Chapter six

The intonation of Manado Malay

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6.1 Introduction[40]

In this paper I will give an overview of the intonation of Manado Malay. Intonation is a topic that is often ignored in grammars of Indonesian languages. This is a serious shortcoming, as intonation is an essential part of the spoken language. The description that is presented here is based on the autosegmental-metrical framework developed by Pierrehumbert (1980), Beckman and Pierrehumbert (1986), and Ladd (1996).[41] In this model, the tonal structure of an utterance is composed of edge tones, which are associated with the edges of prosodic domains, and pitch accents, which are associated with stressed syllables. In Manado Malay, there is typically no more than one pitch accent in an utterance. Beside this one focus-marking accent, discourse particles may appear to carry an accent as well, but I will argue that these are in fact edge tones. I will discuss the intonation of statements, questions, and a few more specialized constructions. I will also compare the intonation of Manado Malay with that of two other Indonesian languages.

Manado Malay (also called 'Minahasa Malay') is a variety of Malay that is spoken in the Indonesian provinces of North Sulawesi, Gorontalo, and some parts of Central Sulawesi. It is the mother tongue of most of the inhabitants of Manado, the capital of North Sulawesi, and is used elsewhere in North and Central Sulawesi as either a first or a second language. There are at least one million first-language speakers, and probably even more second-language speakers. Manado Malay is closely related to the other creole forms of Malay that are spoken in eastern Indonesian, including Ternate Malay and Ambon Malay.[42] It is also related to Standard Indonesian, but the two languages are not mutually intelligible, although there is a growing influence of Indonesian on Manado Malay.

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[40] This paper is an extension and revision of chapter 4 of my dissertation (Stoel 2005). The research was financed by grant 95-CS-05 from the Royal Netherlands Academy of Arts and Sciences KNAW (principal investigators V.J. van Heuven and W.A.L. Stokhof).

[41] See Gussenhoven (2004) and Jun (2005) for several language-specific sketches within this tradition.

[42] See Adelaar (2005: 212−217) for some characteristics of these pidgin-derived Malay varieties.

This research is based on two long/extensive fieldwork trips to Manado in 1998/99 and 2000/01, respectively.[43] During this time I recorded and transcribed a corpus of spontaneous conversations. I also made recordings of read sentences, and conducted a number of experiments. The present paper is based mainly on spontaneous speech, but read sentences have been used as well, especially to obtain minimal sentence pairs that differ only in intonation.

Earlier publications on Manado Malay include Karisoh Najoan, Liwoso, Djojosuroto & Kembuan (1981), an overview of the morphology and syntax; Watuseke & Watuseke-Politton (1981), a humorous story with a Dutch translation; Salea-Warouw (1985), a concise but useful Manado Malay−Indonesian dictionary; Prentice (1994), an overview of the phonology and a short grammar sketch; and Stoel (2000), an overview of the discourse particles.

The remainder of this paper is organized as follows. Section 6.2 discusses lexical stress. Sections 6.3 and 6.4 introduce two essential notions of intonation, viz. accent placement and prosodic phrasing. Section 6.5 covers the intonation of statements in more detail, and section 6.6 discusses the intonation of questions. A few more specialized intonation patterns are presented in section 6.7. Section 6.8 presents a conclusion. Finally, section 6.9 offers a short comparison between the intonation of Manado Malay and two other Indonesian languages.

6.2 Lexical stress

In the autosegmental-metrical tradition of intonational analysis, it is assumed that pitch contours have a phonological structure, and that the building blocks are level tones, including H (high) and L (low). In languages that have lexical stress, these tones may be linked to a stressed syllable, and are then called pitch accents. In addition there may be edge tones that are associated with the beginning and/or end of a prosodic domain, such as the phonological phrase.

Manado Malay is a language with lexical stress. Most words have stress on the penultimate syllable, but there are also numerous words with final stress, including many loanwords from Dutch, as well as native vocabulary. A few minimal pairs occur, for example *lala* (a girl's name) vs. *lalá* 'tired' (in this article, final stress is marked by an accent sign, while penultimate stress is not marked). There are also a small number of words that have variable stress, such as *telfon* ~ *telfón* 'to telephone'.[44] Consequently, pitch accents in Manado Malay are associated with either the penultimate or the final syllable.

[43] I thank Lusiana Musa, Roseline Rumtotmey, Fitri Kohongia, and many others for their assistance during my fieldwork.

[44] See Stoel (2005: 12−14, 16) for more information on stress position in Manado Malay.

6.3 Accent placement

In this section I will give a short overview of accent placement in spontaneous speech.[45] Most sentences in Manado Malay have only one accent, and this accent typically falls on the last word of the sentence. However, it is sometimes difficult to define what a sentence is in spontaneous speech. This section will therefore be limited to accent placement in clauses. An accent marks the end of a focus domain, i.e. the part of the sentence/clause that expresses new information. Most clauses have final focus: they have an accent on the clause-final word. But this is not always the case, and there are at least three reasons why a clause may have a non-final accent.

First, the final word may not be able to carry a focus-marking accent. This is the case for discourse particles, a class of mostly clause-final words that express non-propositional meanings. Thus, in example (1), the discourse particle *kata* (which indicates that the speaker is reporting what someone else has said) cannot get an accent, and so it is a non-final word that carries the accent (the accented word is marked H*).[46]

(1) (M. was looking for you, but you were out.)

				H*	
nanti	*dia*	*mo*	*babale*	*ulaŋ*	*kata*.
later	3.SG	ASP	return	again	PAR

'She would come back later, she said.'

Secondly, an accent may be non-final because the clause has non-final focus. For example, clauses in which the subject follows the predicate never have a final accent. The basic word order in Manado Malay is subject-predicate, but the predicate may be fronted if it is in focus. The accent then falls on the predicate, as in the example in (2).

(2) (Talking about a handsome man.)

	H*	
so	*kaweŋ*	*dia*.
ASP	married	3.SG

'He is already married.'

Cleft sentences, which are formed by the relativizer *yaŋ*, frequently have a non-final accent. For example, in the sentence in (3), the focus is on the initial noun phrase, which therefore gets the accent.

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[45] For a more extensive treatment of accent placement in both spontaneous and read speech see Stoel (2005: chapter 7).

[46] The following abbreviations are used in the glosses: ASP, aspect; CONJ, conjunction; INTERJ, interjection; PAR, discourse particle; PL, plural; POSS, possessive marker; REL, relativizer; SG, singular.

(3) (We decided not to wait for the others anymore.)

			H*		
jadi	*toŋ*	*tiga*	*jo*	*yaŋ*	*pigi*.
so	1.PL	three	PAR	REL	go

'So it was the three of us who went.'

SVO sentences with predicate focus may have an accent on the V in case the O refers to an entity that is already activated in the consciousness of the speakers. Thus, in the example in (4), the O is not accented, because it refers to one of the speech participants, and the V is accented instead.

(4) (We were talking about my former boyfriend, and then N. said:)

		H*		
dia	*masi*	*cəm*	*pa*	*ŋana*.
3.SG	still	jealous	at	2.SG

'He is still jealous of you.'

Some deictic expressions with a relatively 'empty' semantic content, such as *di sana* 'there' or *kalamariŋ* 'yesterday', remain unaccented in clause-final position (except when they are in narrow focus), whereas more specific time adjuncts (such as *jam tiga* 'at three o'clock') must be accented if they have not been mentioned before.[47] An example is given in (5).

(5) (My boyfriend lives elsewhere, so he doesn't know I am cheating on him.)

				H*		
dia	*le*	*sto*	*ja*	*bahugəl*	*di*	*sana*.
3.SG	PAR	PAR	ASP	cheat	in	there

'He is probably cheating on me as well there.'

Contrary to English (and other Germanic languages), the minimal focus domain in Manado Malay is the XP, and there is no such thing as a narrow-focus accent on a non-final word. Thus, in a noun phrase consisting of a numeral followed by a noun, the accent always falls on the noun, not on the numeral. This is illustrated by two examples below. In the answer in (6), the accent falls on *klas* 'class', not on *dua* 'two', even though it is the number of classes that is of interest. The example in (7) shows that the accent is final even in case the numeral is contrastive. Both clauses have an accent on *oto* 'car', and the two numerals remain unaccented.

[47] This is also the case in English (Lambrecht 1994: 303).

(6) (Talking about their time in high school.)

A: *jurusan* *IPA* *da* *brapa* *klas?*
department science have how.many class
'How many classes did the science department [at your school] have?'

H*
B: *kalu* *toraŋ* *dulu* *daŋ,* *jurusan* *IPA,* *cuma* *dua* *klas.*
as.for 1.PL formerly PAR department science only two class
'In our case, in the science department, there were only two classes.'

(7) (We planned to go to the wedding party by car.)

H*
doraŋ *mo* *cari* *tiga...* *tiga* *oto.*
3.PL ASP look.for three three car
H*
cuma ... *kita* *cuma* *dapa* *satu* *oto.*
only 1.SG only get one car
'They were looking for three… three cars. But… I only got one car.'

6.4 Prosodic phrasing

There are two prosodic constituents that are particularly relevant for the description of Manado Malay intonation: the Phonological Phrase (PhP) and the Intonation Phrase (IP). The PhP is defined here as a prosodic constituent that begins and/or ends with an edge tone. The IP is defined as a prosodic constituent that contains one or more PhPs, but no more than one pitch accent. IPs do not have any associated edge tones. A PhP corresponds roughly to an XP at the syntactic level, and an IP to a clause. An IP may be followed by a short pause, while a PhP may not. It is characteristic for Manado Malay that the accent-bearing unit is a relatively high-level unit, whereas in many European languages, not only the IP, but also the PhP, may have more than one accent.

Thus there is only one PhP within an IP that carries an accent, and this PhP is called the accent-bearing PhP. If there are any PhPs preceding the accent-bearing PhP, then these begin with an L edge tone and end with an H edge tone. In statements, the accent-bearing PhP begins and ends with an L edge tone. In addition, there is an H* pitch accent on the final word of this PhP. There may be at most one encliticized PhP following the accent-bearing PhP, which also ends with an L edge tone, but does not have an initial edge tone.

There are three reasons to assume that the encliticized PhP is not part of the accent-bearing PhP, but forms a PhP of its own. First, the pitch after the H* accent goes down, which points to the presence of an L boundary tone at the end of the accent-bearing PhP. Secondly, an accent on the final word of the PhP is very common in Manado Malay. If we assume that there is another PhP following, then the accent-bearing PhP will also have a final accent in this case.

Finally, if an equivalent yes-no question (with the same syntactic and lexical structure) has a non-final accent, then there is a clear boundary, as the accent-bearing PhP ends in a H tone, and the encliticized PhP begins with a L tone.

Short sentences with a subject-predicate structure often contain two PhPs if they are spoken in isolation, corresponding to the subject and predicate, even in case the subject is simply a pronoun. Even in such short sentences there may also be an encliticized PhP, as in the example in (8), where the word *beso?* 'tomorrow' remains unaccented in a broad-focus context (cf. example (5) in section 6.3).

(8) L H L H* L L
[*doraŋ*] [*mo pi tondano*] [*beso?*]
1.PL ASP go Tondano tomorrow
'They will go to Tondano tomorrow.'

A fronted object usually forms a PhP of its own, and if the remainder of the sentence is short, then this part may form only one PhP, as in the example in (9). This example shows that there is no special intonation pattern for topicalization.

(9) L H L H* L
[*ini calana*] [*kita da bli di jumbo*]
this trousers 1.SG ASP buy in Jumbo
'These trousers I bought at the Jumbo (supermarket).'

In fact, the same [L ... H] pattern is used also in case of a contrastive topic, as the example in (10) shows. This sentence has two accents, as there are two focus domains, and therefore also two IPs, which have been marked '{ ... }'.

(10) L H L H* L L H L H* L
{ [*nita*] [*so pulaŋ*] } { [*mar kiki*] [*masi di sini*] }
Nita ASP go.home but Kiki still in here
'Nita went home, but Kiki is still here.'

There may be two or more PhPs preceding the accented PhP. In careful speech, a time or place adjunct in initial position typically forms a PhP of its own, as does a following subject, as in the example in (11).

(11) L H L H L H* L
[*beso?*] [*toraŋ*] [*mo baronda di molas*]
tomorrow 1.PL ASP go.round in Molas
'Tomorrow we will go round in Molas.'

In case of initial focus, the first PhP contains the pitch accent, and ends in an L tone. Any remaining out-of-focus material is contained in an encliticized PhP, which may be relatively long, as in the example in (12).

(12) L H* L L
[*so lama*] [*dia da suka pa ŋana*]
ASP long 3.SG ASP like at 2.SG
'It is already a long time that he is in love with you.'

6.5 The intonation of statements

Statements typically have an H* pitch accent. Section 6.5.1 discusses accent and stress, i.e. the association of an accent with a specific syllable. Section 6.5.2 is about accent and focus, i.e. the association of an accent with a specific word. Section 6.5.3 discusses emphatic accents, and section 6.5.4 is about the accentuation of discourse particles. Most statements have a final L tone, but a final H tone or a final level tone also occur, and these are discussed in sections 6.5.5 and 6.5.6, respectively.

6.5.1 Stress and accent

Pitch accents are associated with the stressed syllable of a word, which in Manado Malay is either the penultimate or final syllable (cf. section 6.2). In example (13), the accent is associated with the penultimate syllable. The pitch contour of this sentence as read by a female speaker is given in Figure 1.[48] The utterance consists of two PhPs. At the end of the first PhP there is an H edge tone, which is followed by an L edge tone at the beginning of the second PhP. Note that, while the final H tone is aligned exactly with the end of the word, this is not the case for the L tone. This is because the speaker needs some time to lower her pitch after the preceding maximum.

Within the second PhP, the pitch reaches a local maximum in the syllable *ma*. This maximum may appear to be hardly visible in the pitch contour, but the accent can be perceived by ear quite easily. Note that this maximum is lower than that of the final edge-tone of the preceding PhP, which is characteristic for sentences with final focus. Notice also that the penultimate and the final syllable are much longer than the preceding syllables. In case of the penultimate syllable this is due to accentual lengthening, while the final syllable is lengthened because it is the final syllable of the utterance.

(13) (Penultimate stress)

L	H	L	H*	L
[*ŋana*	]	[*ja*	*bamara*	]
2.SG		ASP	angry	

'You are often angry.'

[48] The pitch contours in this paper were generated by Praat (http://www.fon.hum.uva.nl/praat/), using the autocorrelation method. They are raw pitch tracks, which have not been stylized or smoothed in any way. Note that the pitch of an utterance is not only determined by the sequence of tones, but also by certain processes at the segmental level, e.g., pitch is lowered during voiced obstruents, as can be seen at the beginning of the syllables *ja* and *ba* in figure 1. This is an automatic process that is not significant for the phonology of intonation.

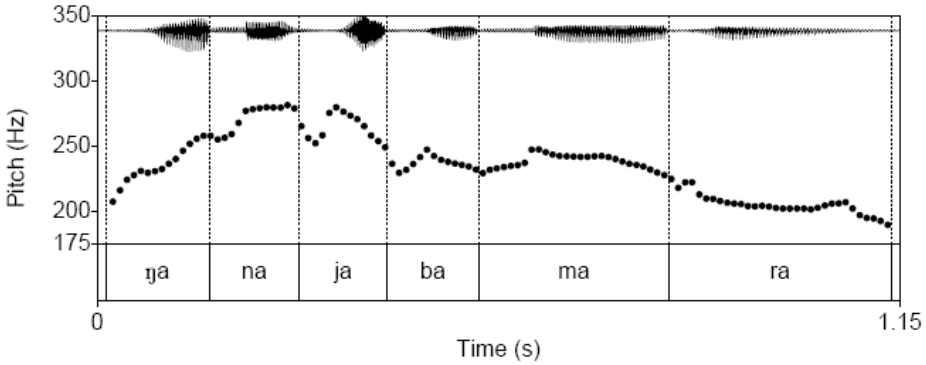

Figure 1: Pitch contour of (13).

In the sentence in (14), the accent is associated with the final syllable of the word. Note that this syllable is lengthened considerably, which is typical of words with final stress in Manado Malay. This may be due to a constraint that feet are left-dominant and minimally bimoraic, thus forcing a word with final stress to have a long vowel (as has been observed by Blevins (1994) for Rotuman, another Austronesian language).

(14) (Final stress)

L	H	L	H*	L
[*ŋana*	]	[*ja*	*lalá*	]
2.SG		ASP	tired	

'You are often tired.'

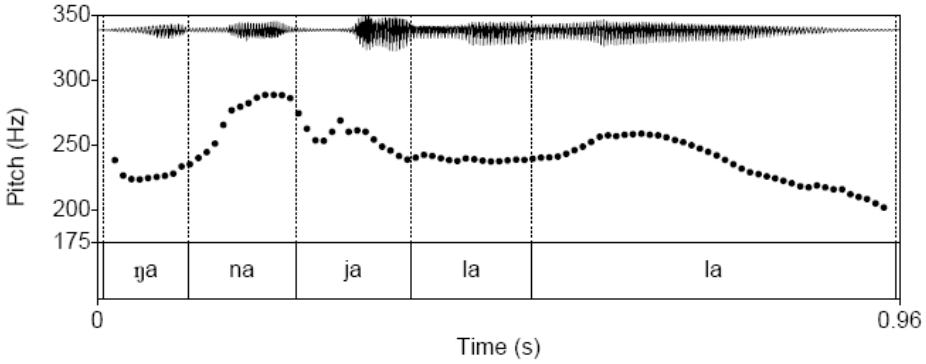

Figure 2: Pitch contour of (14).

6.5.2 Focus and accent

The two examples in (15) and (16) are identical, except for their focus structure. The sentence in (15) has final focus, while the one in (16) has initial focus. The word *yulia* forms a PhP in both readings. The pitch tracks in Figures 3 and 4 show that, in (15), the highest pitch is reached at the end of this word, corresponding to a H edge tone, while in (16), the highest pitch is reached at the penultimate syllable, followed by a drop in pitch, corresponding to an H* pitch accent, and an L edge tone, respectively.

(15) (Predicate focus: 'What is Yulia doing?')

L	H	L	H*	L
[*yulia*	]	[*da*	*mandi*	]
Yulia		ASP	bathe	

'Yulia is bathing.'

(16) (Subject focus: 'Who is bathing?')

L H*	L			L
[*yulia*	]	[*da*	*mandi*	]
Yulia		ASP	bathe	

'Yulia is bathing.'

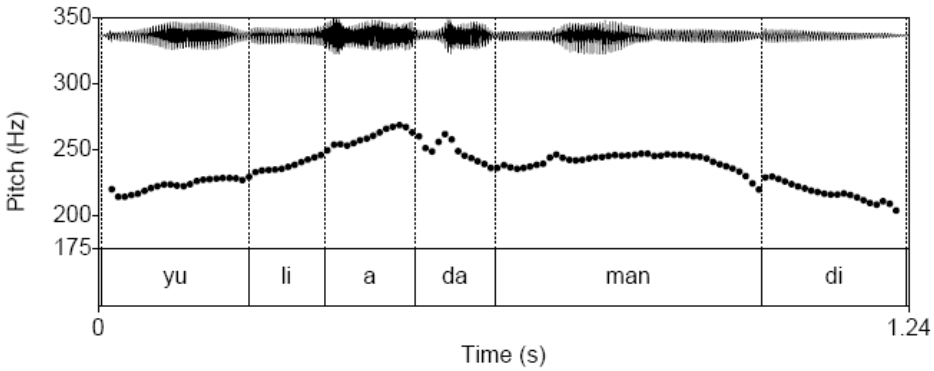

Figure 3: Pitch contour of (15).

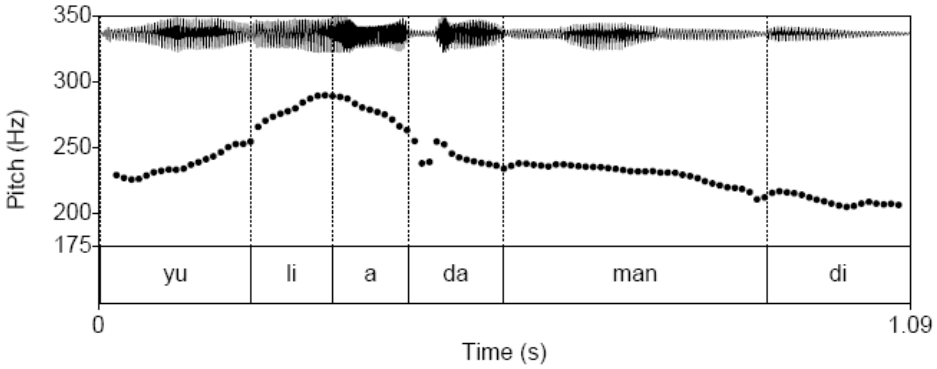

Figure 4: Pitch contour of (16).

Another minimal pair that differs only in focus structure is given in (17) and (18). Both sentences consist of three PhPs. The one in (17) has object focus, so the last PhP carries the accent, and the two preceding PhPs end in an H edge tone. The sentence in (18) has verb focus, so it is the second PhP that carries the accent. This PhP is then followed by an encliticized PhP ending in an L edge tone.

(17) (Object focus)

L	H	L		H	L	H*	L
[*dia*	]	[*da*	*bamara*	]	[*pa*	*weni*	]
3.SG		ASP	angry		at	Weni	

'She is angry at Weni.'

(18) (Verb focus)

L	H	L	H*	L			L
[*dia*	]	[*da*	*bamara*	]	[*pa*	*weni*	]
3.SG		ASP	angry		at	Weni	

'She is angry at Weni.'

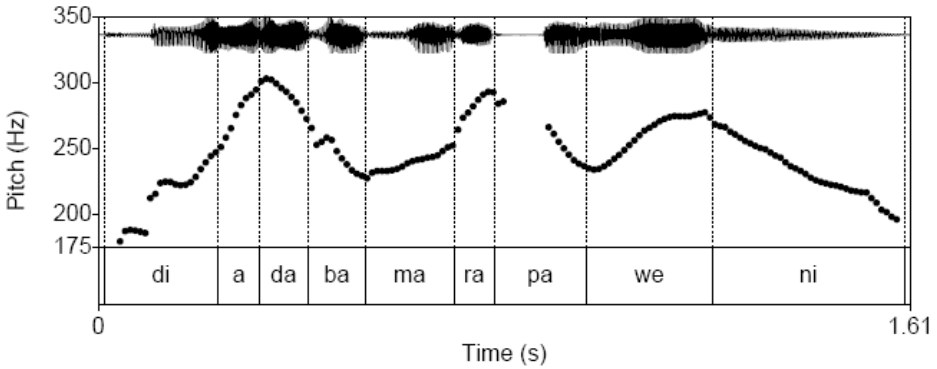

Figure 5: Pitch contour of (17).

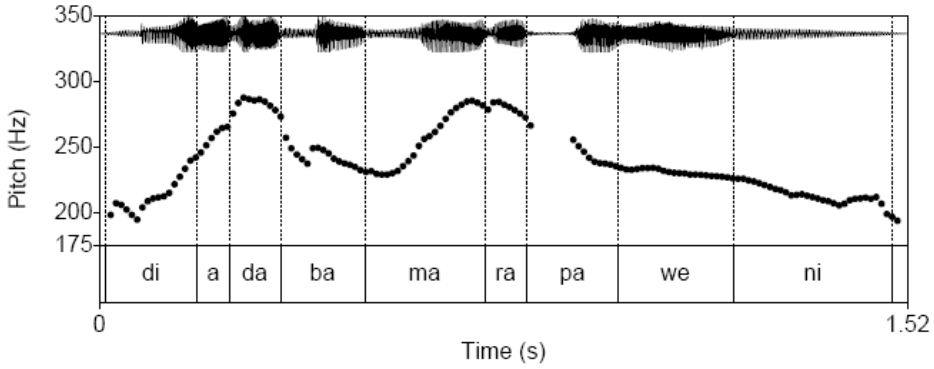

Figure 6: Pitch contour of (18).

The minimal pairs given above were instances of planned speech. Now two examples of spontaneous speech will be given that have a similar intonational structure. The sentence in (19) consists of two PhPs, with an accent on the sentence-final word. The sentence in (20) has a non-final accent, followed by an encliticized PhP. The pitch tracks show that the last word of a PhP is lengthened to some extent.

(19) (And how about you, do you also have a boyfriend?)

L		H	L			H*	L
[*kalu*	*kita*	]	[*bukaŋ*	*di*	*jurusan*	*sini*	]
as.for	1.SG		not	in	department	here	

'Concerning myself, not here in the department.'

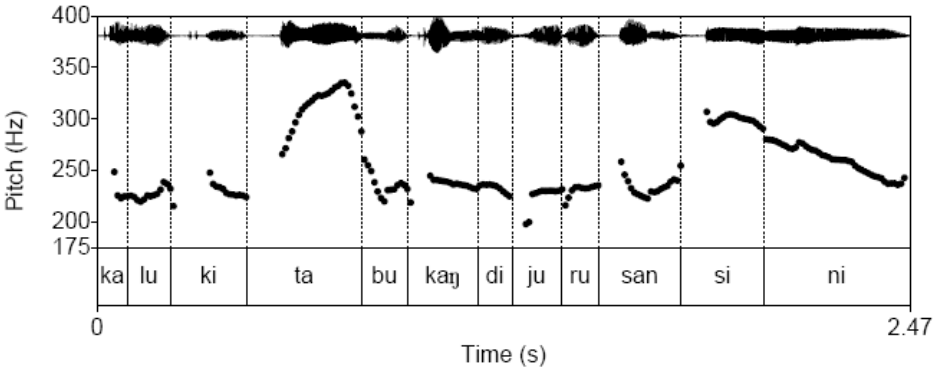

Figure 7: Pitch contour of (19).

(20) (He told me:)

L		H*	L			L
[*da*	*oraŋ*	*cari*	]	[*pa*	*ŋana*	]
ASP	person	look.for		at	2.SG	

'Somebody was looking for you.'

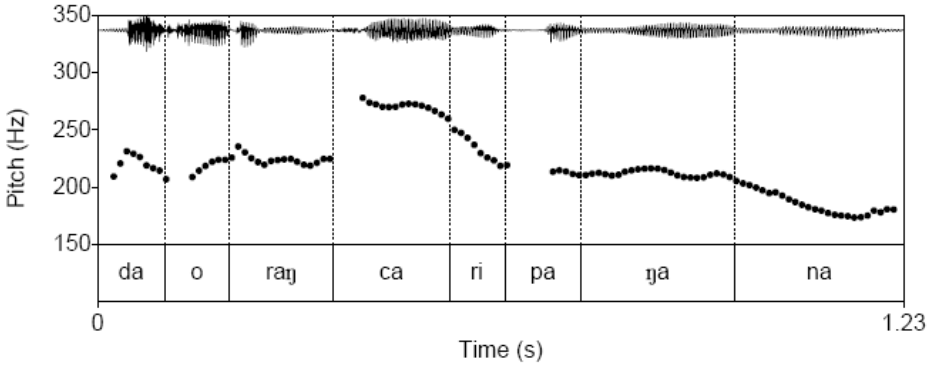

Figure 8: Pitch contour of (20).

A special construction is used in case of polarity focus, i.e. focus on the truth value of a proposition. This construction consists of *ada* 'have' followed by a verb phrase, with an accent on both *ada* and the verb. This is exceptional, since the examples that were given above have just a single pitch accent. Since there are two accents, there must also be two IPs, according to the definition given in section 6.4.

(21) (I heard you are not going out anymore with your girlfriend?)

L	H*	L	L	H*	L
{ [	*ada*	] }	{ [	*baku-bakubawa*	] }
	have			go.out.together	

'We ARE going out.'

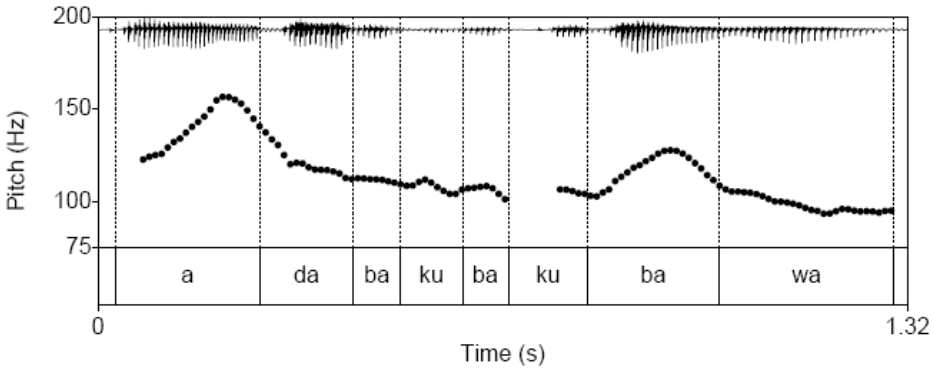

Figure 9: Pitch contour of (21).

6.5.3 Emphatic accents

The pitch excursion at a H* accent may be large or small, depending on the speaker and the context. In case of a sentence-final accent, the pitch may rise just one or two semitones,[49] but larger accents are common, especially in spontaneous speech. A speaker can emphasize the proposition that is expressed by the sentence by using an emphatic accent. Such an accent is characterized by a major pitch excursion. Thus, the accent on *kaweŋ* 'married' in (22) has a pitch excursion of almost 8 semitones. Emphatic accent often occurs at the beginning of a sentence, but this is not necessary, as the example in (23) shows, where the accent on *skali* 'very' has a pitch excursion of 6 semitones (also, this word is lengthened considerably).

(22) (Don't tell me that you have fallen in love with him.)

L	H*	L		L
[*so*	*kaweŋ*	]	[*dia*	]
ASP	married		3.SG	

'He is already married!'

(23) (I asked him not to be angry at us, but he said:)

L	H	L			H*	L
[*kita*	]	[*naʔ*	*mara*	*sama*	*skali*	]
1.SG		not	angry	same	very	

'I am not angry at all.'

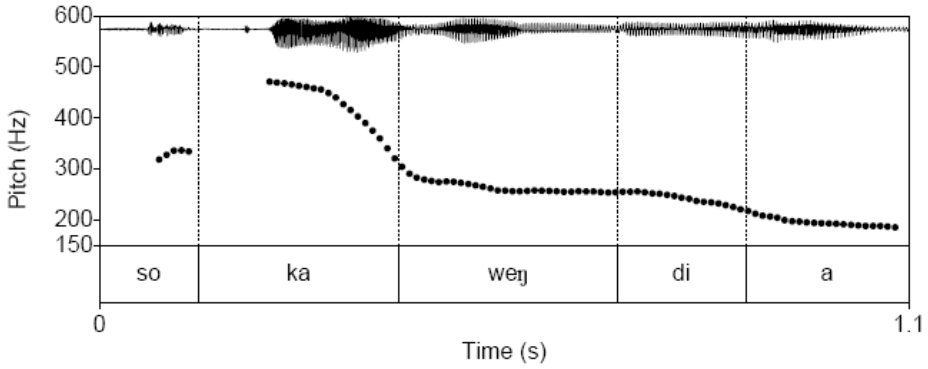

Figure 10. Pitch contour of (22).

[49] An octave (a doubling of the frequency) contains 12 semitones, and 1 semitone is thus an increase in frequency of about 6% (since the 12th root of 2 ≈ 1.06).

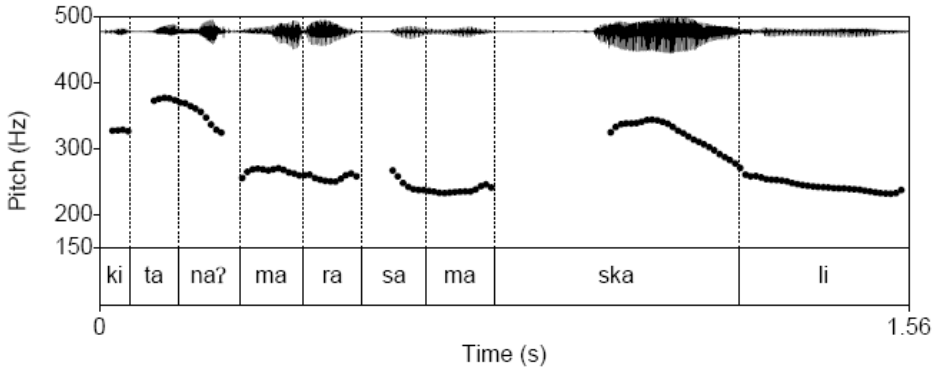

Figure 11: Pitch contour of (23).

A larger pitch excursion generally results in a more emphatic utterance. An utterance may be somewhat emphatic, or more emphatic than another one. Emphasis is thus a gradual notion, and not a categorical one.

6.5.4 Discourse particles

Discourse particles are words that are morphologically invariable, and express a speaker's immediate 'here-and-now' attitudes, thoughts and desires (Goddard 1998: 167). In Manado Malay discourse particles always occur at the end of a syntactic phrase. One of the unique features of Manado Malay is the large number of discourse particles, and their frequent usage. Some of these particles are the following: *no*, the speaker presents something as obvious or inevitable; *sto*, the speaker is making a guess; *kwa?*, expresses a contrast; *daŋ*, the speaker gives or asks for additional information; *le*, one more item of a certain kind, or a marker of emphasis; *kan*, the speaker assumes that the addressee already knows this; *to*, the speaker assumes that the addressee will agree; *kaŋ*, the speaker asks the addressee for confirmation; *ne*, expresses a polite request; *kata*, the speaker is reporting what someone else has said; and *kote?*, the information is derived from the speaker's own sensory experience.[50]

From a prosodic point of view, discourse particles are exceptional, because they cannot carry the main (focus-marking) accent of the sentence. It has been mentioned in section 6.3 that the accent always falls on the last word of a syntactic phrase, but this does not include discourse particles. Although discourse particles sometimes may sound prominent, and therefore it may appear that they can get an accent, this accent never marks focus, and in addition to this accent, there will always been another accent that does mark focus, which sounds generally more prominent than the accent on the discourse particle. It is thus questionable whether the tone on a

[50] See chapter 3 of Stoel (2005) for more information on these and other discourse particles.

discourse particle should be analyzed as a pitch accent. But they also do not appear to be edge tones, since words with an edge tone do not sound prominent.

It appears that some discourse particles, such as *kwaʔ*, always sound prominent. But most particles, including *le* and *daŋ*, may sound either prominent or not. Thus the particle *le* appears twice in example (24), both with and without prominence, and the same is true for *daŋ* in example (25). It seems that a particle sounds prominent only if the PhP in which it occurs ends in an H edge tone. I therefore assume that this tone associates with the particle instead of the edge. The shift to the left of this tone is indicated by 'H<' in the transcription.

(24) (I am afraid that my boyfriend will start betraying me.)

L	H*	L	L		H<	L	H*	L
{ [*o*	*sama*	*le*] }	{ [	*hele*	*kita*	*le*]	[*pambahugəl*] }	
INTERJ	same	PAR		since	1.SG	PAR	(wo)manizer[51]	

'Oh, it's the same with me, since I too have a secret relationship.'

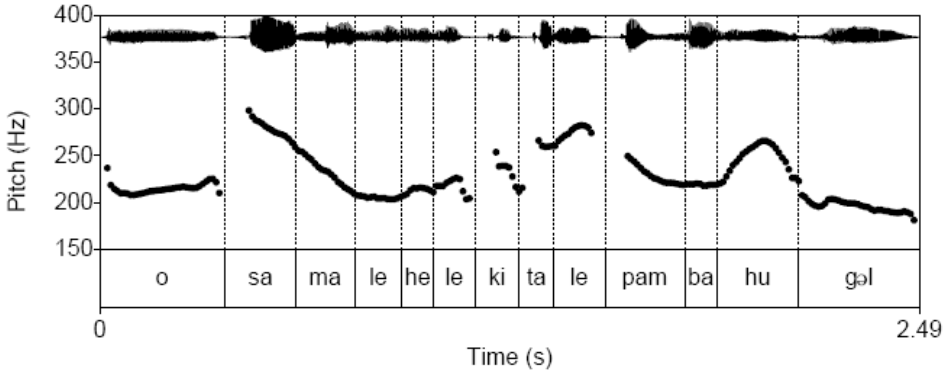

Figure 12: Pitch contour of (24).

(25) (I want to break up with my boyfriend, because he is still a child.)

L	H<	L			H*		L
[*jadi*	*daŋ*]	[	*ɲaʔ səsuai ta*	*pe*	*səlera*	*le*	*daŋ*]
so	PAR		not agree 1.SG	POSS	taste	PAR	PAR

'So he doesn't suit my taste.'

[51] Someone who has secret romantic relationships (< *hubuŋan gəlap*). This may also refer to a woman.

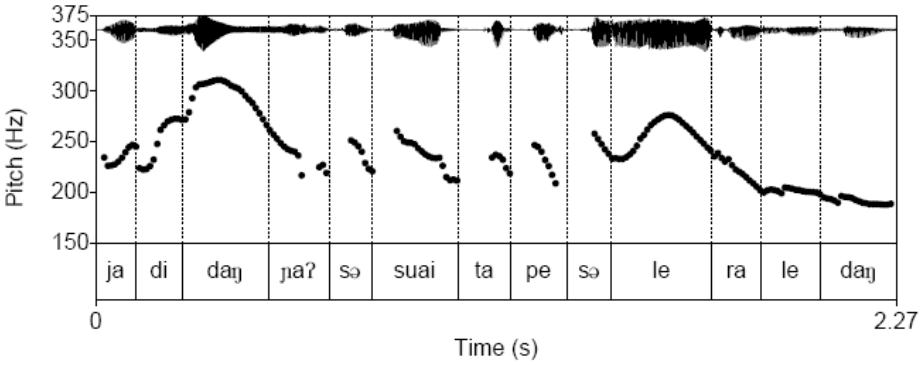

Figure 13: Pitch contour of (25).

If a prominent discourse particle is preceded by a L edge tone, then it is necessary to assume that this particle forms a PhP of its own. This happens only if the particle appears in sentence-final position and is preceded by an accent-bearing PhP. Thus, in the example in (26), the particle *no* must form a PhP of its own, which ends in a H tone, since there is no other source for the H tone that is associated with the particle.

(26) (Here we are trained to be a teacher.)

L	H	L	H	L	H*	L	H<
[*so itu*	]	[*kita*	]	[*nimau*	]	[*no*	]
therefore		1.SG		not.want		PAR	

'That's why I don't like it.'

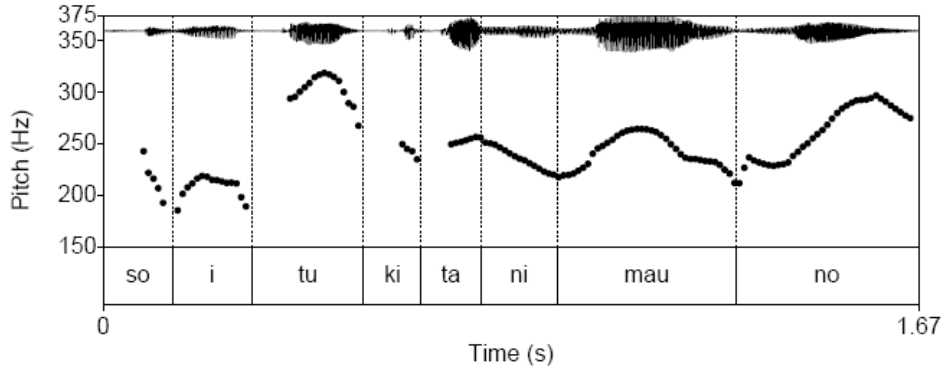

Figure 14: Pitch contour of (26).

The same analysis is proposed for the example in (27), where the particle *to* forms a PhP of its own. Note that in this sentence, the focus-marking accent on *guru* occurs

on the same syllable as the initial L edge tone of the PhP, which is therefore hardly realized.

(27) (As for me, I like to become a teacher.)

L	H	L			H<	L	H	(L)	H*	L	H<
[*soalŋa*]		[*kita*	*pe*	*oraŋ tua*	*le*]	[*dua-dua*]		[	*guru*]		[*to*]
CONJ		1.SG	POSS	parents	PAR	both			teacher		PAR

'Since my parents, too, are both teachers.'

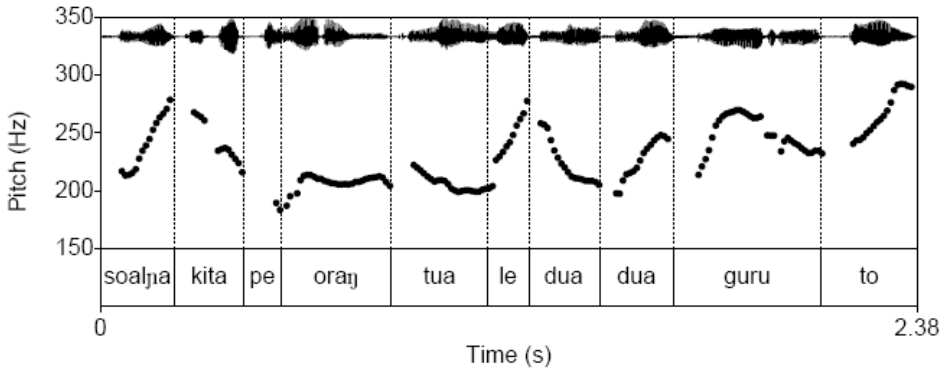

Figure 15: Pitch contour of (27).

In example (25) above, there were two discourse particles following each other, neither of which was prominent. In example (28), there are also two particles, but here the second particle carries a H tone. Since the accent-bearing PhP has a final L edge tone, I again assume that there is an additional PhP that supplies the tone on the particle.

(28) (What would you have done if you were free to choose for yourself?)

L	H*	L		H<
[	*sama*	*le*]	[	*no*]
	same	PAR		PAR

'The same.'

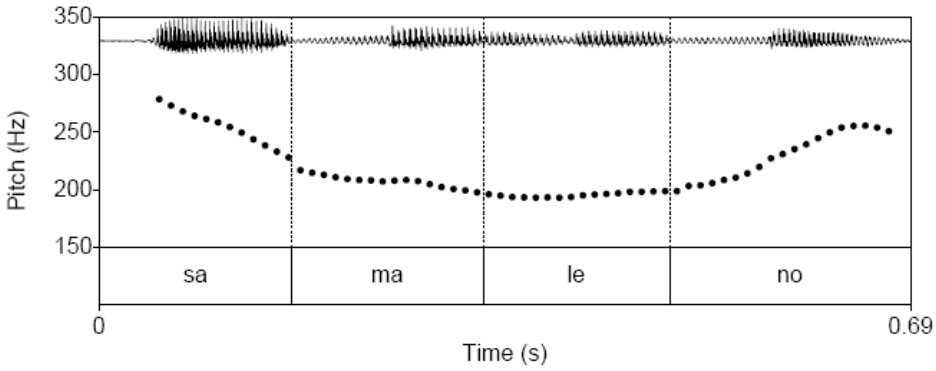

Figure 16. Pitch contour of (28).

6.5.5 Final H tone in statements

A final H edge tone is typical for polar questions (see section 6.6.1), but it also occurs at the end of an encliticized IP in statements. An encliticized IP is an IP that contains just a single PhP without a focus-marking accent, and which follows another IP that does contain a focus-marking accent. It occurs only after a discourse particle with an associated H tone that forms a PhP of its own (this PhP supplies the H tone that gets associated with the particle; see section 6.5.4). Only one PhP can follow an accent-bearing PhP within an IP, and this is the PhP that contains the discourse particle. The following PhP must therefore be analyzed as a separate IP. This PhP begins with an L edge tone and ends with a H edge tone. Note that these edge tones are copies of the preceding two edge tones, just as the edge tone of an encliticized PhP (without a discourse particle) is a copy of the preceding edge tone.

An example of a sentence containing an encliticized IP is given in (29).[52] There are three PhPs: an accent-bearing PhP, a PhP containing a discourse particle, and a PhP that forms the encliticized IP.

(29) (You and your boyfriend, do you see each other regularly?)

L	H*	L	H<	L		H
{ [	*ada*	]	[*no*] }	{ [*ja*	*bakudapa*	] }
	have		PAR	ASP	meet	

'We DO see each other regularly.'

[52] This sentence expresses polarity focus, cf. the example in (21) above.

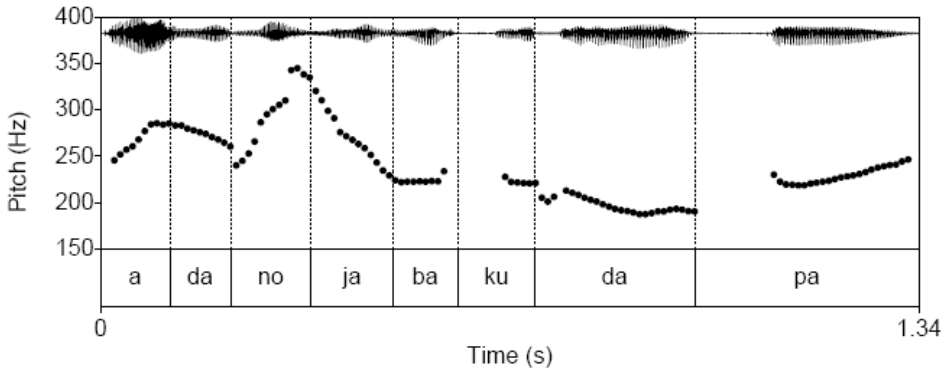

Figure 17: Pitch contour of (29).

Another example of an encliticized IP is given in (30). In this sentence there is a short pause between the discourse particle *no* and the encliticized IP. This provides evidence that the final PhP is indeed an IP of its own, since a pause typically occurs after an IP, but not after a PhP.

(30) (What I have heard is ...)

	L						H	L	H*	L		H<	
{ [	*yaŋ*	*basa iŋgris*		*paliŋ*	*bagus*	*kata*	]	[	*di*	*sini*	]	[*no*	] }
	REL	English		most	good	PAR			in	here	PAR		

L			H	
{ [	*di*	*ikip*	] }	
	in	IKIP		

'.. that the best place to study English, so they say, is here, at the IKIP.'

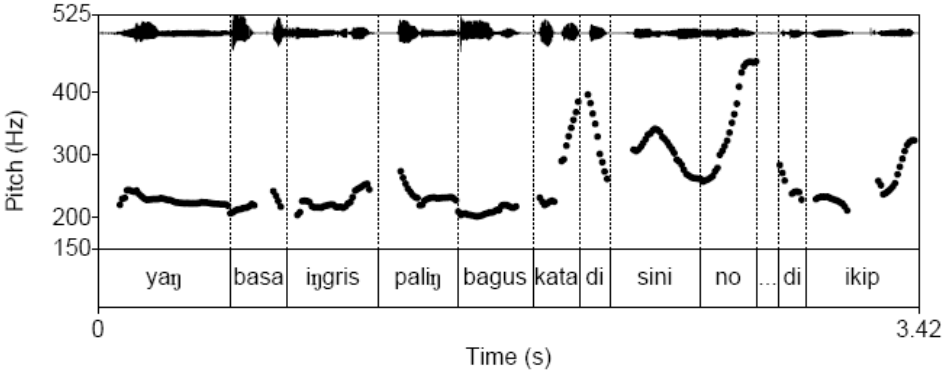

Figure 18: Pitch contour of (30).

6.5.6 Final level tone

In all the examples given so far, the final edge tone of a PhP was either a H or L tone. But there is a third possibility, a final level tone, which will be transcribed as '0', to indicate that the pitch is neither high nor low. The 0 tone is always accompanied by strong lengthening of the final syllable of the word. It is used in lists, and indicates that there is more to follow. For example, in the sentence in (31), the speaker tries to remember the food items that were sold at her high school canteen. The four items all have the same structure: a pitch accent on the penultimate syllable, a final syllable with level pitch, which is lengthened considerably, and followed by a pause.

(31) (Tell me, what did they sell at your high school canteen?)

L	H*	0	L	H*	0	L	H*	0	L	H*	0
{ [	*pisaŋ*	*goreŋ*] }	{ [	*milu*	*bakar*] }	{ [	*tinutuan*	] }	{ [	*mi*	] }
	banana	fried		corn	roasted		vegetable.soup			noodles	

'Fried banana ... roasted corn ... vegetable soup ... noodles ...'

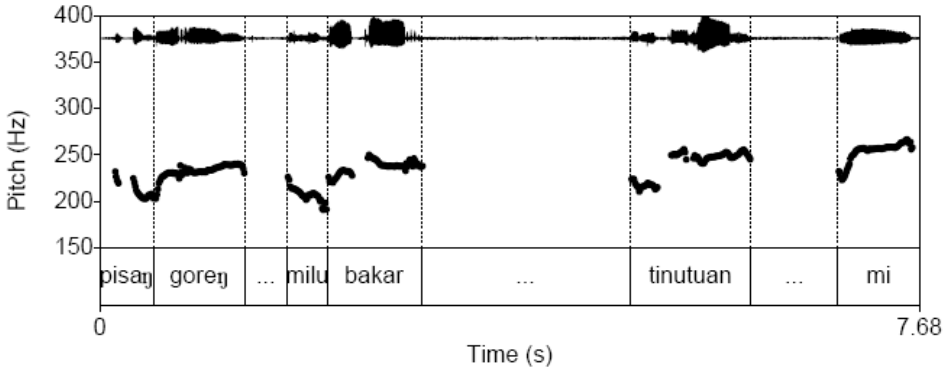

Figure 19: Pitch contour of (31).

Another example of the final level tone is given in (32), which consists of two pairs of reduplicated words that clearly show the lengthening effect.

(32) (Everything they sell there is very expensive.)

L	H*	0	L	H*	0
{ [	*spatu-spatu*	] }	{ [	*tas-tas*	] }
	shoes			bags	

'Shoes ... bags ...'

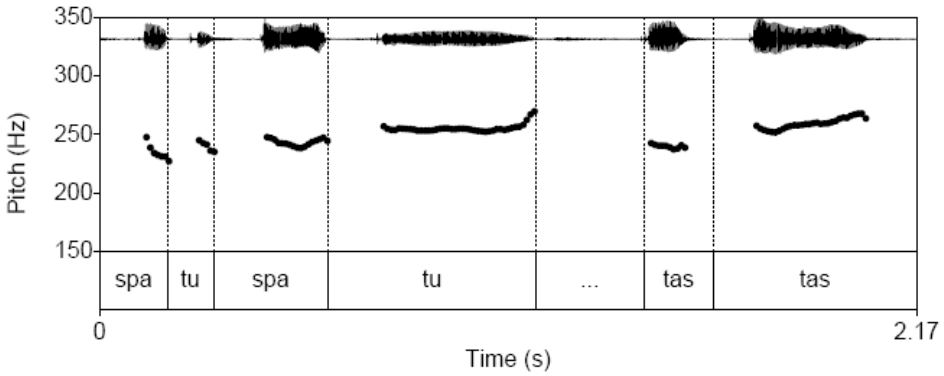

Figure 20: Pitch contour of (32).

I found that the final level tone is used not only in lists, but also in some exclamations, as the example in (33) shows. The pitch rises on the first syllable, and remains flat thereafter. The rise is interpreted as an initial H edge tone, because it cannot be a pitch accent, as words in Manado Malay never have antepenultimate stress. Just as in case of an initial L edge tone following a H tone, it takes some time before the target is reached. Other exclamations that are frequently pronounced with this intonation pattern include *o tolo*ŋ 'help!' and *ya ampun* 'good gracious!'.

(33) (Her face was swollen up like that of a prostitute.)
H 0
[*astaga*]
INTERJ
'My God!'

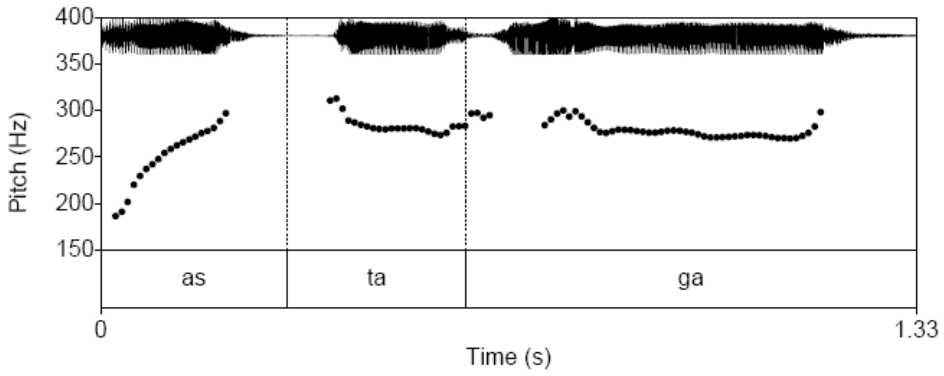

Figure 21: Pitch contour of (33).

6.6 The intonation of questions

There are three types of questions in Manado Malay that have a characteristic intonation pattern, including polar questions, information questions, and echo questions. These will be discussed in sections 6.6.1, 6.6.2, and 6.6.3, respectively.

6.6.1 Polar questions

Polar questions (also called yes-no questions) are formed by a L* pitch accent associated with the last word of the focus domain, followed by a H edge tone. Any PhP preceding the accent-bearing PhP starts with a L edge tone and ends with a H edge tone, as is the case for statements. The L* pitch accent is reached at the end of the penultimate syllable in case of penultimate stress, as in example (34), and about halfway the final syllable in case of final stress, as in example (35). This difference in alignment proves that there is indeed a pitch accent here. Note that in the last example the final syllable is extra long, just as in case of a H* accent on a word with final stress. In both polar question examples, the pitch at the beginning of the accent-bearing PhP starts high, and then gradually drops until the L* accent. There is thus no initial L edge tone as in statements, and neither is it necessary to assume that there is an initial H tone, as the next two examples show.[53]

(34) L H L* H
[*nana*] [*ja* *bamara*]
Nana ASP angry
'Is Nana often angry?'

(35) L H L* H
[*nana*] [*ja* *lalá*]
Nana ASP tired
'Is Nana often tired?'

[53] Note that this absence of an initial L edge tone probably helps the listener to understand the utterance as a question at an early stage. At the end of the sentence, the pitch seems to go down a bit, but this is an idiosyncrasy of this speaker, which, moreover, is hardly audible, since the speech signal at this point is very weak.

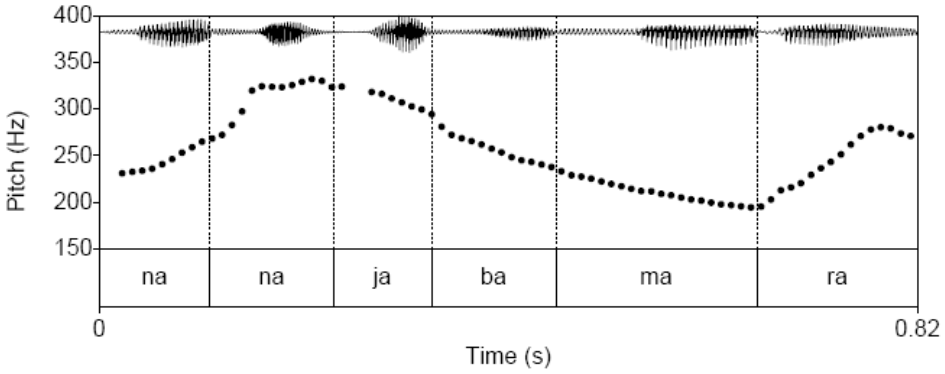

Figure 22: Pitch contour of (34).

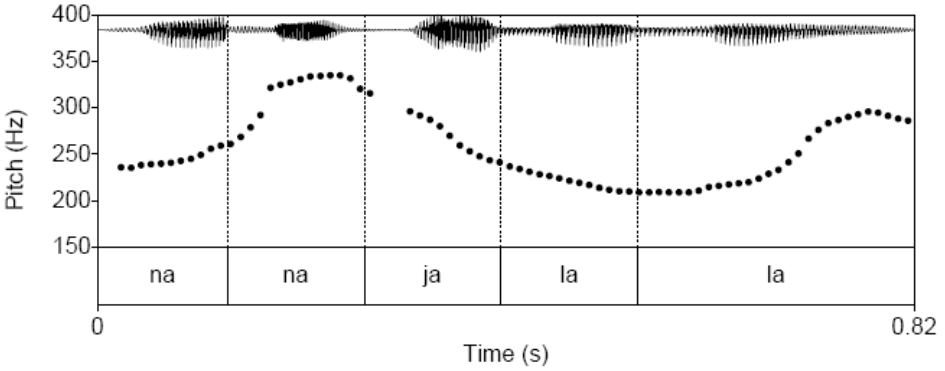

Figure 23: Pitch contour of (35).

In examples (36) and (37), the accent-bearing PhP is the first PhP of the sentence. The pitch starts low and remains low until the L* accent (which is again aligned with the end of the stressed syllable in case of penultimate stress, and with about the middle of the stressed syllable in case of final stress), which is followed by a rise. The initial L tone may just be a default tone that is not specified at the phonological level, since it is absent from the accent-bearing PhPs in the two previous examples. The accent-bearing PhPs in (36) and (37) are followed by encliticized PhPs. The edges tones of these PhPs are copies of the preceding edge tones, just as in case of the encliticized IPs in (29) and (30) above.

(36) L L* H L H
[*ja* *bamara*] [*nana*]
ASP angry Nana
'Is Nana often angry?'

(37) L L* H L H
[*ja* *lalá*] [*nana*]
ASP tired Nana
'Is Nana often tired?'

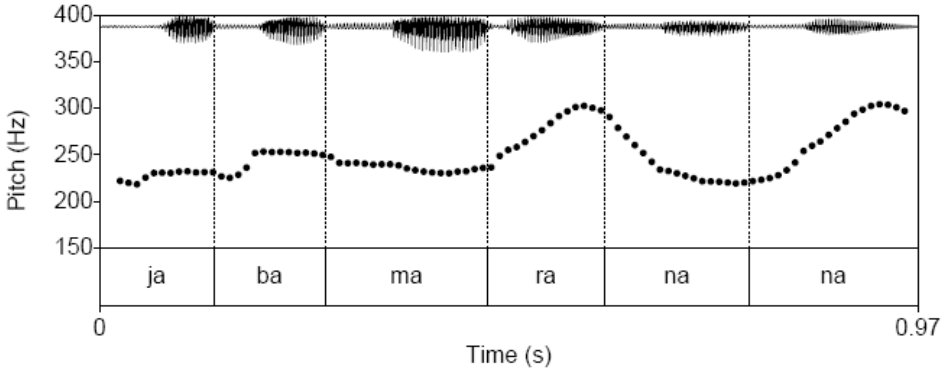

Figure 24: Pitch contour of (36).

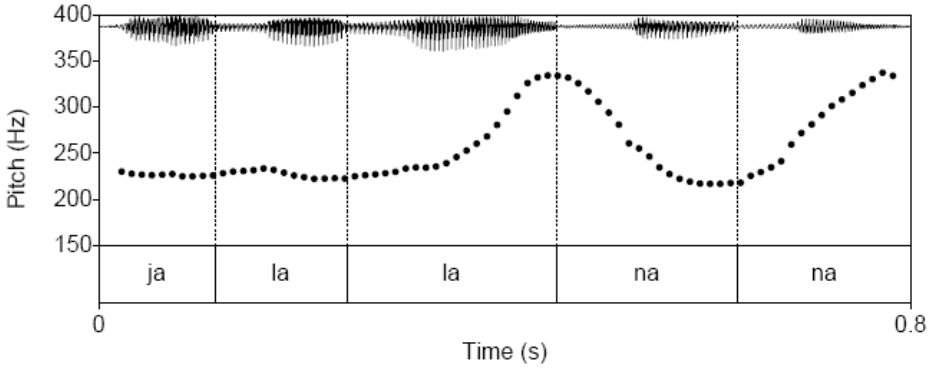

Figure 25: Pitch contour of (37).

I will now give two examples of spontaneous speech, both of polar questions in which the accent-bearing PhP is followed by an encliticized PhP. In the sentence in (38), the L tone at the beginning of the encliticized PhP is not realized very clearly, and there is no return to the baseline of the speaker's pitch range, as in the two examples above. In the sentence in (39), the final H edge tone of the accent-bearing PhP is deleted, so there is just a single rise at the end of the sentence (which may be easier for the speaker, especially when talking quickly).

(38) (Talking about the boys at their school.)

L	H	L		H	L			L*	H	L		H
[*koŋ*]		[	*ŋana*	]	[	*da*	*cowoʔ*	*da* *taɲa*	]	[	*di* *sini*	]
CONJ		2.SG				have	boyfriend	ASP ask			in here	

'And is there someone who asked to be your boyfriend here?'

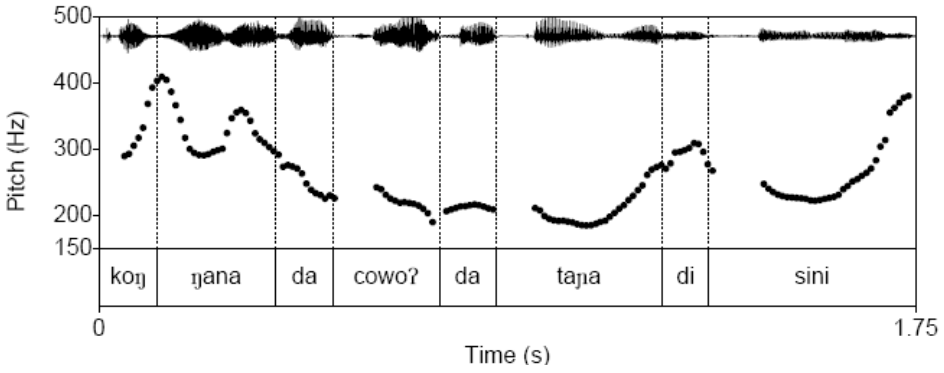

Figure 26: Pitch contour of (38).

(39) (A word-guessing game.)

L			L*		L	H
[*ada*	*di*	*ruaŋ*	*tamu*	]	[*dia*	]
have	in	room	guest		3.SG	

'Is it in the living room?

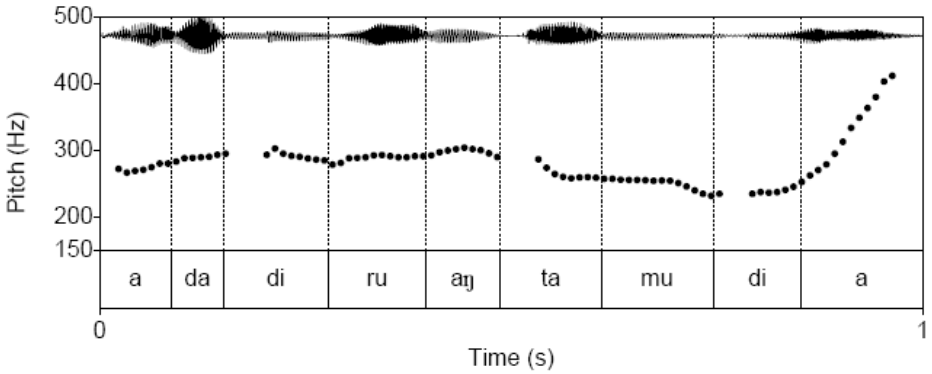

Figure 27: Pitch contour of (39).

6.6.2 Information questions

Information questions (also called WH or question-word questions) often get a H*L (falling) pitch accent, which is associated with the stressed syllable of the last word of the focus domain. The H tone is aligned with the beginning of the syllable, and the L tone with the end. An example is given in (40). The first PhP has the L...H pattern that also occurs in statements and polar questions. But the accent-bearing PhP has a very different structure. The pitch is high from the beginning until the stressed syllable, then there is a fall, and after that it remains low.

(40) L H H*L
[*ŋoni*] [*mo* *pi* *mana*]
2.PL ASP go where
'Where are you going?'

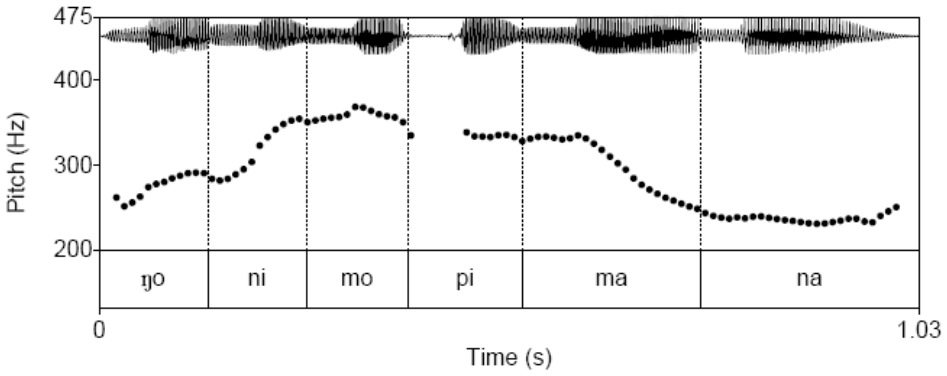

Figure 28: Pitch contour of (40).

The same pattern is used if the question word appears at the beginning of the sentence, as in example (41). The H*L accent is thus not necessarily associated with the question word itself.

(41) L H H*L
[*bagimana*] [*kabar*]
how news
'What's the news?'

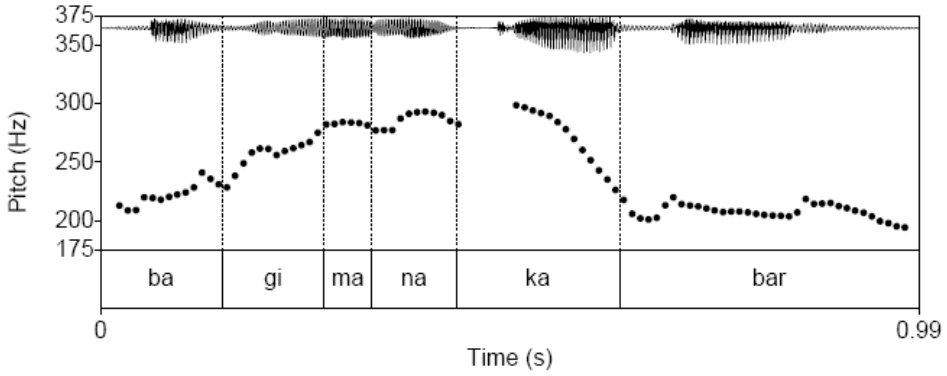

Figure 29: Pitch contour of (41).

The H*L accent occurs only in information questions, but it does not occur in all of them. If the accent-bearing PhP is the first PhP of the sentence, then the pitch begins low, and a H* accent is used instead, as in the example in (42).

(42) L H* L L
[*brapa* *hari*] [*di* *sana*]
how.many day in there
'How many days (did you stay) there?'

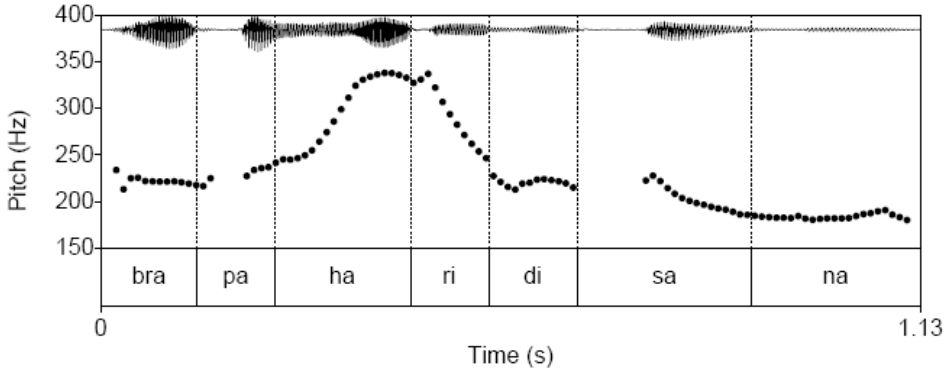

Figure 30: Pitch contour of (42).

An example of an information question occurring in spontaneous speech is given in (43). Note that there is a small drop in pitch after the first PhP, which is not uncommon. However, the pitch at the beginning of the accent-bearing PhP stays relatively high, and there is thus no need to transcribe an initial L edge tone.

(43) (Talking to a friend at college.)

L	H			H*L				L
[*ŋana*	]	[*skola*	*di*	*mana*	]	[*waktu*	*SMA*	]
2.SG		go.school	in	where		during	high.school	

'Where did you go to high school?'

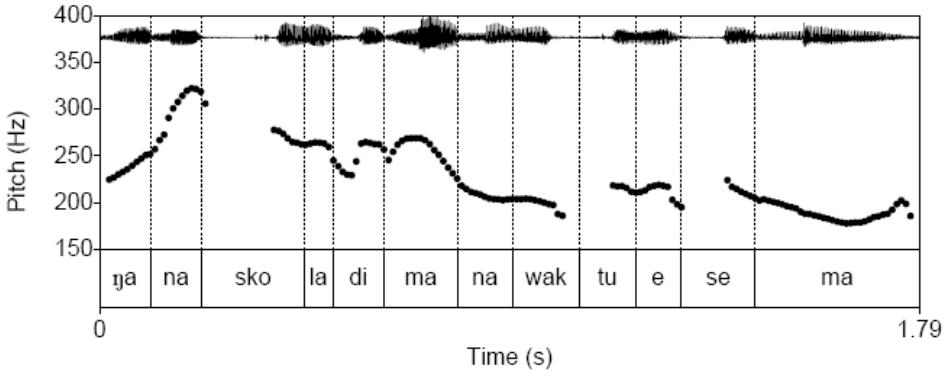

Figure 31: Pitch contour of (43).

6.6.3 Echo questions

Echo questions ask for confirmation of something that the speaker finds hard to believe or thinks he did not hear correctly. Their form is identical to regular information questions, except for their intonation pattern. An example is given in (44). This sentence ends in a final rise, just like polar questions, but, unlike these, there is no preceding L* accent. Also, the final rise is much higher than in polar questions. Since the rise starts at the stressed syllable of the final word, and continues until the end of this word, it is transcribed as an H* accent followed by a H edge tone.

(44)

L	H	L		H*	H
[*nana*	]	[*da*	*pi*	*mana*	]
Nana		ASP	go	where	

'Nana went where??'

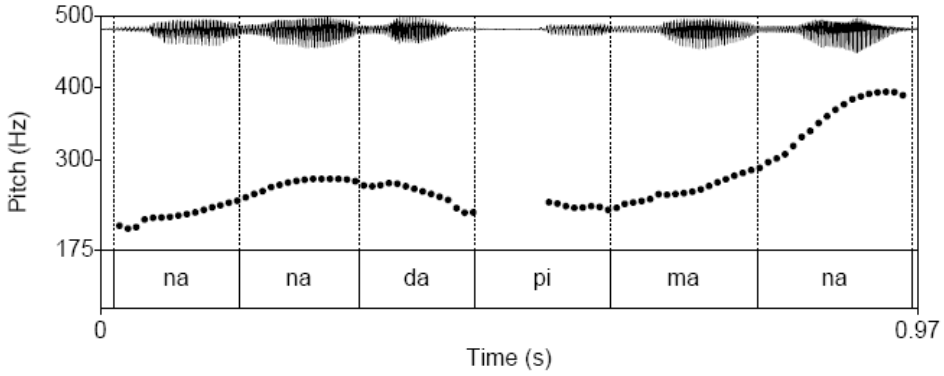

Figure 32: Pitch contour of (44).

6.7 Special intonation patterns

This section discusses two intonation patterns that are special because of their form and because they have a specialized function that is not used very frequently. The first pattern I called 'accent shift', as the accent does not fall on the stressed syllable of the word. The second one is a rising pitch pattern found in two one-word utterances.

6.7.1 Accent shift

Pitch accents are by definition associated with the stressed syllable of a word. However, there are two constructions in Manado Malay in which the pitch accent is not associated with the stressed syllable, but with the final syllable of the word. The first one is the calling contour, which is used for calling people who are some distance away from the speaker (Ladd 1996: 136). An example is presented in (45). Although the word *nana* has penultimate stress, the H* accent is associated with the final syllable. This shift to the right of the accent is indicated by 'H*>' in the transcription. The H tone is indeed an accent, and not part of a complex HL edge tone, because it is the final syllable that sounds prominent.

(45) L H*> L
[*nana*]
Nana
'Nana!'

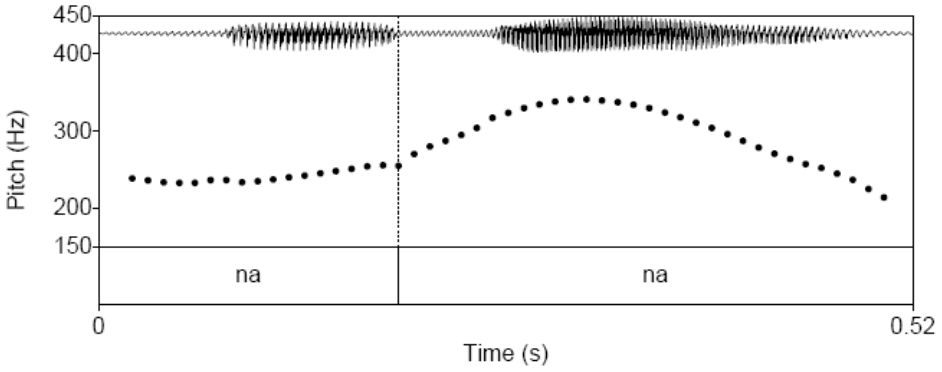

Figure 33: Pitch contour of (45).

The second construction in which the accent is associated with the final syllable is used for marking emphasis. It consists of an adjective followed by the intensifier *skali*, with a pitch accent associated with the final syllable of the adjective. This construction is special for two reasons: the accent falls on the last syllable of the word, rather than on the stressed (penultimate) syllable; and the accented word is not the last word of the adjective phrase, which is remarkable, since in Manado Malay the accent typically falls on the last word of the XP (cf. section 6.3).

(46) (At the beginning of a conversation.)

L			H*>		L
[*ta*	*ada*	*cirita*	*lucu*	*skali*	]
1.SG	have	story	funny	very	

'I have a very funny story.'

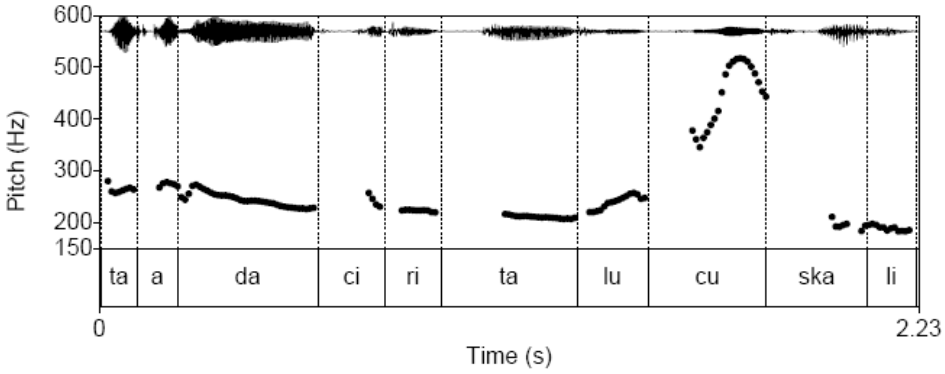

Figure 34: Pitch contour of (46).

6.7.2 Final H tone in *tau?* and *mau?*

The one-word utterances *tau?* 'I don't know' and *mau?* 'I don't want' are pronounced with an intonation pattern that is specific for these words. It consists of a rising pitch throughout the word, which is transcribed as an L initial tone, followed by a H* accent and a H edge tone. The final H tone probably expresses uncertainty, as in polar questions, but, contrary to these, there is no L* accent. This intonation pattern also contrasts with that of a statement, which has a final L tone, as in *tau* 'I know' in example (47a). This contrast is illustrated in Figure 35, where the two utterances are pronounced by the same speaker. Note that the initial L tone is not visible, since the initial consonant is voiceless.

(47a) L H* L
[*tau*]
know
'I know.'

(b) L H* H
[*tau?*]
not.know
'I don't know.'

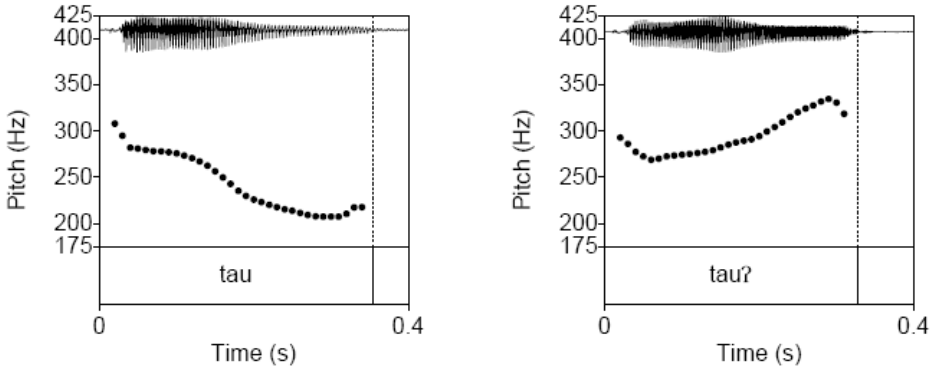

Figure 35: Pitch contours of (47a) and (47b).

6.8 Conclusion

There are three types of pitch accent in Manado Malay: H*, L*, and H*L. The H* accent can occur in statements as well as in information questions, while the L* and the H*L accent are limited to polar questions and information questions, respectively. These accents are associated with a stressed syllable. In a few special constructions, a H* accent may be associated with the final syllable of a word, rather than the stressed penultimate syllable (transcribed as 'H*>').

Edge tones are associated with the beginning and/or end of a Phonological Phrase (PhP). These include H, L, and 0 (final only). The 0 tone indicates that the pitch is sustained at mid level, in combination with lengthening of the final syllable. If, on the other hand, no tone is specified, then the pitch remains low after a previous L tone, or high after a previous H tone. A final H edge tone may be associated with a

discourse particle at the end of a phrase, rather than with the phrase boundary itself; in such cases it is transcribed as 'H<'.

No edge tones are associated with the Intonation Phrase (IP). Each IP consists of one or more PhPs. There is no more than one accent-bearing PhP, which may be preceded by any number of PhPs starting with an L edge tone and ending in a H edge tone, and followed by no more than one encliticized PhP. There is thus no more than one pitch accent per IP. This is quite different from languages such as Dutch and English, where it is not uncommon that several words in the same IP are accented.

6.9 Comparative intonation

Since very little is known about the intonation of most of the languages in Indonesia, this section on comparative intonation is limited to just two languages, viz. Standard Indonesian and Javanese.

6.9.1 Indonesian

Standard Indonesian is closely related to Manado Malay, but an important difference is that the former apparently does not have lexical stress, notwithstanding frequent claims to the contrary (see Odé 1994 for an overview of the literature). Goedemans and van Zanten (this volume) have shown that in Indonesian the accent has no mandatory association with a specific syllable of the word. It is therefore difficult to distinguish between accents and edge tones, and it is even possible that Indonesian does not have accents at all, but only edge tones.

The intonation of Indonesian was studied by Halim (1981), who uses a transcription system with three pitch levels: 1 (low), 2 (mid), and 3 (high). This system readily translates into the standard autosegmental-metrical system used in this paper if 3 is replaced by H, and both 1 and 2 by L (2 is equivalent to a non-final L tone, and 1 to a final L tone). The non-nuclear accent of Halim corresponds to a H edge tone, and the nuclear accent to a H* pitch accent. His utterance medial pause (/) corresponds to either a PhP or (sometimes) an IP boundary, and his utterance final pause (#) to an IP boundary.

From the examples given by Halim, it appears that Manado Malay and Indonesian have a fairly similar intonation system, as far as statements are concerned. It is remarkable that Halim uses the same transcription for statements, polar questions, and information questions, suggesting that they have the same intonation, which is certainly not the case in Manado Malay.

Ebing (1997) found that Indonesian listeners are unable to recognize a (contrastive) narrow-focus accent on a specific syllable of a word, or on a non-final numeral in a sentence. Thus it appears that in Indonesian a narrow-focus accent on a non-final word is not possible, which is also the case in Manado Malay (cf. the last two examples in section 6.3).

6.9.2 Javanese

This discussion of Javanese intonation is based on Stoel (to appear). Like Indonesian, Javanese presumably does not have lexical stress. The prosodic structure of Javanese seems to be similar to that of Manado Malay, in that there are three types of phonological phrases (PhPs): one that is equivalent to the accent-bearing PhP in Manado Malay, which may be preceded by one or more PhPs starting with a L tone and ending with a H tone, and followed by at most one encliticized PhP. However, Javanese does not have stress, so there are no pitch accents. The accent and final edge tone of an accent-bearing PhP in Manado Malay corresponds to a HL% or LH% boundary tone in Javanese. The HL% tone is clearly audible only in case of non-final focus, contrary to Manado Malay, where final and non-final accents are equally strong.

There are at least three more similarities between Javanese and Manado Malay intonation. First, Javanese also has a final level tone, but its usage seems to be less limited than in Manado Malay (cf. section 6.5.6). Secondly, just as in Manado Malay, it is not possible to focus on a non-final word within a noun phrase (cf. section 6.6.3). Finally, Javanese also has an emphatic adjective + intensifier construction with an exceptional non-final accent (cf. section 6.7.1).

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