CHAPTER TWO

PAST WORK ON MALAY INTONATION

2.1 Introduction

In this chapter, reference will be made to previous studies on Malay intonation, although thus far not much work has been carried out in this field. The existing material in intonation looks insignificant compared with the number of scholarly studies devoted to English intonation.

To start with, there is no basic work on the subject, all we have is a series of articles and some brief sections in books dealing with Malay grammar. The need for a more explicit description of Malay grammar and the need for materials that would be useful for teaching purposes became a major impetus for the works on intonation published in the 1980's.
2.2 Scope of Examination

In general, the studies on Malay intonation have as a common starting point the assumption that sentences in Malay are intonationally marked, and that consequently pitch phenomena in speech have been studied in relation to the linguistic structure of the sentence.

All the studies have chosen the syntactic unit of the sentence as the unit of reference within which intonation features of Malay are identified. The various "functions" of intonation are examined then within the structure of sentence.

Any attempt to determine the exact nature of the relation between Malay intonation and grammar depends crucially on the definition and scope of grammar. The works on Malay intonation, in particular those by Asraf (1981), Hashim (1981), Arbak (1981), and Nik Safiah et al (1987) subscribe to the traditional view of grammar whose main concern has typically been with the functions which grammatical classes perform in the sentence (e.g. certain parts of speech function as subjects, others as predicates, etc.) and with the functions which certain types of sentences are said to fulfil (e.g. a declarative sentence makes a statement, an interrogative sentence asks questions, an imperative sentence gives commands, etc.).
 Needless to say, in the traditional view of grammar, intonation appears to relate primarily to the grammatical category of mood (declarative, interrogative, exclamative, imperative) or in functional terms to sentence type. Implicit in this traditional view of grammar and intonation is the hypothesis that each major sentence-type is associated with a given intonation contour, tune or tone (Schubiger, 1958:40).

    Common to most studies on Malay intonation is the assumption that an investigation of Malay intonation should begin by examining the role of intonation in grammar. Intonation is perceived as a phenomenon which operates on two levels:

    (1) On the level of sentence, i.e. as a signal of grammatical structure, allowing the speakers of Malay to differentiate one logical mode of expression from another, (e.g. questions, statements, commands, etc).

    (2) On a level smaller than a sentence, i.e. as a signal of phrase division, enabling separation of, for example, a phrase which functions as the subject and that which functions as the predicate.
Amongst these studies, there appears to be a general consensus as to which theoretical approach is preferred. Asraf, Hashim, Arbak, and Nik Safiah et al. follow the American models of Pike (1945), Wells (1945), Trager & Smith (1951), subdividing the pitch contour into four phonemic levels.

Although Asmah's (1980) *Nahu Melayu Mutakhir* is not a work on Malay intonation as such, a section which she devotes to the phenomenon of focus in Malay has some relevance here. Unlike the other writers already mentioned, Asmah's approach to intonation draws heavily on Halliday's work. Asmah who concurs with Halliday believes that the choice of information focus is realised by the assignment of prominence. That portion of the message which is most informative is realised by the nucleus, which is regarded as the most important element in intonation.

### 2.3 Descriptive Framework

On the whole there is a general conformity that Malay intonation may be analysed and described in terms of intonation contour, pitch levels, stress and pause and their interaction all play a part in the realisation of Malay intonation.
Following the approach of the American tradition, in particular that of Trager & Smith, Asraf, Arbak, Hashim and Nik Safiah et al describe pitch patterns as a series of levels transcribed by the corresponding numerals: from 1 for the lowest to 4 for the highest. These superscript numerals are placed at specific positions in the phrase as follows (with optional in parenthesis):

**INITIAL (CENTRE) (PREFINAL) FINAL**

where the INITIAL and FINAL are obligatory.

A representation in terms of pitch levels is equivalent to the specification of a step-function, of the type illustrated in the following example from Nik Safiah et al (p. 58):

1. *Ali menendang bola itu* "Ali kicks the ball."
   
   **Ali** kicks **ball** the

2. *Pegawai itu pengurus* "The officer is a manager."
   
   **Officer** the manager
One question that may be posed is whether this step function is a reasonable representation of pitch/Fo contours. Crompton (1980) believes it is not since it does not bear any resemblance to observed pitch/fundamental frequency contours. The segmental phoneme is semantically discontinuous, whereas intonational movement is continuous.

In Nik Safiah's et al and Asraf's transcription pitch phoneme 2 does not only indicate a mid-pitch level but more importantly it indicates that the syllable marked with 2 is not stressed. Pitch 2 usually occurs at two locations: at sentence-initial to mark the beginning of a sentence and at a phrase boundary to separate one phrase from another in simple sentences.

Hashim (1981: 5) postulates that the prominent or important lexical items receive the primary stress and are usually accompanied by a high pitch level of either 3 or 4, while the other words in the same utterance which are marked 2 or 1 do not have a primary stress, e.g.

(3) Mereka itu telah berpindah "They have moved."

They that have moved

Notice that pitch level 2 appears at sentence initial and also after a word with a prominent syllable to indicate that the syllable following it is unstressed. In the above sentence, the word "itu" has a prominent syllable
which receives a primary stress and is accompanied by a high pitch, i.e. level 4 and is immediately followed by level 3. The subsequent pause-defined group begins on level 2, and the pitch presumably continues to be low until the word "berpindah" where it ascends to level 4 on the last syllable "dah" which also has a primary stress. Nevertheless, no attempt has been made to identify which syllables in the two words have a recognisable amount of prominence that makes them stand out from the neighbouring syllables.

This is indeed surprising since "itu" and "berpindah" are words with more than one syllable, and stress and pitch are prosodic features dependent on the syllable rather than word. Examining the location of the non-final and final phonemes, one tends to assume that the final syllable in "itu" is the prominent syllable since pitch phoneme 4 is placed close to it and the syllable "dah" in "berpindah" with its pitch phoneme 3 is the prominent syllable.

Hashim's claim that words with a low pitch of either 1 or 2 are not accompanied by a primary stress implicitly suggests that the occurrence of initial prominent syllables is not possible, since on examining his data and the data of Nik safiah et al and Asraf, it appears that all utterances begin on pitch level 2. As regards this, one may face the problem of how to indicate prominence to an utterance that is made up of one syllable only (e.g. "tak" (no), "ya" (yes), "nak" (want), etc since at utterance-initial only pitch
phoneme 2, which denotes the feature (-stress) rather than (+stress) can be used.

At this juncture, it is not too far-fetched to say that the concept of prominence as understood by these writers seem to differ from most of the works in the American tradition which treat stress and pitch separately since stress is viewed as a relative degree of loudness while pitch is taken as a constituent of intonation. For structuralists such as Trager/Smith, stress is thought to have phonemic character, differing degrees of stress representing independent phonemic entities and these stress phonemes are assumed to function independently of pitch.

In fact, associating primary stress with pitch in creating prominence is a view which is more in line with the British tradition which fully acknowledges the interrelatedness of stress and pitch in intonation (cf. Kingdon, 1958; Halliday, 1967; Crystal, 1969; Cruttenden, 1986; Couper-Kuhlen, 1986; and Chapter Seven of this thesis). If such is the case one would then begin to question the preference of the Malay writers mentioned for the levels approach in the analysis of Malay.

Following Pike-Trager & Smith's notation, they advocate marking pitch at the beginning and end of every contour. The first issue which arises here is that whether it is really necessary to mark pitch level at the beginning
of every utterance. The tonetic analysis which represents one of the trends in the British approach to intonation (which is in accord with Bolinger) would not have marked the pitch of initial stressed syllable, since it is assumed to be pitched slightly above the bottom of the normal voice range (cf. Cruttenden, 1986; Couper-kuhlen, 1986).

Unlike the typical levels analyses which involve three terminal junctures (roughly characterised as the last pitch direction on the last syllable of an intonation group, e.g. falling (marked by #), rising (marked by ||) and level (marked by |), the analysis of Malay, however, chooses to dispense with the terminal contour. In the Trager-Smith system, for instance, /1#/ represents a terminal fall from level 1, /2#/ a terminal fall from level /2/, /1||/ rise from level /1/, /3|/ a terminal sustention at level /3/ and so forth (Trager & Smith, 1951:41-52). All of these terminal junctures thus have different effects on the pitch contour immediately preceding them.

Consequently, one problem that one can immediately foresee with an analysis that excludes terminal pitch movements is in cases where the final pitch shows a fall yet that fall is followed by a terminal-rise or it shows a final pitch rise but is followed by a terminal fall. For the purpose of representing this opposition between the terminal pitch and the pitch contour immediately preceding them, the writers should have at least represented the falling and rising using some other representation since without it the description is not
complete. Arbak (1981:15), for example, suggests the use of arrows proposed by Gleason (1965) to show rising ( ), falling ( ) and (->) level pitch contours.

Another feature of the levels approach which is not adopted is the four stress levels (primary //, secondary //, tertiary //, weak //) which supplement the four pitch levels mentioned earlier. Instead primary stress is indicated by 3. Implicit here is that the other pitch phonemes such as 1, 2 and 4 do not occur on stressed syllables. One problem that may arise is the difficulty to indicate a syllable that has a primary stress yet is accompanied by either a low or an extra high pitch level.

2.4 Pause-defined Units

Hashim equates units of intonation with pause-defined units. In his opinion, the presence of pause in Malay indicates an intonation boundary. He posits a one to one correlation between pause-group and sense-group. Since the term "sense-group" is not defined, it is assumed that his sense group corresponds with that defined by Kingdon, which is accepted by most prosodians as "groups of words that have a semantic and grammatical unity - not necessarily complete" (1958:162ff).
According to Halim (1989) a sense group must contain a nuclear accent and based on this assumption he equates pause group with nuclear pause-group. Whether Hashim's pause group includes a nucleus or not is not made explicit. However, based on what is generally accepted it is assumed that intonationally a pause-group contains a nuclear syllable.

The forms of pause fall into two categories: final pause and tentative pause. In the following example, a final pause (marked by //) indicates the end of the utterance or contour and the tentative pause (marked by /) marks the boundaries of minor syntactic constituents, e.g. separating the subject "mereka itu" (they) from the predicate "telah berpindah" (have moved) as in (4) below:

(4) Mereka itu/ telah berpindah//
    They that have moved
    They have moved

The tentative pause is said to be marked by a slight gap in the speech and sometimes the gap may be filled by a prolongation of the last sound of the preceding word.
The pitch movement may be unidirectional (falling or rising) from the CENTRE to the FINAL point or from the INITIAL to the FINAL point, or it may be bidirectional (falling-rising). In the latter case, a PREFINAL point specifies the level at the pivot, for example:

**UNIDIRECTIONAL PITCH MOVEMENT**

(5) \[ \underline{\text{matsuk}^3} \] (rising from I to F)

*come in*

(Nik Safiah et al, p. 60)

(6) \[ \underline{\text{orang}^4 \text{tu}^4 \text{guru}^4} \] (falling from C to F)

*That person is a teacher.*

(Asraf, p. 6)

**BIDIRECTIONAL PITCH MOVEMENT**

(7) \[ \underline{\text{buku}^4 \text{sayang}^4} \] (falling at PREF to rising at F)

*That book is mine*

(8) \[ \underline{\text{orang}^4 \text{guru}^4} \] (falling at PREF to rising at F)

*That person is a teacher*  
(Asraf, pp. 5-7)

The fundamental claims of the pitch-level analysis model adopted are first, that intonation is basically a matter of attaining particular levels at
particular points in time; pitch movements - ascents, descents, levels - are simply means to this end; and second, that languages operate in terms of a small fixed number of distinctive (phonemic) levels. By describing intonation as a sequence of phonemic pitch levels, intonation is perceived as static rather than dynamic and this is precisely Bolinger's main criticism of the model: intonation is not a matter of levels, but of configurations, i.e. sequences of accents, descents and level stretches (Bolinger, 1951).

2.5 Intonation and Demarcation of Utterance

As regards the demarcative function of intonation, one tends to concur with Bolinger (1989:82) in that

"the most indispensable syntactic use of intonation is to divide utterance into segments to establish a formal hierarchy of beginnings and endings whereby major constituents can be distinguished from the minor."

Bolinger further adds that this demarcative function is to a certain extent universal in that all languages use intonation, speech rate and pause as cues for separation (cf. Chapter Four of this thesis).

According to Asmah (1980) in a type of passive construction which she calls "pasif samu" (pseudo-passive), the theme is separated from the other parts of the utterance by a pause. A pause is also used to demarcate
a constituent boundary between a fronted object and the subsequent predicate like the following (a single slash marking the location of pause):

(9)  (a) Ubat/ sudah dibeli?
     (b) Ubat/ sudah dibeliakah?
     (c) Ubat itu/ sudahkah dibeli?
     (d) Ubat itu/ sudah dia belikah?
     (cf. Asmah, 1980:389-390)

The above sentences have two pause-defined units which co-occur with the boundaries of syntactic constituents.

In Malay, clauses with NP + NP, NP + AdvP, NP + AdjP constituent structures are frequently ambiguous as between subject and Predicate (cf. Arbak, Asraf, Hashim). Unlike English where the presence of a verbal phrase in the predicate differentiates it from the subject, in Malay the ambiguity is averted intonationally. (Asraf:15-17)

In the sentence below, the word "itu" is intonationally marked as belonging to the subject "bunga" (flower) and not to "indah" (beautiful), which is the predicate:

(10) Bunga itu/ indah "the flower is beautiful"
The clause is divided into two tone-groups, the first group "Bunga itu"  
(That flower) is demarcated by a 2-4 pitch level and the second, "indah"  
(beautiful), a 2-3 pitch level.

According to Asraf (1981:16) in longer utterances which contain phrases of different hierarchy, the demarcative function of intonation is a potential help such that phrases of a lower hierarchy have a much lower pitch level than those of a higher hierarchy. Consider the following sentence in this respect:

(11)   Kempung  tempat abang saya tinggal [\textit{tu}] dari sini  
Village place brother my live the far from here

\textit{The village where my brother lives is far from here}

(pitch level: 2-4-2-3-1)
Intonation divides the above sentence into three phrase-unit boundaries: two major phrases, an NP (i.e. "kampung tempat abang saya tinggal itu") which functions as a Subject and an adjP (i.e. "jauh") which functions as a predicate and one minor phrase (i.e. "dari sini") which functions as an adverbial of place in the peddicative position e.g. 12 below:

(12) Kampung tempat abang saya tinggal itu (subject) jauh (main predicate) dari sini (AdvP in the predicative position)

(Asraf, p.16)

Asraf claims that the transition in pitch up-down is a clue to a break (cf. Chapter Six of this thesis), and the beginning of another phrase is marked by a low pitch, i.e. 2, which signals the beginning of a new phrase. According to Asraf, the phrase "dari sini" is lower in pitch than the other two phrases indicating that it is lower in hierarchy.

The significance of this demarcative function of intonation is further reinforced by the fact that the intonation contour changes according to the phrase-order, e.g.:

3) \( \underbrace{\text{Jauh}}_{2} \underbrace{\text{kampung tempat abang saya tinggal tu dari sini}}_{1} \)

\(< \quad > \quad < \quad > \quad < \quad >\)

Pred subject Adv. of place

(contour: 2-3-1)
Far village place brother my live the from here

My brother lives in a village which is far from here

(14) 2 Dari sini jauh tempat abang saya tinggal itu 1
Adv. of Pred.< Subject >
place
(pitch level: 2-4, 2-3-1)
From here far place brother my live the

My brother lives in a village which is far from here

(15) 2 Kampung tempat abang saya tinggal itu dari sini jauh 3
< Subject >Adv. of Pred. place
(pitch level: 2-4, 2-4, 2-3)
Village place brother my live the from here far

The village that my brother lives is far from here

Sentences 13, 14 and 15 have the following phrase boundaries demarcated by high and low pitches:

(16) Jauh/ kampung tempat abang saya tinggal itu dari sini.
far village place brother my live that from here
(17) Dari sini/ jauh/ tempat tinggal abang saya itu.

from here far place live brother I that

(18) Kampung tempat abang saya tinggal itu/ dari sini/ jauh

village place brother I live that from here far

(Asraf, p.17)

It is also postulated that in Malay, a phrase boundary is not only marked by the difference in pitch level but is also marked by other prosodic cues such as a tentative pause and/or final syllable lengthening.

Implicitly, Hashim claims that Malay intonation also signals a hierarchy of breaks such that it indicates major and minor separations between one clause and another (see Bolinger, 1989). Consider the following sentences:

(19) Jangan makan pisang monyet (pitch level: 2-4-2-3)

Don't eat banana monkey

(20) Jangan makan pisang, monyet (pitch level: 2-4-2-3)

Don't eat banana, monkey.
A major break (indicated by a comma) in sentences 19 and 20 coincides with a pitch cue, i.e. a non-final high pitch that divides the sentence into two segments. In 19, the high pitch on "makan" (eat), the last word in the non-final clause, signals that the word "pisang" (banana) is a constituent of the second segment. In 20, the high pitch on the last syllable of "pisang" indicates that it is a constituent of the first segment. This non-final break may be accompanied by a short pause.

According to Bolinger (1989:84) the "rate-and-break marking of the constituents is iconic" in the sense that things that belong together are grouped together while things that do not are kept apart. From the examples given earlier, it appears that in Malay even in the absence of pause, the break is fairly well-cued by pitch features. These observations are supported by the findings made in chapter 6 of this thesis.

2.6 Intonation and Sentence-type

In discussing correlations between grammar and intonation, Bolinger (1989) holds the view that

"... no intonation is an infallible clue to any sentence type: any intonation that can occur with a statement, a command, or an exclamation can also occur with a question". (p.98)
However, he does not totally dispute the correspondence between syntactic types (e.g. interrogatives, declaratives, etc.) and intonation because immediately after the statement, he asserts that "there are some interesting correlations" (p. 98).

In Malay, it appears that intonation expounds (inter alia) the following perceivable distinctions: sentence structure, clause structure, sentence function, information focus, disbelief, sarcasm, etc. Within this framework, however, distinctions such as clause structure, sentence structure and sentence function belong to the grammatical function of intonation, information focus belongs to the informational function of intonation and those such as belief, sarcasm, etc. belong to the attitudinal function. Much of the discussion in the works of Malay intonation focuses on the grammatical function; the major preoccupation is examining the relationship between intonation and syntactic structure and/or function.

2.6.1 Declaratives

It has been postulated that the unmarked basic declarative sentences have a 2-4-2-3 contour, e.g. 21-23 below:
(21) Pegawai pengurus.

*The officer is a manager*

(cf. Nik Safiah et al, p. 59)

(22) Orang guru.

*That man is a teacher*

(cf. Asraf, p. 6)

(23) Ali menendang bola.

*Ali kicks the ball*

(cf. Nik Safiah et al, p. 58)

Nik Safiah et al assert that the above sentences are demarcated by two sets of pitch levels: a non-final 2-4 contour and a final 2-3 contour corresponding with the end of a clause. It is further postulated that Malay uses a high level pitch to signal non-finality to separate, as in these cases, the subject from the predicate. Implicitly, it appears that in Malay the basic unit of intonation can be accounted for wholly in grammatical terms such that a clause or clause element is seen as the typical grammatical counterpart to the basic intonation unit. If one adopts this line of argument, the above sentences can then be divided into two units of intonation whose boundaries are determined on grammatical grounds.
Many linguists (Cruttenden, 1986; Couper-kuhlen, 1986; Brown et al, 1980; etc.) however, seem to hold the view that in the vast majority of cases grammatical criteria alone do not suffice to indicate unambiguously where tone boundary should go in connected speech. According to Cruttenden (p. 42) we also need other cues like "change of pitch level or pitch direction of unaccented syllables, pause, and/or anacrusis, and/or final syllable lengthening, plus the presence of a pitch accent in each-part utterance thus created" (cf. Chapter Five of this thesis).

Examining sentences 21 and 22 again, there is a change in the pitch level on the last syllable of "ilu" from 4 to 2 and this change (at least in these sentences) corresponds with a clause element boundary phrase. As mentioned earlier, Hashim posits pause as a cue to demarcate intonation boundary in Malay speech and postulates that a structural unit of intonation corresponds with what he terms a "sense-group" which he fails to define. Yet, research in English prosody has shown that there is little systematic overlap between sense group (as defined by Kingdon, 1958) and unit of intonation since the placement of stress and accent depends to a certain criteria on speech tempo and on speaker attitude (Couper-kuhlen, 1986).

Assuming for the moment that in Malay there is a correlation between grammatical entity and units of intonation (see Halliday, 1972; Quirk et al, 1972), there is still the problem of determining the intonation contour
associated with declarative which is determined by the last or final pitch accent if the terminal contour does not reverse its direction. The examination of the unmarked Malay declarative form proposed by Asraf and Nik Safiah shows the absence of a fall in the primary contour; instead it is marked by a rising pitch from 2-3 following an earlier fall from 4-2, assuming that 2 denotes a pitch level lower than 3 and 4.

Hashim (1981: 7) proposes the unmarked intonation pattern of basic declarative sentences with subject-predicate structure as 2-3-2-4-(2):

(24) **Bunga** [kulindah. (contour: 2-3-2-4)
Flower the beautiful
*The flower is beautiful.*

(25) **Dia** [mengganggu] [fikiran saya. (contour 2-3-2-4-2)
He disturbs mind my
*He disturbs my mind.*

(26) **Aku** [tak] [tahu] [Yam. (contour: 2-3-2-4-2)
I don't know Yam.
Unlike Nik Safiah and Asraf, Hashim's intonation contours have an optional low-level pitch following the high-level pitch. The existence of this low-level pitch presumably denotes a high fall from a relatively high level pitch /4/ to a relatively low level pitch /2/. It seems that Hashim's unmarked intonation pattern for declaratives corresponds with that of Arbak's and Nik Safiah's et al such that the sentence on a rising pitch ascending to an extra high pitch, i.e level 4; the fall which is the unmarked final pitch for most languages appears to be optional.

The notion of a rise in declaratives implicit in the above analysis, seems to be at variant with what is proposed by Arbak (1989) such that declaratives have a falling intonation contour. In fact, he emphasizes that what differentiates declaratives from their corresponding interrogatives is their end contour: the former has a falling end contour, the latter a rising end contour. (See the table on page 57).
<table>
<thead>
<tr>
<th>DECLARATIVES</th>
<th>INTERROGATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(27) a. Guru itu pergi ke perpustakaan (ıkl)</td>
<td>b. Guru itu pergi ke perpustakaan (.getPath)</td>
</tr>
<tr>
<td>The teacher went to the library</td>
<td></td>
</tr>
<tr>
<td>(28) a. Dia menulis surat (ıkl)</td>
<td>b. Dia menulis surat (getPath)</td>
</tr>
<tr>
<td>She wrote a letter</td>
<td></td>
</tr>
<tr>
<td>(29) a. Bunga itu cantik (ıkl)</td>
<td>b. Bunga itu cantik (getPath)</td>
</tr>
<tr>
<td>The flowers are beautiful</td>
<td></td>
</tr>
</tbody>
</table>

(Arbak, 1989:110)

In sentences 27b, 28b and 29b, their intonational form of a rising contour is the only formal marker of question status since the morphology and syntax are basically unchanged from the corresponding declarative sentences (i.e. 27a, 28a and 29a). It is by assigning a specific feature (i.e. the final rise) to this otherwise structurally declarative construction that we recognise them as questions.

A sentence final rise on declaratives is rarely reported (Cruttenden, 1986). One would expect that like most languages (cf. Bolinger, 1978) the unmarked pattern for declaratives in Malay is a sentence-final fall and not a rise. Indeed according to Cruttenden the occurrence of a "minor" rise at the end of a sentence after a preceding fall, as postulated by Nik Safiah and
Asraf, does not seem to be common in languages. What then could have accounted for this rather unexpected notion of a rising end contour?

One of the main problems involved in reviewing the works of Nik Safiah et al, Asraf, Hashim and others is that although they start off within Trager & Smith's framework such that their studies involve four pitch levels, they have modified their views considerably. In discussing their notation conventions, they deviate from the model developed principally by Pike, Wells, Trager & Smith in many ways. There is, therefore, difficulty in interpreting their transcription and this difficulty is augmented further by the fact they have failed to provide explanation for this departure from the accepted theoretical framework of levels analysis.

The first difficulty with the theoretical framework is the location of the pitch phonemes in the phrase. The two obligatory positions of the phonemes identified are INITIAL and FINAL. The function of the initial pitch level, which is level 2, is to mark the beginning pitch level (and which has been argued as being insignificant in establishing the primary contour), and Nik Safiah et al further adds that pitch level indicates the feature (-stress). The problem that one may encounter is the presence of the feature (+stress) at the beginning of an utterance. How would one then account for this? The next issue is whether this obligatory initial pitch is equivalent to the beginning point of a primary contour posited by the proponents of the level analysis?
According to Pike (1945) the establishment of the characteristic of a contour is determined by contour points. For instance, in a rising or falling contour, two contour points are present: the pitch level at the beginning and the pitch level at the end. The beginning point for every primary contour is a stressed and prominent syllable, and the final pitch level completes the contour, cf:

(30) I want to go\`home

  3- \*2-4

(31) I want to go\`home.

  2- \*2-4

(32) He\'s\`coming today

    \*2- -4

In sentences 30 and 31, level 4, the endpoint starts on the accented syllable "home", preceded by an optional precontour 3- and 2-. However, sentence 32 does not have a precontour. Pike only identifies the primary contour which begins on the syllable "co" of the word "coming" and ends on level 4.
It appears that the initial pitch postulated by Nik Safiah et al and Asraf does not in the least correspond with Pike's beginning contour point. While the latter begins on a stressed syllable at any point in utterance (though their favourite location is at the end), the former occurs on unstressed syllable and its presence is restricted to the beginning of a phrase. There is thus a great possibility that their initial pitch is analogous to Pike's precontour whose occurrence is optional and even if it is present, it does not contribute to the intonation contour (cf. Pike: 1962).

This problem is heightened further by the fact that the final contour point, which is usually represented by level 3 or 4 does not have a beginning point. Often this endpoint is preceded by level 2 which as said earlier cannot be the beginning pitch level. Its function is solely to indicate the beginning of a phrase. This conflicts with Pike's end point whose function is to complete a primary contour which begins on the preceding stressed syllable.

Unlike the beginning point, the end point may occur on an unstressed or part of a stressed syllable (Pike, 1945). The question that comes to one's mind is: Could this endpoint then be the beginning of a primary contour and that the actual endpoint is not indicated in the contour? Given such an inexplicit and incomplete analysis, one is inclined to conclude that the contour proposed for Malay declaratives may not in actual fact represent the true contour of Malay declaratives.
As it happens, Nik Safiah et al and Asraf do not make their views adequately explicit to resolve this difficulty in any conclusive way. Ideally one would require a statement defining precisely the relevant aspects of pitch contours. To begin with, they are not explicit about the actual function of the four pitch levels and the statements defining these pitch levels require further refinement so that a more adequate and well-defined phonetic representation of intonation contours can be made.

Furthermore, they appear to be uncertain about the interaction of pitch phonemes and stress. Hashim, for example, postulates that the most important word in a sentence will receive the primary stress and this word is usually accompanied by pitch phoneme 3 or 4 while the other words will have only pitch phoneme 1 or 2 without primary stresses.

Nik Safiah et al and Asraf on the other hand equate pitch phoneme 3 with stress and pitch phonemes 1 and 4 with pitch level only, i.e. the former low pitch and the latter extra high pitch without any mention of stress at all. The issue that requires clarification is whether level 3, being the only phoneme with the feature (+stress) will always be the initial pitch of a primary contour, for in Pike's, Trager & Smith's opinion a contour point always begins on a stressed syllable. Unfortunately, this issue is left unresolved by the Malaysian linguists under discussion.
Another point at issue is the uncertainty as regards the division of utterances into units of intonation. Hashim postulates that intonation boundaries are marked by pause, but to what extent this prosodic cue fulfils that function is not discussed at all. Nik Safiah et al and Asraf use grammatical criteria as a clue to intonation boundaries. Again no attempt was made to explain this phenomenon further.

2.7 Intonation and Focus

There is an agreement that grammar and intonation can converge in focus marking. The consensus is not confined to any particular linguistic approach (cf. Chomsky, 1971; Jackendoff, 1972:ch. 6; Wilson and Sperber, 1979; Taglicht, 1982; Quirk et al, 1972; Rochemont, 1980). Following Halliday (1967, 200ff) intonational focusing may be defined as a way of making an utterance element intonationally prominent by assigning it the intonational nucleus. It is typically used by the speaker in a textual function to signal new information and discourse.

In her description of Malay grammar, Asmah discusses how focus is realised in Malay declaratives and interrogatives. Since Asmah's interest is more towards discovering the relationship between information focus and the placement of nucleus, her discussion is therefore limited to identifying the
nucleus in basic sentences rather than in determining their intonation contour.

According to Quirk et al (1972) a clause has at least one tone-unit representing a unit of information and the place where the nucleus falls is the focus of information. That being the case, Asmah considers it easier to relate the positioning of focus to clause structure, limiting her exemplary sentences to those in which clause and tone-unit correspond in extent, although of course it is quite common for a tone-unit to extend over a single clause.

In Asmah's opinion nucleus being the most prominent element is marked with a high pitch, to which is added a little extra duration, and also rhythmic salience, i.e. primary stress (see also chapter 7 of this thesis). The primary effect of focus marking of an utterance is to draw the interlocutor's attention to particular parts of the message at the expense of other parts.

Asmah identifies two types of focus in Malay: end-focus and contrastive focus. End-focus which she refers to as unmarked focus is usually located at sentence-final, the unmarked position of the nucleus. Consider the following sentences:

(34) Nama saya Cik PUTIH

My name is Cik Putih
(35) Mereka semua TERSENYUM.

They are all smiling

Capitalisation marks the "focal unit" or "domain of focus" which is the lexical item. Sentences 34 and 35 are examples of unmarked focus with the final lexical item being the focused element. According to Asmah in the above sentences focus is on PUTIH (the name of a person) and TERSENYUM (smile), and this portion of the message which is the most "informative" is realised by the nucleus which is the last fully stressed syllable.

Contrastive focus refers to a type of focus whose function is to highlight contrastivity in meaning within the sentence. It is related to the system of marking the utterance focus by means of nucleus placement. Unlike the end-focus, contrastive focus may be placed at any points in the clause. Consider the following sentences:

(36) Focus at direct object

Dia tak makan IKAN

He doesn't eat FISH
(37) Focus at subject:

Tok PENGHULU yang memberi arahan.
The village head who gives the order

*It is the VILLAGE HEAD who gives the order*

(38) Focus at adverbial:

Dia datang SEKEJAP saja.

*He dropped in for a SHORT WHILE only*

(39) Focus at verb:

Dia MELANGKAH pulang.

He took a step home

*He WENT home*

Besides intonational means of focusing, Malay also uses lexical means of focusing such as the use of focused particles, e.g. "kah" "pun" and "lah", and grammatical means, e.g. focusing structures like wh-interrogatives, alternative interrogation and marked word order. It is commonly held that these constructions will coincide with intonational focusing such that the focused items at the same time contain the nucleus.
Asmah points out that such particles as "kah", "pun", "lah" and so forth govern the information focus, and their syntactic position is sensitive to focus structure. For example, in Malay interrogatives the particle "kah" functions as the focus morpheme in an utterance such that it assigns prominence to the lexical item to which it is suffixed.

In fact, Mashudi (1980) in his study on Malay syntax postulates that the intonation contours of Malay interrogatives are usually attributed to the occurrence of "kah". It appears that by placing the particle "kah" in a particular position in the interrogative clause, one is able to "focus" the interrogation on a particular item of information, which unlike the rest of the sentence is assumed to be unknown. Consider the following sentences;

(40) Focus at subject:

DIAkah yang datang tadi?
He came just now?

Was HE the one who came just now?

(41) Focus at verb

Dia DATANGkah tadi?
He came just now?

Did he COME just now?
(42) Focus at object

Dia pergi KERJAKAH?

Did he go to WORK?

(43) Focus at auxiliary verb

Ubat itu SUDAHkah dibeli?

The medicine HAS BEEN bought already?

As can be seen above, the focus may be indicated by "kah". The placement of "kah" which is accompanied by the assignment of prominence therefore identifies the new or focal information in the message. According to Asmah, the position of "kah" in a clause depends on where the speaker intends the focal information to be, that is, if for example the speaker decides to give special prominence to the object then "kah" can be optionally suffixed to the object as in 42.

As focus marking indicates new information, the operations of dislocation and passivisation that affect the linear order, and therefore thematic information of a sentence are also relevant to a study of constraints on the choice of focally marked item. Consider the following sentences from Nahu Melayu Mutakhir (Asmah, 1980: 358-360):
Passivisation operation

(44) MATANYA dibuka luas-luas.

HER EYES are open wide

(45) BUKU itu dibelinya.

The BOOK was bought by him

Dislocation operation

Negative word fronting

(46) BELUM pun dia selesai bercakap, sudah disela oleh kawannya.

Even BEFORE he could finish speaking, he was interrupted by his friend

Adverblial fronting

(47) CEPAT-CEPAT dia melangkah menuju rumah.

Quickly, he walked towards the house

According to this observation, the fronted element is the focused item and it is of no accident that the items brought into focus by the use of these constructions take the nucleus.
An example of focusing structure in Malay is alternative interrogation, a type of question which expects as an answer one of two alternatives mentioned in the question. Alternative question in Malay can appear with "or-coordination" (signalled by "atau") as follows:

(48) Dia DATANG(kah) atau tidak?
He coming(particle) or not

Is he coming or not?

(49) Dia itu PENSYARAH(kah) atau guru?
He that lecturer (particle) or teacher

Is he a lecturer or teacher?

According to Asmah if the question has a coordinated alternative, then focus falls on the first alternative which means that this focal constituent receives prominence on its last fully stressed syllable. The fact that "kah" can be optionally suffixed to the item mentioned first in the clause further proves that that is the focal constituent.

In informal conversations between native speakers, for example, "atau" coordination is ellipsed and instead the boundary between the first and the second alternatives is indicated by means of prosodic cues such as a change in pitch.
According to Mashudi (1980) information focus posited by Asmah may also entail a change in the intonation contour because in Malay, one of the functions of prominence is to signal focus distribution and the contour changes according to where prominence is located.

2.8 Conclusion

What has been said thus far about the present situation in the field of prosodic study leads to the question what can be done in order to have a better understanding of Malay prosody. Examination of the past work has convinced us that Malay prosody should be given the place it so deserves.

Summarising the survey, it can be concluded that although the studies on Malay intonation have succeeded in foregrounding the areas which obviously exploit prosody, they are unduly limited in their aim as their methods. The studies confine themselves to syntactic structure within the limits of the sentence, concentrating on features of pitch events. The investigation problem is restricted then to pointing at functionally relevant pitch contours that categorise the various sentence types and to establishing correlations between pitch and syntactic units that are smaller than the sentence.
Of particular relevance to this study is the notion of focus and the nature of its relationship with prosodic prominence. It has been suggested that the information focus of a sentence is realised by the nucleus. As regards the claim that nuclear prominence signals new information, studies in spoken discourse point in the direction that the presence of prominence does not necessarily mean that an item is new (cf. Chapter Seven of this thesis). However, the possibility should not be overlooked that this "counter-evidence" is due to the lack of agreement as to what information is.

Attempts have been made to explore the adequacy of the theoretical framework adopted for analysis. More often than not the distinctive features are impressionistically observed and caught in imperfect transcriptions. The works of Nik Safiah et al, Asraf, Arbak and Hashim clearly reflect questionable theoretical assumptions, e.g. that there are four pitch phonemes, and impose their strict categorisation upon the material, thus blocking the way to unprejudiced observations.

Given the above situation, this thesis therefore intends to undertake a study of prosody within a framework of a theory of interactive discourse examining in particular a few selected systems which exploit prosodic cues. It is the belief that discourse orientation approach may offer promising approach to prosodic meaning.