



On the Perception of Prosodic Prominences and Boundaries in Larantuka Malay Variety by Non-Native Speakers

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Abstract

This paper examines how non-native speakers of Larantuka Malay Variety (henceforth LMV) perceive the prosodic prominences and boundaries of the language, as well as finding out the extent to which the 'raters' agree one with another on the values of prosodic prominences and boundaries of LMV. This is descriptive-qualitative research. The data was collected through Rapid Prosody Transcription (RPT) (Cole & Shattuck-Huffnagel, 2016) by involving 16 non-native speakers of LMV who gave their perceptions on every word inside 9 excerpts by scoring the words from 0.0 to 1.0. The data was firstly calculated to find the mean of each word in the excerpts where they are presented in line charts. Secondly, to assess the extent where the raters agree with one another on the perceptions, this is measured by using Cohen's Kappa Coefficient in statistics software named 'IBM SPSS Statistics 20'. The results are then classified based on Agreement Categories (Riesberg, Kalbertodt, Baumann, & Himmelmann, 2018). Result shows there is a high variability of inter-raters' agreement on the prosodic prominences which also means that there is a very small percentage of agreement among the raters on the prosodic prominences. On the other hand, less variability of the inter-raters' agreement is obtained when perceiving the prosodic boundaries. This means that there is more agreement on the perception of prosodic boundaries rather than the prosodic prominences. Furthermore, it also means that there is a significantly better performance on the prosodic boundaries rather than the prosodic

prominences. For a further step, it is interesting to know how native speakers of LMV perceive the prosodic prominences and boundaries of their own language and to compare the results of the native speakers' perception with that of the non-native speakers.

Keywords: *perception, prosodic prominences and boundaries, Larantuka Malay Variety*

Introduction

Background

Larantuka Malay or sometime called 'Nagi Malay' (ISO: 639-3) is a Malay variety spoken in three different places in East Flores regency of East Nusa Tenggara province, that is, Larantuka town, Wure (on Adonara island) and Konga. Da Franca (2000:p.35) explained that the spread of LMV into Wure and Konga were heavily based on the exodus of Portuguese people from Malacca in 1641, that in many cases they brought the language with them. In term of its speaking geography, Larantuka Malay (LMV), in the three speaking places, is surrounded by Lamaholot speaking communities (Fernandez, 2000:p.378). This variety is spoken by around 20,000 speakers (Eberhard, Simons, & Fennig, 2019)(Eberhard & Simons G. F., & Fennig, 2019) in which about 90 percent of them are Roman Catholic.

Typologically, LMV is an Austronesian language inherited from Proto Malayic Languages which belong to a West-Malayo Polynesian subgroup of Malayo-Polynesian group (Blust, 1997). Prentice (Paauw, 2008, p. 202)(Paauw, 2013) classified Malay languages into three types, i.e, 'mother-tongue' Malay, 'lingua franca' Malay and 'official' Malay. Based on this classification, LMV belongs to 'lingua franca' Malay. Later, Adelaar and Prentice (Adelaar, 2005)(Adelaar, 2005) revised Prentice's classification by producing three new kinds of Malay languages, that is, (1) Literary/Classical Malay, (2) Trade Malay or Pidgin-based Malay and (3) Vernacular Malay.

According to this division, LMV is therefore grouped into ‘Vernacular Malay’. From a historical viewpoint (Paauw, 2013), Malay languages are divided into ‘national’ language, ‘inherited’ varieties and ‘contact’ varieties. Based on the three varieties, LMV is classified as a variety which was stimulated by contacts in East Indonesia.

Historically writing, Spencer and Thomas claimed that LMV was firstly introduced around the Solor archipelago in the 5th century when there was a continuous contact between Malay traders and Larantuka dwellers (Akoli, 2010, p. 15). Since then, it has become a locally-important language for people of Larantuka and surrounding areas in several domains such as religion, education and trade as well as daily events. Beside Malay, its vocabulary is also composed of Lamaholot, Bahasa Indonesia, Portuguese and Dutch words (Monteiro, 1975).

There are several reasons why LMV is considered important to discuss here. Firstly, LMV is the author’s mother-tongue. He was born and grew up in the speaking community although he has migrated from the community since 1994. Secondly, it is currently classified by Ethnologue (Eberhard, Simons, & Fennig, 2019)(Eberhard & Simons G. F., & Fennig, 2019) as ‘a threatened language’. In the author’s viewpoint, being under this condition also means that LMV is facing a number of linguistically-threatening issues such as ‘brain-drain’, the increasing uses of Bahasa Indonesia in more domains is probably creating a negative perception, of its speakers, toward LMV. Without considering the history of LMV development, there are certain people and speakers who believe that LMV may be best understood as ‘a broken form of the standard Indonesian’.

Existing Research on Prosody of Malay Languages and the Problems

The prosody of Malay languages is a topic that has been increasingly investigated. A book edited by van Heuven and van Zanten (2007)(Heuven & Zanten, 2007) discussed the prosodic

natures of 5 Malay varieties, i.e, the standard Indonesian (Goedemans & van Zanten, 2007, pp. 35-60)(Goedemans & Zanten, 2007) ; Toba Batak and Betawi Malay (Roosman, 2007, pp. 89-114)(Roosman, 2007) ; Manado Malay (Stoel, 2007, pp. 117 - 149)(Stoel, 2007) and Kutai Malay (Sugiyono, 2007, pp. 151-170). Less than a decade after the appearance of the book, Maskikit-Essed and Gussenhoven (2016, pp. 353-389)(Maskikit-Essed & Gussenhoven, 2016) published their paper on Ambonese Malay prosody. Two years after that, Riesberg et al (2018, pp. 389-414)(Riesberg, Kalbertodt, Baumann, & Himmelmann, 2018) released their article on prosodic prominences and boundaries of Papuan Malay.

The growing studies on prosodic elements of Malay languages look contrast with LMV itself. Up to now, there have been very limited reports on LMV's phonology. There are a number of papers discussing LMV's history (Steinhauer, 1991)(Steinhauer, 1991), morpho-syntax and morpho-semantics (Kumanireng, 1982) (Kumanireng, 1993)(Threes Y Kumanireng, 1993; Threes Yosephine Kumanireng, 1981). However, it should be acknowledged that there are almost no previous articles talking about the LMV prosody or phonology. Being aware of the limited number of publications on LMV's phonology, this writing aims at contributing to the discussion of prosodic elements in particular and LMV's phonology in general.

Therefore, things that would like to be answered in this paper are (1) what are the perceptions of prosodic prominences and boundaries in LMV by the non-native speakers?; (2) to what extent do the raters agree with one another on the LMV's excerpts that they listen to?

Methodology

This is a descriptive-qualitative research (Sugiyono, 2008). In order to see the way raters perceive the prosodic prominences and boundaries of LMV, the author followed several research steps as follows.

The sample of LMV's data was recorded from a 65-year old woman who has never left Larantuka for more than 3 months in her life. Her monologue was recorded by using a Sony IC Recorder ICD-UX200F. The genre of her monologue was a historical recount. She talked about her experience in witnessing a flood that struck Larantuka in 1979. The duration of her speech is 1.5 minutes, which was separated into 9 excerpts.

The spoken data was then presented into tables where each word of each excerpt is put inside a row so that the raters are able to insert the scores of both prosodic prominences and boundaries in them. This method is called '*Rapid Prosody Transcription*' (RPT) that was made popular by Cole and Shattuck-Huffnagel (2016)(Cole & Shattuck-Huffnagel, 2016). The benefits of RPT are that (1) it can be performed by any untrained persons in phonetics ; (2) it can also directly and simply be performed during the perceiving process (Riesberg, Kalbertodt, Baumann, & Himmelmann, 2018, p. 393)(Riesberg et al., 2018). Thus, due to the similar situations faced by the author this time, the author considers this method appropriate for assessing the prosodic prominences and boundaries in LMV.

The raters or perceivers themselves are 16 non-native speakers of LMV. They are four males and 12 females. The ages of the raters range from 18 to 23 years old. They are bilingual, with most of them are predominantly Kupang Malay speakers. All of them are English Education Department students of Universitas Nusa Cendana.

There were basically two activities in perceiving the prosody of LMV, i.e, perceiving the prosodic prominences and the prosodic boundaries. *Prominence* here means how prominently the words are pronounced; the stronger the words are pronounced, the higher the prominence scores should be rated. On the other hand, *boundary* means the degree of pause between two consecutive words. In the process of rating the scores of prosodic prominences and boundaries, the raters were given chances to listen to the recording three times; the first time was to

introduce the listening to the content; the second time was to let the raters rate, with scores from 0.0 to 1.0 ; the third listening time allowed the raters to confirm the scores they had given based on their listening.

To answer the first research problem, the scores from each word in the excerpts are calculated to find the mean of each word. The results are presented in line charts. Moreover, to see the inter-rater agreement among the perceivers on the prosodic prominences and boundaries, Cohen's Kappa coefficient is used. The data was measured using Cohen's Kappa coefficient by statistics software 'IBM SPSS Statistics 20'. To interpret the data, a scale named 'Agreement Categories' proposed by Landis and Koch (Riesberg, Kalbertodt, Baumann, & Himmelmann, 2018, p. 398) was used. The agreement categories characterize that the 'slight' agreement ranges from 0.0 to 0.20 ; 0.21 to 0.40 shows 'fair agreement' ; 0.41 to 0.60 indicates 'moderate agreement'; 'substantial agreement' extends from 0.61 to 0.80 ; 0.81 to 1.0 represents 'perfect agreement'.

Discussion and Result

By calculating the mean scores of each word inside every excerpt, a line chart can be drawn, as exemplified in Figure 01. It is quite surprising that the perception scores for prosodic prominences are predominantly lower than that of prosodic boundaries. The lower values for the prosodic prominences also show that less perceivers similarly rated the prosodic prominence scores compared to what they did for prosodic boundaries.

Perception of Prosodic Prominences in LMV

By using Cohen's Kappa coefficient, the inter-rater agreement on the prosodic prominences is assessed and the results are somewhat unexpected. Looking at Table 02 below, it can be said that of 120 pairs, half of the total raters have slight agreement on the prosodic prominences (50.83%). Moreover, almost 50 percent (47.50%) of the raters have no agreement on the prosodic prominences in LMV. This also shows that there is a very high degree of variability in the way raters perceive the prominence levels of words in the excerpt which leads to not just mainly low but also extremely low p-scores.

In the author's viewpoint, there are some possible reasons as to why the disagreement of the raters can reach such a significant level, for the prosodic prominences. Firstly, although the RPT method can be used by an untrained person, it should be acknowledged that some raters found it confusing to score the words based on what they listened to. This confusion has probably led them to be unable to hit the right scores. The other reason is that, even though they already listened for three times before scoring the words, they still have problems in perceive the prominence levels of words, in LMV. Consequently, they found themselves uncertain in scoring the words.

Perception of Prosodic Boundaries in LMV

After looking at table 04, we perhaps have a much better impression than that of the prosodic prominences. In fact, although the total number of pairs who agreed slightly and who has no disagreement is still dominant, the percentages of those who have both 'fair' and 'moderate' agreement is higher in the boundary experiment than in the prominence experiment. This also means that the subjects agree more when performing the boundaries experiment rather



than the prominence experiment. Furthermore, it also means that there is a significantly better performance on the prosodic boundaries rather than the prosodic prominences.

In the author's viewpoint, the reason that the subjects perform better in the experiment of prosodic boundaries is that it is easier for the untrained non-native speakers to identify any possible pauses or stops, rather than doing the same for the prosodic prominences.

Conclusion

Dealing with these results, it is clear that there is a very high degree of variability for prosodic prominences, but less variability for boundary judgements. Next, the overall low Kappa values indicate a conspicuous absence of agreement among the subjects dealing with the prominences. On the other hand, much higher Kappa values show a broader agreement of the subjects relating to the prosodic boundaries. Therefore, it is interesting to know how native-speakers of LM perceive the prosodic prominences and boundaries of their own language and to compare the results with the current things the author has now.

Words	P-Scores	B-Scores
pada		
tanggal		
27		
februari		
1979		
ada		
banjir		
di		

lohayong
 kita
 lari
 pi
 menonto
 sementara
 bediri
 menonton
 bajir
 semakin
 besa

Table 01. the example of how raters worked on scoring each word in each row for the first experiment to find P-Scores and the second experiments to assess the prosodic boundaries.

Inter-rater agreement	Prominences	
	Pairs	Percentage
none	57	47.50%
slight	61	50.83%
fair	2	1.66%
moderate		
substantial		
(almost) perfect		
	120	100%

Table 02. the inter-rater agreement categories for LMV excerpts in the prominence experiment.

	Boundaries	
	Pairs	Percentage
none	27	22.50%
slight	66	55.00%

fair	24	20.00%
moderate	3	2.50%
substantial		
(almost) perfect		
	120	100%

Table 04. Inter-rater agreement for LMV excerpts in the boundaries experiment.

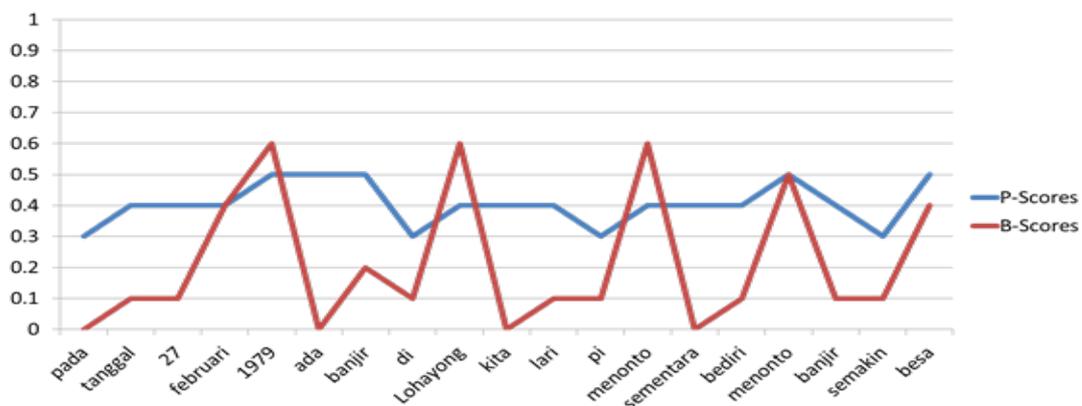


Figure 01. P-scores and B-scores of both prosodic prominences and boundaries described from the analysis of first excerpt. Prominent words are indicated by blue lines, while the prosodic boundaries perceived by the raters are drawn in red lines.

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