

The Phonological Analysis of Liquids Sound in Using Dialect Palatalization

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Abstract: Palatalization phenomenon is rarely found in Indonesia. This is caused by the less phenomena as the object research. However, here the researcher has found one of local Javanese dialects with the palatalization phenomenon that is Using dialect. It is one of Javanese dialects used by Banyuwangi inhabitants. This research is beneficial for linguists that work with the same topic in phonology (palatalization) and it can explain how the pronunciation of palatalization in Using dialect. This research observes the specific palatalization rule that appears between /l/ → [l] and /r/ → [r] considered as the target of palatalization and also some vowels /a/ → [a] and /e/ → [ɛ] considered as the trigger of palatalization. The used methods in this research are referential and orthographic methods. The data were taken from interviewing the local people that represent the population in the speech community of Kemiren village in Banyuwangi. Then, the data were transcribed by using IPA symbols. For the analysis, it used articulatory phonetic analysis to see how the Using dialect is pronounced and find out the environment in the palatalization. The result shows, although there are some other consonants that become the targets of palatalization but only these two consonants are palatalized in the middle position only, whereas the other target consonants are flexible to be placed in the beginning or in the middle position. There are also some effects from other sound preceding the liquids sound as the target in palatalization.

Keywords: Palatalization, Using, Trigger, Target.

Abstrak: Fenomena palatalisasi jarang ditemukan di Indonesia. Hal ini disebabkan sedikitnya fenomena sebagai objek penelitian. Namun, disini peneliti telah menemukan satu dari dialek-dialek Jawa dengan fenomena palatalisasi yaitu dialek Using. Dialek Using adalah salah satu dari dialek-dialek Jawa yang digunakan oleh masyarakat Banyuwangi. Penelitian ini bermanfaat bagi linguist yang menekuni topik yang sama pada fonologi (palatalisasi) dan penelitian ini dapat menjelaskan bagaimana pengucapan dari palatalisasi pada dialek Using. Penelitian ini mengamati aturan khusus palatalisasi yang terjadi pada /l/ → [l] dan /r/ → [r] yang dianggap sebagai *target* palatalisasi dan bunyi vokal /a/ → [a] dan /e/ → [ɛ] yang merupakan *trigger* dari palatalisasi. Metode yang digunakan pada penelitian ini adalah metode referensial dan ortografis. Data diambil dari wawancara dengan penduduk lokal yang merepresentasikan populasi dari komunitas pengujar di desa Kemiren di Banyuwangi. Kemudian, data di transkripsikan menggunakan simbol IPA. Pada bagian analisa, penelitian ini menggunakan metode analisa fonetis artikulatoris untuk melihat bagaimana dialek Using diucapkan dan menemukan pola palatalisasi. Hasil penelitian ini menunjukkan, meski ada banyak konsonan yang menjadi *target* palatalisasi namun hanya dua konsonan ini dipalatalisasi pada posisi tengah, sedangkan *target* konsonan lain fleksibel untuk diletakkan di posisi awal atau tengah. Ada juga beberapa pengaruh dari bunyi lain yang mendahului bunyi alir sebagai *target* palatalisasi.

Kata kunci: palatalisasi, Using, trigger, target

1. INTRODUCTION

Javanese language is a local language that is known as the largest used as a local language in Indonesia especially in central java and east java. The Standard Javanese language is always aimed to central java region rather than east java. The Javanese language that has been spread and used by in habitant east Java is considered to have many changes from the standard Javanese in central java. One of the changes that commonly appears is dialect.

Javanese language has various dialect that exists in east java for example Jawa Surabaya (Surabaya dialect), Jawa Malang (Malang dialect), etc. Those various dialects should provide a criterion for distinguishing between one language and another. As a linguist, those phenomena are a challenge to answer and be a valuable contribution in the language research.

Related to the Javanese dialect, there is a dialect called Using dialect. It is used by the society in Banyuwangi. Using is taken from the name of indigenous society who live in Banyuwangi region especially the sub-districts around the city centre. The general insight in Banyuwangi society, they consider that the language used in their daily communication is a language that equal with javanese rather than one of dialects in Javanese. Whereas, according to Balai Bahasa Yogyakarta (cited in Wedhawati, 2006: 20), it mentioned that Using dialect is categorized as Javanese language with Using dialect.

Using dialect has been used in a long period but the research toward Using language is only very few especially in phonology studies. Most of the previous researches that I had found focus on the ethnography and sociolinguistics study. Here, there are two previous researches that one used phonology point of view and the second used dialectology. Both of them talked about Using dialect, the first research written by Franendya (2014) entitled "Phonological and Lexical Exploration on Dialect Differences Between Kemiren and Tampo Osing". In her research, she found several differences between Kemiren and Tampo Using. The differences are consonant addition, the diphthongisation of vowel in open syllable such as the vowel /o/ changes into /u/, The addition of vowel /ə/, the lowering vowel of /i/ into /e/, the vowel addition of /u/, the lowering vowel of /e/ into /a/ and there are 21 lexemes of 21 sentences with different lexicon especially in predicate position.

The second previous research is written by Budiono (2005) entitled "Variasi Bahasa di Kabupaten Banyuwangi: Penelitian Dialektologi". He observed about the dialect variation and its distribution in Banyuwangi region. His focus was not phonological analysis but dialectology and the mapping of Using users. Here, he also gave several data that show the language variation and his data prove that palatalization is exist in Using dialect. Let me give a flash review, Franendya and Budiono's article have the same display about the palatalization of Using dialect in their data. They show the data transcription of several words that have palatalization in the transcription. From their reports, the researcher did not find out any explanation about the pattern emergence of palatalization.

The leading researches about palatalization were mostly done in other countries. There is almost no reference about palatalization researches in which the object is the local language in Indonesia. Fortunately, the researcher found there is one observation cited in Bateman's report done by Cowan (1965) about Sentani language in Papuan, Indonesia. However, Cowan research only gives additional information that the palatalization in Indonesia is exist. In this research, I adapt Bateman's research (2007) entitled "a crosslinguistic investigation of palatalization". In her research, she observed several languages in different area such as palatalization in Romance, Tsawana and other languages. In her research, she found that every language has certain characteristic in order to form palatalization. From all languages, the palatalization is constructed by different combination of vowel and consonant. Her conclusions showed that there is no fixed rule of palatalization. So, the researcher concludes that every language has its pattern or rule in the palatalization form.

This research focuses on l and r consonants in the position to have palatalization in Using pronunciation. Compared with other consonants, these two sounds have unique phenomena. Commonly, the palatalization happens caused by certain rule that involves combination of single consonant and single vowel. In palatalization study, the consonants and vowels constructing palatalization are called as *target* and *trigger* (Chen, 1973; Bhat, 1978; Bateman,

2007). Moreover, the appearance of palatalization can be in two positions, it depends on the target and trigger position. The palatalization can appear in the beginning or in the middle position. However, for these liquids consonant l and r cannot be simplified based on the target and trigger position. This research aims to find the palatalization pattern of these consonants in Using dialect.

2. RESEARCH METHODS

In order to conduct this research, I have found several participants in Kemiren Village. Kemiren village is known as a village that preserves Using dialect in their communication. In addition, this village has been legitimized by the local government as tourism village in Banyuwangi. Here, the researcher interviewed several inhabitants in Using community especially in Kemiren Village. The researcher adopted some criteria of choosing participants. The criteria are 1) women or men aged 30 to 60 years old, 2) born and grown up in their village, 3) speak certain language as their mother tongue (Javanese with Using Dialect), 4) Never leave the village or live in other area in a long time from (Zulaeha, 2010). The object data are some words pronounced by the participants especially the words that contain palatalization. The researcher used semi structured interview and note taking method to collect the data. Semi structured interview is valuable to collect natural data from the participants. Next, the data are transcribed into Phonetic transcription by using IPA (International Phonetic Symbol) in order to continue the analysis. Here, the data were analyzed by using Phonetic articulatory analysis. This method describes the feature of speech organs and provides to make classification of the phonetic feature in the pronunciation. From the classification of phonetics feature, the researcher can decide the pattern of palatalization in Using dialect especially for liquid consonants l and r.

3. DISCUSSION

3.1.1. *Phonetic Symbols in Using Dialect*

The palatalization research in Using dialect has never been done before. It is proved by the lack of references about Using researches especially in phonology studies. Some local researchers have made several books such as Using-Indonesia Dictionary and other books related to local language learning. The Using-Indonesia dictionary was written by Ali (2002) and the previous researchers also used it to give an explanation about consonant and vowel in Using dialect. According to Ali (2002), the alphabet in Using dialect consists of 20 consonants and 5 vowels. In his dictionary, he also wrote a list of several consonants with palatalization, but without explanation how the pattern of palatalization in Using dialect. From those twenty consonants in Using there are only 12 consonants and 2 vowels that construct the environment of palatalization. Those consonants and vowels are b,d,dh,g,j,l,m,n,ng,ny,r,w and a, e.

In other words, those 12 consonants and 2 vowels are considered as the *target* and *trigger* in the palatalization. The grapheme in the previous paragraph is not the convention symbols of IPA symbol. To specify the analysis, the researcher transferred it into IPA symbols because the IPA symbols can be specified into binary features. The binary features are marked by (+) for the presence feature and (-) for the absence feature (Schane,1973:25; Katamba,1989:42). Here is the transferred form of grapheme into phonetics symbol.

Table 1. Phonetics Alphabet Consonant

4. NO	5. 1	6. 2	7. 3	8. 4	9. 5	10. 6	11. 7	12. 8	13. 9	14. 1 0	15. 1 1	16. 1 2
17. GRAP HEME	18. B	19. D H	20. D H	21. G	22. J	23. L	24. M	25. N G	26. N Y	27. N	28. R	29. W
30. IPA	31. [B]	32. [D]	33. [ɗ]	34. [g]	35. [j]	36. [L]	37. [M]	38. [N]	39. [ŋ]	40. [N]	41. [R]	42. [W]

Table 2. Phonetic Alphabet Vowel

No	1	2
Grapheme	a	e
IPA	[a]	[ɛ]

According to the table 1 and 2, the symbols between grapheme and IPA show some differences such as the allophone of the phoneme. One phoneme can have more than one sound. The pronunciation in Using dialect is mostly the same with these symbols especially for the consonants. There are no allophones variation from the consonants when they are combined in word pronunciation. Different from consonants, the vowels or the trigger sounds in Using dialect have some variations (allophone) in Using dialect. The most common triggers in some languages are the higher front vowels [i] and [e] according to Bateman (2007), and the palatalization is the epenthesis of glide [j] in a stem. This ground understanding should be given in order to give short explanation about the target and trigger in Using dialect palatalization. Collapsing of those explanation would make over generalize about the specific target and trigger in palatalization of Using dialect.

There is no specific theory that can be used to decide the consonant as target and vowel as triggers in palatalization. In this study, the researcher uses the implication statement from Bhat (1978) and Bateman (2007). They have same idea that all consonants can be palatalized dependently or independently. Coronal consonants can be palatalized independently or dependently whereas dorsal consonants can be palatalized independently only, and this palatalization only happen in phonological. For the trigger, Bath (1978) and Bateman (2007) are agree with Chen's implication relationship. If lower front vowels trigger palatalization, then it will be also possible for higher front vowel. His statement also possible for high back/central vowels triggers so do the high front vowels. So, there is no specific theory how to decide the *target* and *trigger* but we can consider and make a decision from the palatalization phenomena to determine which are the target and the trigger.

In the previous part, the researcher has explained about several alphabets that can be palatalized in Using dialect. There are two terms *target* and *trigger* that become an indication of palatalization. In Using dialect, the *target* sounds are the consonant in the table 1.1 and the triggers are [a] and [ɛ] in the table 1.2. Palatalization has general indication and structure where the glide sound [j] is added in a word pronunciation. In palatalization, the [j] sound always appears between the consonant (target) and vowel (trigger). This combination is the minimal requirement that can be palatalized.

The general condition of palatalization is proposed by Bhat (1978). He mentions that palatalization happens caused by an areally or restricted phenomenon. Another researcher argues that palatalization is triggered by front vowels in an implicational fashion: if lower front vowels trigger palatalization, then so will higher front vowels (Chen, 1973). The environment that induces the epenthesis must be a "palatalizing environment" (front vowel sound, palatal semivowel sound, or palatal or palatalized consonant sound). The trigger in

this research is in line with Chens's implication, [a] and [ɛ]. The triggers in Using dialect are included as front vowel sounds.

This article does not describe all of the target palatalization sounds but it is concerned more in liquids sound l and r. These two target consonants are unique because both of them cannot be palatalized when they are in the beginning position. Whereas, other target consonants have flexible position to be palatalized as long as they fulfill the requirement. These sounds are always palatalized when they are in the middle position. For the example:

Table 3. The l and r in Beginning Position of Palatalization

No	/l/	Transcription	/r/	Transcription
1	Ladak	[lad ^ɨ ak]	Rabèk	[rab ^ɨ èk]
2	Ladhang	[lad ^ɨ aŋ]	Radèn	[rad ^ɨ èn]
3	Ladrag	[lad ^ɨ rag]	Ragang	[rag ^ɨ aŋ]
4	Lègrèk	[lɛgr ^ɨ èk]	Rèrèan	[rɛr ^ɨ èan]
5	Lèdèr	[lɛd ^ɨ èr]	Rèken	[rɛk ^ɨ en]
6	Lèdhèh	[lɛd ^ɨ hèh]	Rèntèng	[rɛnt ^ɨ ɛŋ]

Table 4. The l and r in Middle Position

No	/l/	Transcription	/r/	Transcription
1	Belabak	[bel ^ɨ ab ^ɨ ak]	Berah	[ber ^ɨ ah]
2	Belahi	[bel ^ɨ ahi]	Berèd	[ber ^ɨ èd]
3	Bilahi	[bil ^ɨ ahi]	Berèntèk	[ber ^ɨ èntèk]
4	Delèbèr	[del ^ɨ èb ^ɨ èr]	Derajat	[der ^ɨ aj ^ɨ at]
5	Delèndèng	[del ^ɨ ènd ^ɨ ɛŋ]	Derawas	[der ^ɨ aw ^ɨ as]
6	Delèwèr	[del ^ɨ èw ^ɨ èr]	Derèdès	[der ^ɨ èd ^ɨ ɛs]

The examples above are the example of l and r sounds when they are in the beginning and middle positions. Actually, there are still more examples that can prove the palatalization of l and r sound. However, it is impossible for the researcher to show the overall data here. These data are shown to represent the phenomena of l and r sound in the Using dialect palatalization.

The target sounds l and r have similar case that both of them only appear in the middle position as I mentioned in the previous parts. The other target sounds have more flexible position than these two as the target sounds of palatalization. They have strong position as a target and they just require the trigger sounds to following them in Palatalization. The l and r consonants have weak function to be a target sound, so the researcher categorized them as weak target palatalization based on the positional factor. In the previous part, it has been described that palatalization has the basic pattern, If the target consonants are followed by the trigger vowel, the palatalize sound [j] will be added or appear this basic pattern is symbolized as 0_ [j] / C_V.

Those weak targets consonants have the same feature with the other target consonants. All the target consonants have the same feature [+voiced] that make them categorized as target palatalization in Using dialect. However, l and r have the same specific feature of articulation that do not exist in other target sounds, here is the table feature.

Table 5. Distinctive Feature of [l] and [r] Sound

No	Phones	Features
1	[l]	+ sonorant + consonantal + continuant + lateral + coronal + anterior + voiced
2	[r]	+ sonorant + consonantal + continuant + trill + coronal + anterior + voiced

Of the table above, there are 3 features on the table but it is only two similarities between those two sounds. Firstly, the table shows the feature of [+lateral] and [+trill] that only owned by l and r sounds, so it cannot be used to consider the relation with other related sounds. The other features are [+consonantal], [+coronal], [+voiced] [+sonorant], [+continuant] and [+anterior]. It is hard to find the similar features that cause l and r has special phenomena in palatalization. However, the researcher finds there are two features in l and r sounds that have relation with the vowels. These features are only owned by vowel sounds and a few consonants included these liquid sounds as target in palatalization. Continuant belongs to manner of articulation when a sound is produced by incomplete closure of vocal tract compared with the other target consonants. The researcher is sure that this feature causes the liquid sounds weak rather than other targets. In addition, sonorant also become the feature for l and r sound but m and n (nasal) also owned this feature. However, the phone m and n (nasal) do not have the same pattern as liquid sound in palatalization. The nasal sounds are strong or flexible to be placed in beginning or middle position.

Palatalization in Using dialect happens when the target consonants are followed by the trigger. However, the basic pattern is inapplicable when the first consonants are liquids sound. From the basic requirement, the pattern as below;

Table 6. Basic pattern of Palatalization

Pattern 0	[l]	[r]
0 → [j] / C → V	[lad ⁱ ak]	[rab ⁱ ek]
	[lad ^j aŋ]	[rad ⁱ en]
	[lad ^r iak]	[rag ^j aŋ]
	[leger ^r iek]	[rer ^e an]
	[led ^r ier]	[reken]
	[led ^j eh]	[renten]

The sample on the table above, the initial consonants are the liquid sounds but they are not palatalized. The palatalization does not happen although the trigger [a] and [e] are following

the target. In different position [r] sound in *ladrak* [ladriak] and *lègrèk* [lɛgrɛk], the phone [r] is in the middle position and it is followed by [ɛ] but it gets palatalization. Another example in the table above, the word *rerean* [rɛrɛan] is not palatalized although the [r] and [ɛ] appear twice. From this example, I suppose that the phones before the target brings an effect to the emergence of palatalization.

Other target consonants, please look at the [b], [d] and [g], these three are not included as liquids sound but they include as target consonants and palatalized when they are in the middle position. The word *rabek* [rabɛk] contains [b] sound followed by [ɛ], so it causes palatalization between [b] and [ɛ]. Other examples the words *ladak* [ladɛk], *lèdèh* [lɛdɛh], and *ragang* [ragɛŋ], the sound [d], [d] and [g] are followed by the trigger [a] and [ɛ], so they get palatalization.

On the sample data, the researcher has found some specific stem patterns when the l and r sound are palatalized in the middle position. There are two stem patterns, the most frequent pattern is a combination of all target consonants and some vowel [e], [i], and [u]. The next, the vowels [i] and [u] precede the liquid sounds.

Table 7. Pattern 1 Palatalization of Liquid Sounds

Pattern 1	Mid [l]	Mid [r]
0 → [j] / #CVC __ VC	[beliabiak]	[berɛd]
	[bilahi]	[biriət]
	[buliak]	[guriət]
	[delɛbiɛr]	[derɛjɛt]
	[diliɛh]	[derɛawas]
	[dulɛŋ]	[muriɛh]

Table 8. Pattern 2 Palatalization of Liquid Sounds

Pattern 2	Mid [l]	Mid [r]
0 → [j] / # VC __ VC	[iliət]	[iriɛs]
	[iliɛŋ]	[iriɛk]
	[ilɛn]	[iriɛn]
	[ulɛan]	[uriak]
	[ulɛap]	[uriɛŋ]
	[ulɛar]	[uriɛp]

The table 7. means that stem before liquid sounds are always combination between other target sounds followed by non-trigger sounds. The most frequent vowel sound is [e] as the combination with other target sounds. The sound [e], [i] and [u] have several features. The feature of these three vowels are below;

Table 9. Distinctive Feature of [e], [i] and [u] Sound

No	Phones	Features
1	[e]	+ Syllabic + Sonorant + front + tense
2	[i]	+ Syllabic + Sonorant + high + front + tense
3	[u]	+ Syllabic + Sonorant + high + back + tense + rounded

The table shows that the similar feature of those three is [+tense] feature. Other vowels in Using dialect do not have any effect to palatalization of liquid sounds event though the basic pattern comes up before the liquid sounds. In Using dialect, the sound [o] is exists and it has [+tense] feature but the researcher cannot find the example about this sound combination, so the researcher assumes that this vowel does not give an effect to palatalization because the lack of evidence.

The table 8. shows the pattern 2 of palatalization. When the vowels [i] and [u] precedes the liquid sounds. The sample of this data is only very few, if it is compared with the table 1.7 the pattern 1 of palatalization. The vowels [i] and [u] have two similarities that are [+high] and [+tense]. Only these two sounds that have both features causing palatalization in liquid sounds. The other vowels which have [+tense] or [+high] feature only cannot cause the palatalization of liquid sounds although they precede the liquids sound l and r.

4. CONCLUSION

The palatalization in Using dialect especially for liquids sound l and r is unique compared with the other consonant in Using dialect considered as the target consonant in palatalization. The existence of l and r as a target cannot be palatalized by its own when they are putted on the front or beginning position. The palatalization of liquid sounds happens when it follows certain pattern stem. There are two pattern that can predict the palatalization pattern of l and r sounds, because the basic pattern of palatalization does not work. The first pattern, if the combination of other target consonants followed by the vowels with [+tense] feature precedes the liquid consonant, the liquid consonants followed by trigger sounds will be palatalized. The second pattern, if the vowel sound with [+tense] and [+high] feature as [i] and [u] vowels precedes the liquid consonants, the liquid consonants followed by trigger vowels will be palatalized.

In the other side, the researcher considers the possibility that those patterns cannot be fully applicable in the Using dialect pronunciation. Some words also deflect the basic pattern and also those two patterns found. I as the researcher expect that this research can give valuable information toward palatalization and trigger other researcher to observe the same scope study with different object research.

SUGGESTION

Ages, Using dialect has existed and used by Using people in their communication since a long time. Some of researchers also have done many researches that relate to Using language. However, the phenomena in local dialect especially Using dialect still store various linguistic phenomena. The research that I had done is only reveal one phenomenon especially in Phonology scope studies. So, it is possible for other researchers to conduct deeper and wider researches about Using dialect or other local dialect. This research still need improvement especially the amount of subject of the research, the data research, the methods analysis, etc. More data collected will give comprehensive result and it is possible to find different or the similar result. Other researchers also can observe other subjects in different communities because Banyuwangi has many sub-districts and villages with different characteristics especially in the use of Using dialects.

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