. *Language* 42:370-7.

COLLINS, J.T.

- 1976 'Vokal sengau di dalam bahasa Melayu Kedah (Langkawi)'. *Dewan Bahasa* 20:19-31.

DIFFLOTH, G.

- 1972 'Notes on Expressive Meaning'. *CLS* 8:440-7.
- 1973 Expressives in Semai. Paper read at the First International Conference on Austroasiatic Linguistics, Hawaii.

DIMOCK, E.C.

- 1957 'Symbolic Forms in Bengali'. *Bulletin of the Deccan College Research Institute* 18:22-9.

DOKE, C.M.

- 1935 *Bantu Linguistic Terminology*. London.

EMENEAU, M.B.

- 1969 'Onomatopoeitics in the Indian Linguistic Area'. *Language* 45:274-99.

FRIEDRICH, P.

- 1976 'The Symbol and its Relative Non-arbitrariness'.

GONDA, J.

- 1940 'Some Remarks on Onomatopoeia, Sound-symbolism and Word Formation à propos of the Theories of C.N. Maxwell'. *Tijdschrift voor Indische Taal-, Land- en Volkenkunde* 80: 133-210.
- 1949 'The Functions of Word Duplication in Indonesian Languages'. *Lingua* 2/2:170-97.

GOUDGE, T.

- 1950 *The Thought of C.S. Pierce*. Toronto.

GROSSMAN, R.

- 1975 Bahnar Expressives. M.A. essay, University of Chicago.

HAAS, M.R.

- 1942 'Types of Reduplication in Thai (with some Comparisons and Contrasts taken from English)'. *Studies in Linguistics* 1/4:1-6.

HAMILTON, A.W.

- 1922 'Penang Malay'. *JSBRAS* 85:67-96.
- 1925 'Corrigenda'. *JMBRAS* 3/3:56.

IDA AHMAD

- 1969 'Fonoloji bahasa Kedah'. *Dewan Bahasa* 13:531-7.

JAKOBSON, R.

- 1965 'Quest for the Essence of Language'. *Selected Writings II*, 345-59. The Hague: Mouton

JOHNSON, M.

- 1973 Towards a Definition of the Ideophone in Bantu. MS.
- 1974 'Phonetic Play in Zulu'. *CLS* 10:

LADEFOGED, P.

- 1971 *Preliminaries to Linguistic Phonetics*. Chicago: University of Chicago Press.

LOPEZ, C.

- 1950 'Reduplication in Tagalog'. *Bijdr TLV* 106:151-311.

MARKEL, N.N. and E.P. HAMP

- 1961 'Connotative Meanings of Certain Phoneme Sequences'.
Studies in Linguistics 15/3-4:47-61.

MAXWELL, C.N.

- 1932 *The Malay Language and How to Learn it*. Kuala Lumpur.
- 1933 *An Introduction to the Elements of the Malay Language*.
Kuala Lumpur.
- 1936 'Light in the Malay Language'. *JMBRAS* 14/3:89-154.
- 1938 'Language Affinities'. *JMBRAS* 16/1:1-99.

NOR EIN MOHD NOOR

- 1977 'Onomatopia dalam bahasa Malaysia'. *Dewan Bahasa* 4:253-63.

PIERCE, C.S.

- 1931 *Collected Papers*, vol.2: *Elements of Logic*. Cambridge,
Mass.: Harvard University Press.

SAPIR, E.

- 1921 *Language: An Introduction to the Study of Speech*. New
York: Harcourt, Brall.

SITI HAWA SALEH

- 1970 *Hikayat Merong Mahawangsa*. Kuala Lumpur: University of
Malaya.

THOMPSON, M.H.

- 1953 *The Pragmatic Philosophy of C.S. Pierce*. Chicago: Univer-
sity of Chicago Press.

THUN, N.

- 1963 *Reduplicative Words in English*. Dissertation, Uppsala.

TUUK, H.N. van der

- 1971 *A Grammar of Toba Batak*. The Hague: Nijhoff. (Original:
Tobasche Spraak[k]unst, 2 vols, 1864, 1867.

UHLENBECK, E.M.

- 1971 'Peripheral Verb Categories with Emotive-expressive or Onomatopoeic Value in Modern Javanese'. *Travaux Linguistiques de Prague* 4:145-56.

VOELTZ, E.F.K.

- 1970 'Toward the Syntax of Ideophones in Zulu'. In: C-W. Kim and H.F.W. Stahlke, eds *Studies in African Languages and Linguistics*. Champaign, Canada: Linguistic Research Inc.

WESCOTT, R.W.

- 1971 'Linguistic Iconism'. *Language* 47:416-28.

WILDING, A.

- 1972 *Introducing Pattani Malay, Part B: Outline of Pattani Malay Sounds*. Yala.

WILKINSON, R.J.

- 1936 'Onomatopoeia in Malay'. *JMBRAS* 14/3:72-88.

WISSEMAN, H.

- 1954 *Untersuchungen zur Onomatopoeie 1: Die sprachpsychologischen Versuche*. Heidelberg: C. Winter.

ZAINU'L-ABIDIN BIN AHMAD

- 1927 'Pair-words in Malay'. *JMBRAS* 5/2:324-38.