

Teaching Sociolinguistics with Dialectometry to Identify Language in Contact of Certain Region

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Abstract: The dialectometry is one way in analyzing language in contact focusing on the similarities and differences of language. Linguistics Students in Indonesia were expected to be able in identifying the language in contact. This study sees Rokan Hulu object to study as one of interesting regencies in Riau Province in Indonesia lies among 3 regions having 3 different ethnics' languages such as: West Sumatra Province with Minangese language, North Sumatra Province with Bataknese/Mandailing language, and Bengkalis Regency with Malay language. This study aims at identifying language in contact of using dialectometry. Qualitative method employed in this study followed by quantitative method in calculating data. This study was conducted in Rokan Hulu Regency by 21 observation spots. In collecting data, questionnaire of Swadesh consisting of 200 words had been recorded, transcribed in phonetic transcription, and drawn in language mapping. The result showed that the identification of language in contact by using dialectometry calculation was easy to identify language in contact. Then, the language in contact in Rokan Hulu Regency was dominated by Malay language and Mandailing language. It means that, there is only one language in Rokan Hulu Regency called Malay-Mandailing language.

Keywords: Dialectometry, language in contact, sociolinguistics, ethnic languages

1. Introduction

In sociolinguistics, there are several topics taught of it; one of them is regional dialect. In teaching regional dialect topics, to identify the language in contact of one regional to other(s) can be used dialectometry. The dialectometry is one of the ways in analyzing language in contact focusing on the similarities and the differences of language. Rokan Hulu Regency in Riau Province, as the object in this research, is quite interesting to be observed. The position of this area is very strategic area, as well as mobilization of it. The changes of the tradition and culture might cause the changes in society, life style, and language. This linguistic research conducted by the researcher was called dialectology.

In the resesarch of dialectology international/world scale, mapping the language is divided into two periods, before 1875 and after 1875. the making language mapping is conducted by Baron Claude Francois Etienne Dupin in 1814. While after 1875 period of the research of dialectology is known as two trends; German and French trend [1]. Whereas the development of dialectology in national scale—in Indonesia, is started by Ayatrohaedi under Language Centre of Indonesia. However, the project or research in Rokan Hulu Regency has not been done yet. Therefore, this research conducted in Rokan Hulu Regency-lies between North Sumatra Province with Bataknese/ Mandailing language and West Sumatra Province with Minangese language.



Figure 1.1: The Map of Rokan Hulu Regency, Riau Province Indonesia

1.2 Research Question

Based on the background above, the question of this study can be formulated as follows: the using dialectometry in identifying language in contact in certain area.

1.3 Significance of the Research

This research is expected to be useful especially for Linguistic Department, lecturers, learners, and future researchers.

1) For linguistic department, the dialectometry calculation can be taught in higher level to identify language in contact used as one of considerations to design a new curriculum.

- 2) For the lecturers and the learners, It is a n interesting way in calculating dialectometry to identify regional dialect in sociolinguistic subject.
- 3) For the future researchers, it is the additional references to them conducting the same dialctometry, dialectology, or regional dialect terms.

2. Theoretical Basis

In this research, the researcher used the conceptual framework and explained theoretical framework based on the previous theories (see Diagram 2.1)

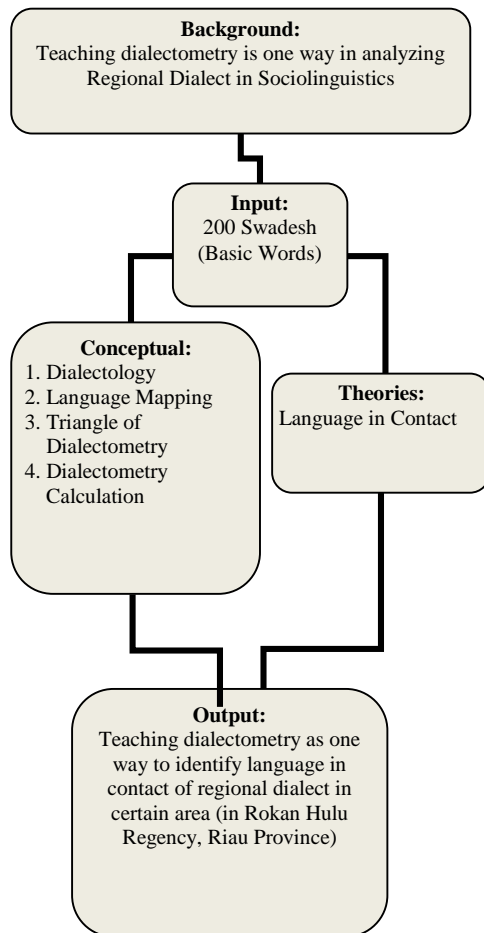


Diagram 1.1: Conceptual and Theoretical Framework

These are the conceptual framework based on the researchers related to: (1) dialectology from Malkmkjær and Anderson (1995), Chambers & Trudgill (2007), (2) language mapping from Campbell & Mixco (2007), and (3) dialectometry from Guiter (1973). Then, the theories of language in contact was adapted from Weinreich (1979). The explanation about those conceptual framework and theories can be seen below.

2.1 Dialectology

Language variation can be found in Sociolinguistics subject in university level. Language variation generally refers to “dialect” terminology. It means that this “dialect” terminology has tightly correlated with analyzing and explaining of language variation interdependent (Malmkjær and Anderson, 1995: 123). In other words, language variation in this research is mostly about branch of linguistics that learns about dialects, called “dialectology”.

Many linguists give the brief definition about dialectology Dialectology is defined as branch of language related to the cases of language variation in spatial range, horizontal characteristic. (Lauder, 2007: 33). In addition, Chambers dan Trudgill (2007: 3) as knowledge about dialect—a language of sub standard, language in rural community, generally language in rugged form, language that related to farmer society, language laborer class, or other groups that is not quite prestige.

2.2 Language Mapping

In dialectology, to see the variation or the language in contact can be use language mapping. As linguists should know about the definition of language mapping itself. Other names of language mapping are linguistic map, also called dialect atlas. Linguistic mapping is a map of geographic area that show the distribution of spesific language features, especially the features that are different from other dialects in one region [4].

In language mapping process, there are 3 activities that is combined, such as: a) making the map and filling the symbol or speech into the map, b) publishing the map, and c) investigation of the map (Ayatrohaedi, 2002: 46). In addition, there are 3 kinds of the map that should be prepared for filling the speech gained as data. Ayatrohaedi (2002: 47) explained the 3 kinds of the map: 1) basic map, 2) stand alone map 3) reconstruction map. The examples of the reconstruction the map can be like: a) issoglosses boundaries map or heteroglosses boundaries map; b) the certain language indication map, such as: 1) fonologis indication map, 2) spesific speech map that is interesting, 3) triangle of dialectometry map, 4) persentage of one spot to other spots map, 5) classification language map or dialect based on dialectometry map. In this research, the researcher used basic map, as well as fonologis map such as triangle dialectometry map.

2.3 Dialectometry

Dialectometry calculation is one of the important way in process of identifying the language, except isoglosses boundaries. Séguý tried to calculate the dialectometry after that a number of researchers in dialectology discuss about dialectometry; one of the researchers is Guiter

(1973) dan Ravier (1973) (Lauder, 2007: 94). In addition, it is supported by Chambers dan Trudgill (2004: 137) stated that dialectometry is one way of the forerunner of calculation in measuring geolinguistics variable. The clear explanation about the dialectometry stated by Ayatrohaedi (1979: 31) that dialectometry is statistical measurement that is used to see how far the differences and the similarities within the language or dialect of observed region by comparing a number of substances collected in observed region.

2.4 Language in Contact

In investigating language in contact theory, there are some factors or background of language in contact itself. According Weinreich (1979: 5) stated that language in contact is considered by antropologists as one aspect in cultural contact and language, such as the spread of cultur and acculturation.

Sankoff (2003:2) added that the existence in two region/area is established by the existence of history of social interaction, among the population of society like economic factor, politics, and demography. Interaction of neigboring region might have positive or negative effect as stated in the research conducted by Palander, Marjatta, Lisa, and Fiona (2003). This reserach is a kind reserach journal. It explained about the region that borders on other region is devided into neighbouring and enemy region. It is caused by the existence the rival variation in changing of dialect. From the some explanation about language in contact, it can be concluded that language in contact occurs when the usage of language or dialect in the same time/alternately in neighbourhood region, influenced by the same background, and even bilingualism exists in that region influenced by social interaction or social space, geometric space, and perception space.

3. Methodology

3.1 Research Design

To gain the language variation, qualitative method employed in this study followed by quantitative method in calculating data. In this study, the researcher classified the language qualitatively, then scored by using dialectometry quantitatively.

3.2 Informant in the Research

Furthermore, informant is the main factor in dialectology. This statement is explained in the research done by Rensink (1999: 3-7) about *Informant Classification of Dialect*. Rensink showed that informant is important thing to establish dialect boundaries in Holland. Informant in Rensink's reseach has good knowledge about the area having similarities in language and differences in language compared with informant's area.

The number of informants were by 42 informants, consisting 21 males and 21 females because the bservation spots in this research taken from 21 spots. The informants should be have the certain characteristic as well as Rensink's informant characteristic.

Other characteristics stated by Chambers dan Trudgill (2004: 29) is the informants should be NORM's— *Non-mobile, Old, Rural, and Male*. Therefore, the informant' characteristics are adapted to NORM;s and combined with the aim of this research 1). The informant should rarely go outside the subdistrict with academic maximum is senior high level, 2). The informant is about 40 60 years old with good/complete organ of speech, 3). The informant is originally from certain region obseved, 4). The informant consists of 50% men and 50% male that have same contribution to the specific questionnaires form male or female.

3.3 The Scope of the Research

The observation spots in this research were 21 spots spreadly distribution of 16 districts in Rokan Hulu Regency in Riau Province, Indonesia (see Table 1)

Table 3.1
Scope of the Research

No.	Observation Spots
1	Tambusai Utara
2	Mahato
3	Ulak Patian
4	Bonai
5	Telok Sono
6	Kepenuhan Barat
7	Lubuk Soting
8	Tambusai Tengah
9	Sejati
10	Kepenuhan Hulu
11	Kota Lama
12	Lubuk Napal
13	Bangun Purba
14	Pasir Pengaraian
15	Pagaran Tapah
16	Pemandang
17	Ujung Batu
18	Cipang Kiri Hulu
19	Pendalian
20	Koto Tandun
21	Aliantan

3.4 Questionnaires

The questionnaires in this research are 200 words of Swadesh (basic words) to identify language in contact by using dialectometry calculation.

3.5 Procedures of This Research

After determining the observation spots as sample of this research, so the village visited are still origin or about 100 years exist. On the other hand, the demography of the villages are the originally not transmigration or immigration people. Other way to gain the enough and accurate information about village that still have originally inhabitant is by checking the subdistrict office of the certain village.

The information gotten from the subdistrict would help get the informants for each subdistrict. Then, the researcher directly went to the village and looked for the informant. Persuasive approach ease the researcher to collect the information of the questionnaires arranged before.



Figure 3.1: Procedures of the Research

3.4 Technique of Collecting Data

In this study, the researcher collected the data by using cakap semuka technique that is in line with 'pupuan lapangan method' by Ayatrohaedi (Mahsun, 2005: 128). According to Mahsun, cakap semuka technique is a technique used by the researcher by going to the observation spots and having interview—asking and answering activity—(by eliciting the informant face to face based on the questionnaire). It is a suitable technique used for this research, because the pupuan lapangan method is more scientific than pupuan sinurat method [1].

This activity (asking and answering activity) can be used 3 ways below: 1) by directly asking the informant (interview), 2) by showing the pictures, and 3) by recording or making some important notes to fulfill the data.

3.5 Technique of Analyzing the Data

After making the language mapping, the data was analyzed by using dialectometry calculation. The dialectometry calculation was done by comparing one symbol by other symbol in language mapping. The same symbol would be graded by 0 (zero) point. The different symbol would be graded by 1 (one) point.

Then, after comparing one symbol to other symbol, the calculation can be calculated by following formula (Ayatrohaedi, 1979: 31).

Dialectometry Calculation

$$\frac{S \times 100}{n} = d$$

- s:** is the sum (s) of difference symbol
n: is the number (n) of mapping comparing one to other(s)
d: is the differences (d) of one to other district

The percentage offered by Guiter is not suitable with in Indonesia region. The range of percentage was too high. Therefore, Lauder (1990: 242) suggested the range of percentage was slightly different from Guiter; the differences 70—100% are categorized into “differences in language”, the differences 51—69% were categorized into “difference in dialect”, the differences 41—50% were categorized into “difference in subdialect”, the differences 31—40% were categorized into “difference in speech”, the differences 0—30% were categorized into “no difference”.

4 Findings and Discussion

4.1 Findings

From the calculation above, it could be stated that the range of percentage of difference language in Rokan Hulu Regency was categorized into “difference in dialect” with percentage 51-69%. The language in contact in Rokan Hulu Regency is Malay Riau Mandailing Dialect in villages with spots 7 (Lubuk Soting) and 13 (Bangun Purba). It means that the communication understanding level with Mandailing language is still high in Rokan Hulu Regency.

4.2 Discussion

In calculating dialectometry, there were several steps that had to be done that could be seen the following.

1. Triangle of Dialectometry

From the triangle of dialectometry, it can be seen that one spot to other spot is connected each other and forming triangle. In calculating the differences of every spots, the researcher referred to this triangle. It could be seen in **Figure 4** below.

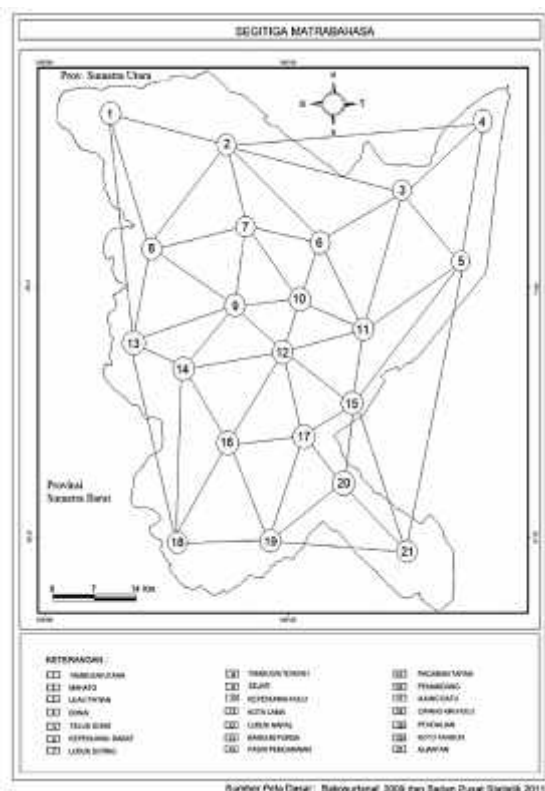


Table 4.1
Table Dialectometry 200 Swadesh Words

No.	Observation Spots	Sum of Differences	%
1	1/2	2	1,0
2	1/8	13	6,5
3	1/13	123	61,5
4	2/3	28	14,0
5	2/4	26	13,0
6	2/6	14	7,0
7	2/7	123	61,5
8	2/8	14	7,0
9	3/4	19	9,5
10	3/5	22	11,0
11	3/6	22	11,0
12	3/11	27	13,5
13	4/5	16	8,0
14	5/11	28	14,0
15	5/15	32	16,0
16	5/21	45	22,5
17	6/7	121	60,5
18	6/10	11	5,5
19	6/11	20	10,0
20	7/8	124	62,0
21	7/9	123	61,5
22	7/10	122	61,0
23	8/9	21	10,5
24	8/13	124	62,0
25	9/10	16	8,0
26	9/12	24	12,0
27	9/13	123	61,5
28	9/14	20	10,0
29	10/11	21	10,5
30	10/12	23	11,5
31	11/12	19	9,5
32	11/15	21	10,5
33	12/14	14	7,0
34	12/15	23	11,5
35	12/16	25	12,5
36	12/17	21	10,5
37	13/14	122	61,0
38	13/18	124	62,0
39	14/16	24	12,0
40	14/18	25	12,5
41	15/17	30	15,0
42	15/20	24	12,0
43	15/21	34	17,0
44	16/17	28	14,0
45	16/18	24	12,0
46	16/19	31	15,5
47	17/19	34	17,0
48	17/20	34	17,0
49	18/19	32	16,0
50	19/20	32	16,0
51	19/21	30	15,0
52	20/21	20	10,0

2. Calculating the dialectometry

After making the triangle of dialectometry, the calculation of dialectometry calculated the compared spots by using dialectometry formula and the results were categorized by differences level.

- Percentage 51—69% showed the difference in language was categorized into “difference in dialect” that could be seen in these observation spots 1/13, 2/7, 6/7, 7/8, 7/9, 7/10, 8/13, 9/13, 13/14, dan 13/18. It means the most differences in “difference in dialect” are in spot 7 and spot 13.
- Percentage less than 30% showed the difference in language was categorized into “no differences” that could be seen in these observation spots 1/2, 1/8, 2/3, 2/4, 2/6, 2/8, 3/4, 3/5, 3/6, 3/11, 4/5, 5/11, 5/15 5/21, 6/10, 6/11, 8/9 , 9/10, 9/12, 9/14, 10/11, 10/12, 11/12, 11/15, 12/14, 12/15, 12/16, 12/17, 14/16, 14/18, 15/17, 15/20, 15/21, 16/17, 16/18, 16/19, 17/19, 17/20, 18/19, 19/20, 19/21, dan 20/21.

3. Table of Dialectometry Calculation

This Table showed that the differences in detail calculation of every compared spots.

5 Conclusions and Suggestion

5.1 Conclusion

Based on the result of mapping the language and the result of dialectometry calculation, it can be concluded into the following points.

1. The language in the Rokan Hulu Regency is one language-Malay Riau Language and with 2 dialects-Malay Riau Rokan Hulu dialect and Malay Riau Mandailing Dialect.
2. The Malay Riau Rokan Hulu dialect can be found in village with spots 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21. However, the Malay Riau Mandailing dialect can be found in villages with spots 7 and 13. The two spots are Lubuk Soting and Bangun Purba. This is caused by the language contact of Malay Riau Language in Rokan Hulu and Mandailing Language in North Sumatra. These two villages are neighbouring with North Sumatra Province.

5.2 Suggestions

From the findings of the research, it can be suggested:

- 1) The development of language, especially Malay Language spread almost all in Indonesia can be the interesting topic to be explored for the next researchers in Malay language in Indonesia.
- 2) The future researchers related to language mapping by using dialectometry can be used in elaborating the language variation and language in contact.
- 3) It can be one of the new curriculum in the university level in sociolinguistic subject by using dialectometry of regional dialect.

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