The intonation of Banyumas Javanese

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Abstract

I will present an analysis of the intonation of the Banyumas dialect of Javanese (an Austronesian language spoken in Indonesia), based on the autosegmental-metrical framework. As Javanese is a language without lexical stress, there are no pitch accents. Boundary tones are associated with the Accentual Phrase (AP). A non-final AP ends in a H% tone, while a nuclear AP ends in either a HL% or a LH% tone that marks the end of the focus. Any post-focal material appears in an encliticized AP. Contrastive focus at the word level is impossible, except in a few special constructions.

1. Introduction

Many of the intonational descriptions that have appeared within the autosegmental-metrical framework concern languages with lexical stress. In these languages, a distinction is made between pitch accents, which are associated with a stressed syllable, and boundary tones, which are associated with a prosodic boundary [8], [6], [3]. Some attention has also been paid to languages of other types, including those with lexical pitch accent (e.g. Japanese [1]), and lexical tone (e.g. Mandarin [7]), as well as intonation-only languages (e.g. Korean [5]). It is especially this last category of languages that deserves more attention, as there are relatively few studies on the languages of this group, whereas there are probably many such languages spoken around the world.

It seems that many of the languages spoken in Indonesia belong to this type. The intonation of most of the Indonesian languages, however, remains virtually unstudied (an exception is Manado Malay [11], which is, however, a language with lexical stress). This is true even for Javanese, the Austronesian language with the largest number of speakers. Except for a few remarks in teaching manuals, the only study that deals with Javanese intonation is the short grammar of Uhlenbeck [12], which distinguishes seven intonation patterns that are used in declarative sentences, based on the number of phrases and the distribution of given and new information within these phrases. The present paper is a first attempt to use the autosegmental framework to analyze the intonation of a Javanese dialect.

2. Materials

The present study is based on a small corpus, that was produced by Maria Ulfah, a native speaker of the Banyumas dialect of Javanese. The corpus contains about 350 question-answer pairs and a short story. In the question-answer pairs, it

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was mainly the answer that was of interest, and the function of the question was to determine the focus of the answer. The sentence pairs were shown one-by-one to the speaker, who was asked to memorize them, and then pronounce them without being able to see the text. The short story was composed on the spot by the speaker.

3. Stress

There is no agreement among authors on the stress pattern of Javanese. Poedjosoedarmo [9] claims that Javanese has final stress, while Ras [10] states that stress falls on the penultimate syllable, but if it contains a schwa, then it is the final syllable that gets the stress. Horne [4], on the other hand, denies that there are any fixed rules for stress in Javanese, and claims that any syllable can get the main stress. Goedemans and van Zanten [2] present convincing evidence that, in Indonesian as spoken by a speaker of Javanese, there are no phonetic correlates for stress, and an accent on the penultimate or final syllable is equally acceptable for listeners.

I assume that not only Indonesian as spoken by speakers of Javanese does not have stress, but that this is also the case for Javanese itself. As there are no stressed syllables, there are also no pitch accents, and I will therefore use only boundary tones in my description.

4. Prosodic structure and focus

4.1. Prosodic structure

I will distinguish two prosodic levels: the Accentual Phrase (AP), and the higher-level Intonational Phrase (IP). Boundary tones are associated with the AP, but not the IP. Each IP contains a nuclear AP, which may be preceded by one or more pre-nuclear APs. A pre-nuclear AP always begins with a %L boundary tone and ends with a H% tone. A nuclear AP begins with a %L tone and ends with either a HL% or a LH% tone. The nuclear AP may be followed by an encliticized AP, which has a final boundary tone that is a copy of the last tonal segment of the nuclear AP.

4.2. Focus structure

The nuclear AP contains the focus of the sentence. Prenuclear APs may also contain material that is in focus, as, for example, in an all-focus sentence. Final focus is the default pragmatic structure in Javanese. In a clause with non-final focus, the non-focus (or background) is contained in an encliticized AP that follows the nuclear AP.

5. Tonal structure

5.1. The HL% tone

The HL% tone is used mostly in statements. The H target of this tone is typically aligned with the penultimate or final syllable, but it is sometimes difficult to determine its exact position, as this tone is often realized very weakly, especially in case of final focus. In example (1), the H target of the HL% tone appears to be aligned with the final syllable.

(1) (Where are you from?)

%L H% %L H% %L HL%

{ [Enyong] [asalé] [sekang Cilacap] }

1.SG origin from Cilacap

'I come from Cilacap.'

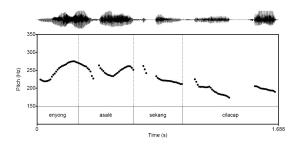


Figure 1: Pitch track of (1).

In example (1), the pitch excursion at the HL% tone is rather small, which is common in sentences with final focus. Since this is the default focus structure in Javanese, there is no need to mark it explicitly. But in case of non-final focus, the pitch excursion at the HL% tone is typically much larger. This is the case in the example in (2), in which the nuclear AP is followed by an encliticized AP. In all the examples in the corpus, the H target of a non-final HL% tone is aligned with the penultimate syllable, except if it contains a schwa (which is written <e>, while <e>, and <e> are used for $[\epsilon]$ and [e], respectively).

(2) (Who ate the peanut biscuits?)

%L HL% L%

{ [Kaki Péyang] [sing mangan rempèyèk] }

grandfather Peyang REL eat peanut. biscuits
'It was Mr. Peyang who ate the peanut biscuits.'

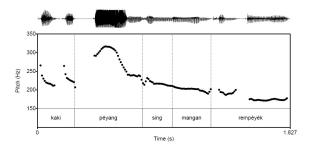


Figure 2: Pitch track of (2).

If the penultimate syllable contains a schwa, then the H target of the HL% tone may be aligned with either the penultimate or the final syllable. In the example in (3), the H target is reached in the final syllable, in accordance with the stress rule of Ras given in section 3.

(3) (Which shop was robbed?)

%L HL% L%

{ [Toko mas Magelang] [sing kecolongan] }

store gold Magelang REL robbed

'The Magelang jewelry shop was robbed.'

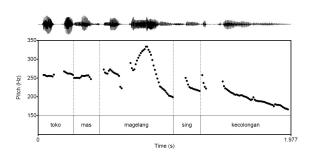


Figure 3: Pitch track of (3).

Perhaps the H in (3) is aligned with the final syllable only because the schwa happens to be very short. The example in (4) shows that the H can be aligned with the penultimate syllable, even though it contains a schwa. Thus it seems that the alignment position of the H is not fixed, but free (at least within the last two syllables).

(4) (What is not clean?)

%L HL% L%

{ [Carané ngepèl] [ora resik] }

manner mop not clean

'The way she mops is not clean.'

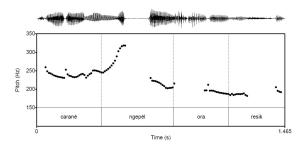


Figure 4: Pitch track of (4).

All the seven intonation patterns of Uhlenbeck's grammar (mentioned in section 1) can be described by associating the HL% tone with the end of the focus domain. Any APs preceding the nuclear AP have the %L ... H% intonation pattern, as in example (1). If there is an AP following the focus, then it has a final L% tone, as in example (2).

5.2. The LH% tone

The LH% tone appears in questions (both yes-no and WH-questions), and also in statements if the IP is followed by another IP. An example of a yes-no question with non-final focus is given in (5). As in (2), the final boundary tone of the encliticized AP is a copy of the last tonal segment of the nuclear AP.

(5) %L LH% H%

{ [Mbak Prapti] [sing seneng foya-foya] }

sister Prapti REL like squander.money

'Is it Mrs. Prapti who likes to squander money?'

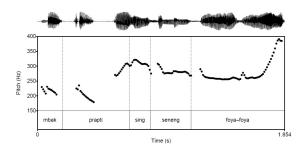


Figure 5: Pitch track of (5).

The LH% tone can be used in a statement in case the IP is followed by additional information, as for example in an enumeration of type 'A is doing X, B is doing Y'. An example of the first IP of such a sentence is given in (6).

(6) (What is happening?)
%L H% %L LH%
{ [Bocah cilik] [padha mangan buah] }
child small PL eat fruit
'The children are eating fruits, ...'

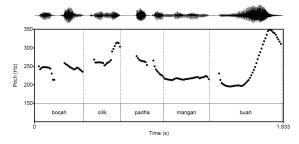


Figure 6: Pitch track of (6).

5.3. Contrastive lengthening

A HL% tone associated with the nuclear AP may be accompanied by a strong lengthening of the final syllable of the AP. The pitch at the end of the AP then does not go down to the base level. This tone will transcribed as HL0%. It can again be used if additional information follows, but it seems to be more emphatic than the LH% tone of example (6). It appears to be common in case of a contrast, as in the example in (7).

(7) %L HL0%
{ [Udu nggo adhi-né kanca-né] }
not for younger.sibling-GEN friend-3.SG
'Not for the younger sister of her friend, (but for ...)'

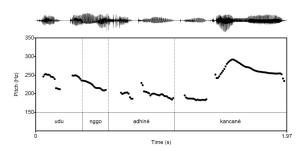


Figure 7: Pitch track of (7).

6. Syntactic vs. prosodic structure

Most clauses correspond to a single IP. Topic-comment clauses often consist of (at least) two APs, with a break between the constituents. If a clause has multiple topics (as in example 1), then each of the topics forms an AP of its own, as do conjunctions or adverbs preceding the topic. In case of broad focus, a verb and a following argument form a single AP. In case of a cleft sentence, the focus and background each form an AP of their own (the focus being a nuclear AP and the background an encliticized AP, as in examples (2), (3), and (4) above).

It is not possible to have an AP boundary within a noun phrase (at least, if the noun phrase is relatively short). It is therefore impossible to have narrow focus on a single (nonfinal) word. Thus, in the example in (8), the contrastive numeral *wolung* 'eight' is not marked prosodically in any way, since the noun phrase *wolung kilo* 'eight kilo' cannot be split into two APs. The H target of the HL% tone is not aligned with *wolung*, but with *kilo*.

(8) (The weight of her child is not nine kilos, ...)

%L H% %L HL%

{ [tapi] [wolung kilo] }

but eight kilo

'... but eight kilos.'

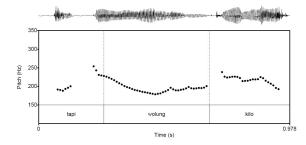


Figure 8: Pitch track of (8).

Thus the H target of the HL% tone is not shifted to the left in case of a contrastive non-final word. However, there are a few constructions in which this is possible, including the adjective + banget construction, which has the meaning 'very ...'. For example, in the sentence in (9), the H target of the HL% tone is clearly aligned with the adjective. Note that, just as in case of non-final focus, the pitch excursion at the H target is quite large.

(9) (Do your parents-in-law treat you bad?)

%L LH% %L H- L%

{ [Ora] } { [mertuwané inyong éman banget] }

no parents-in-law 1.SG kind very

'No, my parents-in-law are very kind to me.'

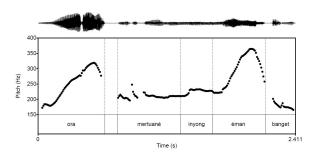


Figure 9: Pitch track of (9).

Another construction that allows the H target of the HL% tone to be aligned with a non-final word has the form verb + *bae* 'only ...'.

7. Conclusion

I have presented a first overview of the intonation of the Banyumas dialect of Javanese. Since it appears that Javanese does not have stress, I have used no pitch accents in my description, but only boundary tones, which are associated with the beginning and end of an Accentual Phrase (AP), but not with the Intonational Phrase (IP). A remarkable feature of Javanese is that it is generally not possible to highlight a nonfinal word of an AP, except in a limited number of constructions.

The results of my investigation can only be preliminary, since only one speaker was recorded. It is currently impossible to compare the intonation of the Banyumas dialect with that of other Javanese dialects, or with other languages in the area, since their intonation has not been studied yet. This would certainly be a worthwhile topic for future research.

8. References

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