

MAPPING AND PHONOLOGYCAL PROCESS OF BIMANESE

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PEMETAAN DAN PROSES FONOLOGIS BAHASA BIMA

Abstrak

Diterima
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Bahasa Bima adalah satu bahasa yang dituturkan oleh sekitar 610 ribu orang, namun jumlah ini belum termasuk penutur di luar pulau Sumbawa dan Indonesia. Tujuan penelitian ini yakni membuat map dengan menggunakan GIS dan mendeskripsikan proses fonologis dan perubahan leksikon diantara dua dialek. Metode campuran kuantitatif dan kualitatif digunakan untuk menghitung distribus permutasi, menganalisa proses fonologis dan perubahan leksikon. Teori fonologi generatif Schane digunakan untuk menganalisa proses fonologis dan teori perubahan leksikon Crowley digunakan untuk menganalisa perubahan leksikon. Hasil penelitian ini menunjukkan ada 262 perbedaan fonologis dan leksikon antara dua dialek. Ditunjukkan dengan dikonstruksinya 262 peta persebaran bunyi yang berbeda antara dua dialek. Beberapa perubahan fonologis seperti asimilasi, penambahan vocal atau konsonan yang disebut dengan epintesis, dan penghilangan vocal dan konsonan awal. Dari data temuan itu, perubahan leksikon menunjukkan perubahan yang sangat signifikan.

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Kata Kunci: proses fonologis, perubahan leksikon, peta, asimilasi.

Abstract

Bimanese is a language spoken by around 610 thousands, yet this number exclude the speaker outside Sumbawa island and Indonesia. This research aims at constructing maps by using GIS, describe phonological process, and lexicon changes between two dialects. Mixed method research design is used to count the distribution of permutation, analyze phonological process and lexicon changes. Schane's generative phonology theory was used to analyze phonological process and Crowley was used to analyze lexicon changes. The result shows that there are 262 phonological and lexicon differences between two dialects. Thus 262 maps were made. Some phonological changes such as assimilation, addition of vowel or consonant namely epenthesis, and initial deletion of vowel and consonant. Meanwhile, lexicon differences showed significant differences.

Key words: phonological process, lexicon changes, display maps, and assimilation.

I. Theoretical Background

The research regarding dialectology has been done on several vernacular languages in world. Especially in Indonesia, the research has been done at the west of Indonesia is bigger than the amount of languages at the west. Apart from languages at the east of Indonesia, the amount of research is lower rather than amount of languages, as stated by Lauder (2007). Till this day, In Indonesia the comprehensive research on language is only on 13 languages. The research concerning dialectology is very vital due to know the vitality of language and to know the spreading of language. The research concerning dialectology cannot be separated from map because one of the aims at dialectology are not only to clarify the amount of languages and dialects but also to mapping dialects on certain language based on demographic features on the research place. The demographic features could be mountain, coastal, slope area, plateau, lowland, and other administrative borders.

Mapping of languages at the east Indonesia is still low especially languages at west Nusa Tenggara. There are two big island, those are Lombok and Sumbawa islands. In detail, Sumbawa is separated into two town, those are Bima town and Dompu Town. At the east Sumbawa island, there are two centre of administrative. The capital of Bima regency is sub-district Woha and the capital of Bima town is Raba. Based on BPS data on Bima Regency (2015), administratively Bima regency consist of 18 sub-districts and inhabitants are 419.302 persons (census number 13 2002). Mahsun stated (2006) there are more than 608.679 inhabitants. These amount are not including the amount of inhabitants out of Sumbawa island. From that amount Bima language is included in category of about endangered language.

According to Blust Bimanese included in sub-group Sumba-Bima. Bimanese widespread at Sumbawa, Sumba, Lombok and several islands nearby east Nusa Tenggara. Bimanese is divided into four dialects, those are Mbojo dialect, Wawo dialect, Donggo dialect, and Tarlawi dialect. Demographically, Bima regency is mountain by least rain fall, the inhabitants earn their life by red onion farmer, paddy farmer, businessmen, and

civil servant. Generally, Bima regency inhabitants are Islam and only several inhabitants from Donggo sub-district are Christian. Several literatures stated that inhabitant of Bima is separated into two, those are east Donggo and west Donggo. Donggo itself translated into mountain.

The recent research which discussed concerning synchronic dialectology was Machmoed (2005) the result of Machmoed research shows that Duri language was not a language, it is included on dialect of Toraja language. Thus, Mahsun (2006), he was mapping the variety of Bimanese by choosing one or two villages as representative in each sub-district. His research revealed show that there are four dialects in Bimanese, those are Mbojo dialect, Wawo dialect, Tarlawi Dialect, and Donggo Dialect. Yet, in Mahsun research was not described a process of generative phonologic and a varieties distinctive dialect and not varieties based on phonology and lexicon evidence. Based on that, this research will describe two components above. The next research was Rahmawati, (2014), named “Geographic dialect of Sunda Language at Parungpanjang regency, Bogor Regency”. Her research shows that the most dominant phonological process occurred were assimilation, lenition, protesist.

Sariono (2016), described that the aim of language mapping is find out the difference feature of dialects in language. The aim of dialectology research is to classify dialects of language and mapping of language so the vitality of language could be figure out clearly. Based on description above the researcher of this paper aims at “mapping Mbojo dialect at sub-district Belo and Wawo dialect at sub-district Lambitu”. Therefore she needs to describe phonological process using theory and lexicon difference on those dialects to grasp comprehensive difference feature between two dialects.

II. Methodology

The methodology of this research is mixed method by using dialectometry and generative phonological method. Dialectometry helps researcher to count the number of different gloss. Then Geographic informational system was

used to make map. Schane generative phonology was used to analyze phonological process between two dialects and crowley theory was used to analyze lexicon difference.

Research places located at nine villages at Belo sub-district and six villages at Lambitu Sub-District, Bima regency. Research had been started in June till July-August 2016. The informants were chosen based on criteria that had been declined by linguists such as Mahsun (2006), Machmoed (2012), Lauder (2007). Those criteria such as s/he has to be 25 years old and more and not least than 80 years old. His/her education are not too low or too high. The informant could be men/ women.

Method of collecting data was *sinctopic and diatopic* (Machmoed, 2005). It means the data were collected in the same time among 15 research place. Thus the technique of collecting data is note-taking and recording. To make the informant easy to remember, the researcher had asked informants 487 umbrella sulawesi wordbook list made by SIL respectively based on those domain (such as domain of body, grammar, so on).

Observation Point (OP)

Kecamatan Belo

1. Desa Diha (Dh) OP 1
2. Desa Ncera (Nc) OP 2
3. Desa Soki (Sk) OP 3
4. Desa Lido (Ld) OP 4
5. Desa Ngali (Ng) OP 5
6. Desa Renda (Rd) OP 6
7. Desa Cenggu (Cg) OP 7
8. Desa Rungu (Rg) OP 8
9. Desa Roka (Rk) OP 9

Kecamatan Lambitu

1. Desa Kaboro (Kbr) OP 10
2. Desa Kuta (Kut) OP 11
3. Desa Kaowa (Kwa) OP 12
4. Desa Londu (Lon) OP 13
5. Desa Teta (Tet) OP 14
6. Desa Sambori (Sbr) OP 15

Mahsun stated postulates were used to analyze language data before conducting dialectometry, those are; 1) if in one observation point known one more than meaning and one of it known at other observation, so the other different

meaning is deniable, 2). If in the observation point being compared is zero, so the different is deniable, 3) if in all observation points being compared is zero, it is deniable, 4). Every observation point compared is compared if it has different, so it is given one, and if it has not different it gives zero, 5). In dialectometry research on lexicon level, phoneme, morphology, and syntaxes, those are deniable. Five formulas above are used to analyze language data had been collected from 15 informants at research place. Data were compared by using dialectometry voluntarily distribution or permutation. Voluntarily Dialectometry distribution is dialectometry distribution which comparing language data between one research place and all research places, which is means 1:2 - 1:15, 2:3-2:15,3:4 - 3:15, 4:5 - 4:15, 5:6-5:15, 6:7-6:15, 7:8-7:15, 8:9-8:15, 9:10-9:15 so on.

Language data which has different phonology and lexicon then counted with domain by using dialectometry formula:

$$\frac{(SX 100)}{n} = d\%$$

S = amount of research place

N = amount of research place compared

D = distance of wording in percentage

After the result is carried out, the research will use level of language different created by Lauder (2002), it is very suitable with language condition in east Indonesia;

70 % above = language different

51 % - 69 % = dialect different

41 % - 50 % = sub-dialect different

31 % - 40 % = different in speaking style

Under 30 % = no different language

Based on Lauder assessment we can identify a status of a language, whether it had transformed into a different language or not.

After we get the status of a certain language, then we make a map. Language map could be differentiate, those are; display map and interpretative map. According to Chamber and Trudgill (2004), display map is a map carried out from every observation point. As interpretative map is a map which made an accumulation of general statements concerning different

distribution of linguistics entities that made based on display map. In this research, the writer had made a display map. The reason why the researcher made display map because display map easy to read even for non-linguists. The second reason is to make a display map is easier and cheaper compare to interpretative map or isogloss map which use geographic information system. After making display map so the next step is making dialectometry map. In dialectometry map the language data would be visualized separately in display map. It would be shown clearly based on language status per meaning domain. (see map one at picture one). After making dialectometry per meaning domain so the next step is making dialectometry map as whole. The next step is analyzing phonological process using Schane Theory and lexical difference based on Crowley Theory. The result of phonological process is formulas of Bimanese voiced and voiceless of dialect Mbojo and dialect Wawo. Dialect Mbojo is the standard dialect used to analyze phonological process in this research.

III. Finding and Discussion

1. Finding

The result of this research showed that from all corpuses of language there are 262 different wordlist and phonologic. From 262 different wordlist, the researcher had made 262 display map that show different features on each observation point (see the display map on picture two). Besides, the researcher had made 16 dialectometry maps and one whole dialectometry map. (see picture one at attachment)

Based on the dialectometry voluntarily counting by using permutation distribution domain as follow. It is started from meaning domain “part of body”. There are thirty seven maps that showed difference on dialect by percentage 55,88 %. Second, on domain of “society relationship” there are three maps that showed no significant difference. Third, on domain of “pronoun” there are seven maps, it means that difference on language. Fourth, on domain of “animal” there 22 maps, it showed different dialect. Fifth, on domain of “plant” there are 14 maps that showed sub-dialect. Sixth, on domain of “universe” there are 13 maps showed sub-sialect. Seventh, on domain of “human creature” there are 16 maps showed dialect

difference. Eighth, on domain of “adjective” there are 33 maps showed dialect difference. Ninth, on domain of “colour” there is one map showed there is no significant different. Tenth, on domain of “grammar” there are 13 maps showed language different. Eleventh, on domain of “numbers” there are 4 maps showed sub-dialect. Twelfth, domain of “position” there are 9 maps showed difference on dialect and language. Thirteenth, on domain of “time” there are 8 maps showed language difference. Fourteenth, on domain of “verb” there are 71 language maps showed difference on dialect. Fifteenth, there are 5 maps showed different on dialect and language. sixteenth, there are seven maps showed language different. In order to show is there any language different or not in number so the researcher made recapitulation of dialectometry.

Over all dialectometry (see picture three on attachment) and display map had been made to show that there are significant dialect different between sub-district Belo and Sub-district Lambitu. This is opposite to Lambitu society’s attitude which claimed that they have different language to other Bimanese Inhabitants. The speaker of Wawo dialect and Lambitu dialect don’t have mutual intelligibility because their language corpuses or wordlist have many difference if it is analyzed by using Terry Crowley theory. A lexicon claimed different when language data showed there is no cognate between standard dialect and dialect on observation point, that is dialect Wawo. See picture five on attachment.

There are several sounds changes that happen, they are assimilation, from voiced to voiceless, such as word /moda/ → /mota/ ‘lose’ and insertion of sound such as /tera/ → /ntera/ ‘hard’. Beside assimilation process and assimilation process, there are released process such as /nami/ → /ami/ see table four on attachment.

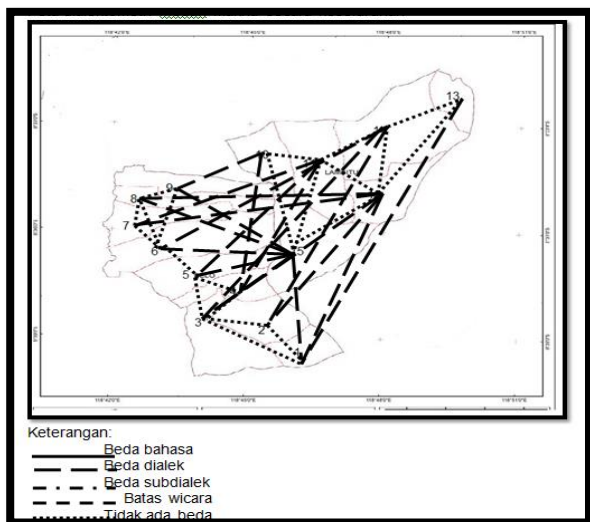
2. Discussion

In the recent research concerning Bimanese language mapping on phonology and lexicon founded that there are significant different amongst dialects in Bimanese. This research experienced the same case that the researcher experienced in dialect Wawo and dialect Mbojo. This research succeed made several displays maps to visualize language data representatively. Beside, dialectometry succeed founded difference

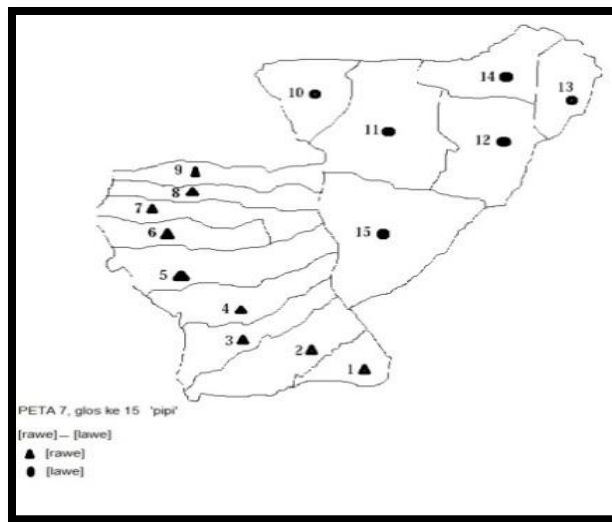
between two dialects at two sub-districts as it different in level of speak-boundary, sub-dialect, dialect, and language on every domain based on dialectometry. In simple terms, language mapping studies in these two sub-districts indicate that dialect boundaries can be marked through the administrative boundaries of the two sub-districts. If there is a difference between villages in the

Belo sub-district, there is no significant difference, the difference is only categorized as "negliable". The same thing also happened in Lambitu sub-district, which was not found to be significant because of glos at one observation point is the same at the next observation point so that the dialectometry calculation is calculated the same.

Map 1
Dialectometry map



Map 2
Display Map
 [r] – [l] 'pipi' [rawe] _ [lawe]



Map 3
Recapitulation of dialectometry
At 15 observation point (15 observation points)

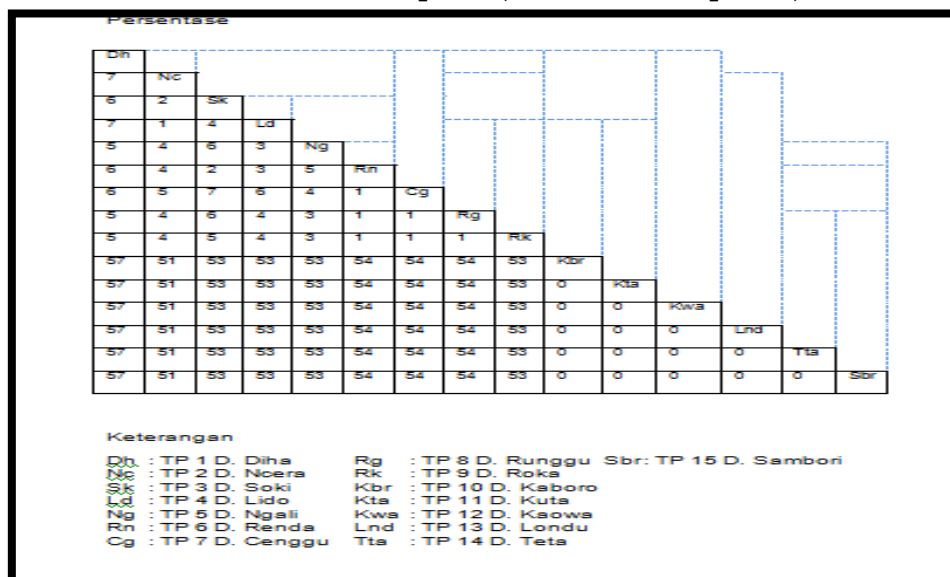


Table 1. Assimilation on several glosses in table below

No	BMb	BWw	Translation	Map	Gloss
1	/dolu/	/tolu/	<i>telur</i>	53	112
2	/doro/	/toro/	<i>gunung</i>	90	215
3	/ade/	/ate/	<i>hati</i>	30	53

Table 2 lexicon difference

No	Corpuses		Translation	Map	Gloss
	BMb	BWw			
1	/tuta/	/poʔo/	<i>kepala</i>	1	2
2	/kere/	/rambi/	<i>bulu</i>	11	11
3	/fiko/	/wiro/	<i>telinga</i>		

IV. Conclusion

Based on the results of the research and discussion above, it was concluded that there was no significant difference between the villages in Lambitu sub-district for the Wawo dialect and also the same thing happened in villages in the Belo sub-district, but there were only a few items or a little glossy different in villages that are located close to the trade and administration center. The results of the discovery of the consonant phoneme and lexicon show that there are no differences between the two dialects of both the Mbojo dialect and the Wawo dialect. The two dialects have the same consonant and vowel phonemes as follows: vowel phoneme / i /, / u /, / e /, / o /, / a / and consonant phonemes / p /, / b /, / t /, / d /, / c /, / j /, / k /, / g /, / ʔ /, / m /, / n /, / ŋ /, / r /, / f /, / s /, / h /, / l /, / w /, / y /, / ʃ /, / ɟ /. The results of dialectometric calculations only found 262 differences in phonology and lexicon so that 262 display maps, 16 dialectometric maps and 1 overall dialectometric map were made. The difference in phonology and lexicon in Lambitu sub-district and Belo sub-district is the difference at the dialect level. The sound changes that occur between the Wawo dialect and the Mbojo dialect are dominated by assimilation, released, and insertion. It is recommended for future researchers to examine the proto form of Bima language compared to different languages but still related. Then examine the form of pre-masters of the Bima language by comparing dialects in the Bima language.

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