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## LEXICAL AND PHONOLOGICAL DIFFERENCES IN JAVANESE IN EAST JAVA, INDONESIA<sup>1</sup>

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### Abstract

The study aims to reveal lexical differences and phonological differences in Javanese in East Java Province. Data were collected from a sample of three regions, namely Banyuwangi, Surabaya, and Magetan. Banyuwangi was chosen because of its location at the eastern end of Java Island and directly adjacent to Madura and Bali Island. Surabaya was chosen because of its strategic location as the center of government as well as the Capital of East Java Province. Meanwhile, Magetan was chosen because of its location in the west end of East Java Province and directly adjacent to Central Java Province. This research is a quantitative one. The data were Javanese language used by adults in East Java. The research instrument was Nothofer questionnaire which was modified by Kisyani to be 829 glossaries of words/phrases. The results of the study revealed that 1) the most lexical of Javanese was in the western and eastern parts of East Java while the least was in the central government of East Java Province, Surabaya, 2) lexical differences in Javanese in East Java resulted in five dialects and two sub dialects, and 3) Phonological differences in Javanese in East Java produced seven speeches.

**Keywords:** lexical differences, phonological differences, Javanese language

### DIFERÈNCIES LÈXIQUES I FONOLÒGIQUES EN JAVANÈS A L'EST DE JAVA, INDONÈSIA

#### Resum

L'estudi té com a objectiu mostrar diferències lèxiques i fonològiques en javanès a la província de Java Oriental. Les dades provenen d'una mostra de tres regions: Banyuwangi, Surabaya i Magetan.

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Banyuwangi va ser triada per la seva ubicació a l'extrem oriental de l'illa de Java, directament adjacent a Madura i a l'illa de Bali. Surabaya fou triada per la seva ubicació estratègica com a centre de govern i com a capital de la província de Java Oriental. Es va triar a Magetan a causa de la seva ubicació a l'extrem occidental de la província de Java Oriental, directament adjacent a la província de Java Central. Aquesta investigació és una investigació quantitativa. Les dades recullen el javanès utilitzat per adults. El procediment de recerca va ser el qüestionari de Nothofer, modificat per Kisyani, que contenia 829 glossaris de paraules/frases. Els resultats de l'estudi van revelar que 1) el lèxic més propi dels javanesos es trobava a les parts occidental i oriental de Java Oriental, mentre que el menys propi era al govern central de la província de Java Oriental, Surabaya, 2) de les diferències lèxiques en javanès a Java Oriental es van obtenir cinc dialectes i dos subdialectes i 3) les diferències fonològiques en javanès a Java Oriental van produir set tipus de parles.

**Paraules clau:** diferències lèxiques, diferències fonològiques, javanès

### DIFERENCIAS LÉXICAS Y FONOLÓGICAS EN JAVANÉS EN EL ESTE DE JAVA, INDONESIA

#### Resumen

El estudio tiene como objetivo mostrar diferencias léxicas y fonológicas en javanés en la provincia de Java Oriental. Los datos provienen de una muestra de tres regiones: Banyuwangi, Surabaya y Magetan. Banyuwangi fue elegida por su ubicación en el extremo oriental de la isla de Java, directamente adyacente a Madura y a la isla de Bali. Surabaya fue elegida por su ubicación estratégica como centro de gobierno y como capital de la provincia de Java Oriental. Se eligió a Magetan debido a su ubicación en el extremo occidental de la provincia de Java Oriental, directamente adyacente a la provincia de Java Central. Esta investigación es una investigación cuantitativa. Los datos recogen el javanés utilizado por adultos. El procedimiento de investigación fue el cuestionario de Nothofer, modificado por Kisyani, que contenía 829 glosarios de palabras / frases. Los resultados del estudio revelaron que 1) el léxico más propio de los javaneses se hallaba en las partes occidental y oriental de Java Oriental, mientras que el menos propio estaba en el gobierno central de la provincia de Java Oriental, Surabaya, 2) de las diferencias léxicas en javanés en Java Oriental se obtuvieron cinco dialectos y dos subdialectos y 3) las diferencias fonológicas en javanés en Java Oriental produjeron siete tipos de hablas.

**Palabras clave:** diferencias léxicas, diferencias fonológicas, javanés

## 1. Introduction

Language is an important aspect that can change human life. Every human being has a close relationship with language. A philosopher expressed thoughts and the results of his reflections using language. Thus, without language, human would not understand the philosophical thoughts. Language and philosophy are like two lovebirds that cannot be separated or two sides of a coin that complement each other. There is a Javanese proverb that reads *“ajining dhiri dumunung ing lathi, ajining raga*

*dumunung ing busana*". It implies that the personal value of a human is determined by language, while the value of a human appearance is determined by clothing. Language spoken by humans must contain goodness and politeness because it reflects the high dignity of a human being and the high civilization of a nation. Thus, language reflects the quality of individual in the life of society, nation and state.

Based on dialectological review, research on lexical differences and phonological differences in Javanese in East Java is reasonable. Javanese is one of regional languages in Indonesia. Among the regional languages, Javanese is the language with the most speakers compared to other regional languages in Indonesia. The study of Javanese language in East Java is important to reveal the facts of differences in Javanese language in the eastern part of Java Island which is directly adjacent to Madura and Bali Island which have other regional languages, namely Madurese and Balinese.

East Java Province consists of three parts, namely the central government, i.e. Surabaya, and the periphery which consists of the east and west parts. The East is represented by Banyuwangi and the western part is represented by Magetan. Surabaya is a major port and commercial trade center in eastern Indonesia, and now one of the largest cities in Southeast Asia, in which many domestic and foreign investors are investing to build companies, factories and malls. This caused a lot of urbanization of people from various regions to find works in the city. This mixture of people from various regions from within and outside the country in the city of Surabaya has caused variants of languages from various languages, including Madurese, Chinese, Arabic, English and other languages that can influence the existence of Javanese in Surabaya.

Magetan is one of the regencies located on the west end of East Java Province which is directly adjacent to Central Java Province. Central Java Province has two Javanese Kraton which are still recognized in Indonesia. The two Kraton are Surakarta Hadiningrat Palace located in Solo and Yogyakarta Hadiningrat Palace located in Yogyakarta. Both Kraton are still very close with Javanese language and culture. The fact that Magetan is close with the two kraton is expected to bring positive value to the existence of Javanese in Magetan.

Banyuwangi is a district located on the east end of East Java Province which is directly adjacent to Madura and Bali Island which have their own regional languages, i.e. Madurese and Balinese. The fact that East Java Province is close to the two islands is possible to influence the existence of Javanese language in Banyuwangi.

Based on a sample of the three research locations, the existence of Javanese language in East Java can be questioned. The questions are: what is the number of lexical Javanese in East Java? What are the lexical differences and phonological differences in Javanese language in East Java? These questions are the consideration of the researchers to conduct Javanese language research in East Java.

The study of Javanese language with dialectological studies is worthy of research and has its own appeal, evidenced by many researchers studied language. There were several studies by -Laksono who examined Javanese language with dialectological studies, including: Javanese in North Java and Blambangan (2004a) in a dissertation at Gadjah Mada University, Identification of Krama Vocabulary in East Javanese Dialect and Dialect Using (2004b) in Indonesian Linguistics journal, Indonesian Linguistic Society in Jakarta, Javanese Isolect in Tuban and Bojonegoro (2000) in the Verba Journal FBS of Surabaya State University, and Javanese Isolect in Keduwung, Tengger (1998) in Indonesian Linguistics journal, Indonesian Linguistic Society in Jakarta.

Based on the research conducted by Kisyani-Laksono on Javanese, it is necessary to conduct further investigation. This study specializes in the scope of Javanese language in East Java. To find out the lexical differences and phonological differences in Javanese in East Java, it is necessary to identify Javanese language in East Java.

## **2. Method**

The current study is a quantitative study with descriptive methods. The data in this study were linguistic data, namely adults' Javanese language in East Java. The research instrument was a questionnaire, a list of questions developed by Nothofer and modified by Kisyani by developing a Swadesh list to be 829 glossaries of words/phrases. The observation areas (OA) 1 and 2 are located in Banyuwangi and the

observation areas (OA) 3 and 4 are located in Surabaya. Meanwhile, the observation areas (OA) 5 and 6 are located in Magetan.

The method used to collect the research data was the field observation method that is the researchers directly came to the field to search for research subjects, interview, hear, take notes, and record data. The field observation method is used by the researchers to observe linguistic data, geographical state, socio-cultural conditions, and the state of transportation infrastructure in the observation area. In addition, the researchers might also ask opinions and explanations directly to the subject of research about things that are poorly understood.

The data collection technique used by the researchers to collect adult Javanese language data in East Java was an advanced proficiency technique. The researchers and the research subjects met directly at the research location to have a direct conversation. The conversation is based on a list of questions that have been developed by Nothofer and modified by Kisyani by developing a Swadesh list into 829 glossaries of words/phrases. This advanced skill technique is always accompanied by note-taking techniques. The note technique was carried out by the researcher during the interview process with the research subject. The note-taking technique was carried out to avoid errors in phonetic writing. The data obtained in this note-taking technique would be matched with the data obtained from the recording. The data obtained from this note taking technique was used to complete the data contained in the recording. At the time of recording, the researcher tried his best so that the research subjects did not know this. This was done to maintain the nature of research data. To get the desired data, the researcher also used fishing techniques. This fishing technique might be carried out by movement or by certain words. Researchers lured the data out of the tool said the research subject.

The analysis was carried out through several steps 1) data transcription, i.e. data obtained through recording were converted into written data. Data obtained through recording were changed according to their original phonetics. The data obtained from this recording technique were used as a complement to the data obtained through note-taking techniques using the Nothofer questionnaire modified by Kisyani by developing a

Swadesh list to 829 glossaries of words/phrases. 2) Data analysis; after the lexical and phonological differences in Javanese had been obtained, the observation areas that were possibly involved in communications were compared. The comparisons were carried out based on dialectometry triangles and a number of dialectometrics.

### 3. Results and discussion

The lexical differences and phonological differences in Javanese in East Java were calculated based on lexical dialectometry and phonological dialectometry. The data retrieval of Javanese language in Banyuwangi and Surabaya was done using the Nothofer questionnaires which had been modified by Kisyani into 829 glossaries covering 20 meaning fields. The 20 meaning fields were (1) numbers, (2) size, (3) season and time, (4) human body parts, (5) greetings and references, (6) kinship terms, (7) clothing and jewelry, (8) work, (9) animals, (10) animal body parts, (11) plants: parts of fruit and their processed products, (12) nature, (13) houses and their parts, (14) tools, (15) diseases and drugs, (16) directions, (17) activities, (18) nature, (19) color and smell, and (20) taste.

#### 3.1 Calculation of the number of lexical differences in Javanese in east Java, Indonesia

The lexical data of Javanese in East Java shows that not all glossaries asked to the research subject were in Javanese *ngoko*. Of the 829 glossaries asked to adults in all observation areas, there were several glossaries answered using Indonesian and *Osing* languages. In addition, there were also zero or empty glossaries. The following is the number of Javanese lexical at each observation area in East Java.

No.	Observation Area	Adults' Javanese Language				Total
		Javanese <i>ngoko</i>	Indonesian Language	<i>Osing</i>	<i>Zero</i>	
1.	1	758	14	50	7	829
2.	2	757	23	29	20	829
3.	3	736	65	-	28	829
4.	4	732	69	-	28	829
5.	5	791	16	-	22	829
6.	6	791	16	-	22	829

Table 1. The Number of Javanese Lexical

Based on the lexical calculation of Javanese language in East Java, the following groups were obtained:

a. OA 1; of the 829 glossaries that were asked there were 7 zero, 758 Javanese *ngoko*, 14 Indonesian and 50 *Osing*.

b. OA 2; of the 829 glossaries asked there were 20 zero, 757 Javanese *ngoko*, 23 Indonesian and 29 *Osing*.

c. OA 3; of the 829 glossaries asked there were 28 zero, 736 Javanese *ngoko* and 65 Indonesian.

d. OA 4; of the 829 glossaries asked there were 28 zero, 732 Javanese *ngoko* and 69 Indonesian.

e. OA 5; of the 829 asked there were 22 glossaries, 791 Javanese *ngoko* and 16 Indonesian.

f. OA 6; of the 829 asked there were 22 glossaries, 791 Javanese *ngoko* and 16 Indonesian.

Based on the grouping, it can be seen that OA 3 and 4 located in Surabaya had fewer Javanese lexical than that in other OAs. The following is the figure of the number of Javanese lexical at each OA in East Java.

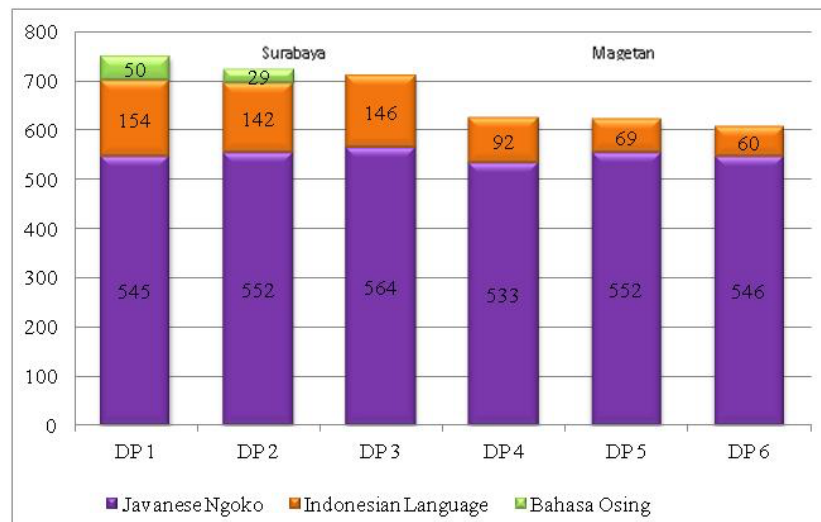


Figure 1. The number of Javanese lexical in east Java

The graph shows the number of lexical in each OA in East Java. The number of Javanese lexical in the west and east ends of East Java Province, namely in Banyuwangi and Magetan, was more than that in the center of East Java Province, namely in Surabaya. Calculation of lexical differences in Javanese in East Java was done by referring to dialectometric triangular maps and numbers of dialectometry maps. However, the netted data shows that not all OAs had Javanese language for the glossaries they were asking. For example: the CICIT kinship term (glossary no.210) with [great-grandfather] was only known at OA 1,2,5, and 6 while in OA 3 and 4 it was unknown. This might be caused by being unproductive to use in everyday speech in OA 3 and 4. Of the 829 glossaries asked to adults at OAs 1, 2, 3, 4, 5, and 6 there were 349 lexical differences found. Following are the results of calculating Javanese lexical dialectometry in East Java.



OA	Number of Difference (S)	Number of Maps Compared (n)	Vocabulary Distance (d%)	Description
1-2	112	349	32,09 %	subdialect differences
1-3	261	349	74,78 %	dialect differences
2-3	187	349	53,58 %	dialect differences
2-4	215	349	61,60 %	dialect differences
2-6	151	349	43,26 %	subdialect differences
3-4	28	349	8,02 %	no difference
4-5	187	349	53,58 %	dialect differences
4-6	185	349	53,01%	dialect differences
5-6	48	349	13,75 %	no difference

Table 2. Lexical Dialectometry in Javanese in East Java

Based on the calculation of the lexical dialectometry of Javanese *ngoko* language in Banyuwangi and Surabaya, the following division groups were obtained:

- a. OA which shows no difference or vocabulary distance with a percentage of 0% - 20% was found in OA 3-4 and OA 5-6.
- b. OA which shows speech differences with a percentage of 21% - 30% was not found.
- c. OA which shows the differences in the sub dialect with the percentage of 31% - 50% was in OA 1-2, and OA is 2-6.
- d. OA which shows the difference in dialect with the percentage of 51% - 80% was found in OA 1-3, OA 2-3, OA 2-4, OA 4-5, and OA 4-6.

Calculation of lexical differences in Javanese in East Java shows no difference in OA 3-4 and OA 5-6. Sub dialect differences were found in OA 1-2 and OA 2-6. Differences in dialects were found in OA 1-3, OA 2-3, OA 2-4, OA 4-5, and OA 4-6. The following is a map of differences in Javanese language and sub dialects in East Java.

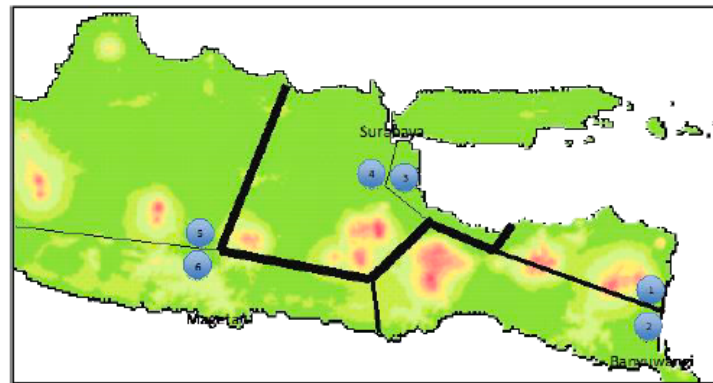





Figure 2. A map of lexical differences in Javanese in East Java

Notes:

	= different dialects
	= different sub dialects
	= no difference

### 3.2 Calculation of the number of phonological differences in Javanese in east Java, Indonesia

Calculation of phonological differences in Javanese in East Java shows variants and correspondence. Of the 829 glossaries asked to adults at OA 1, 2, 3, 4, 5, and 6 there were 272 phonological differences found. The number of the phonological differences was the number to calculate the phonological dialectometry of Javanese in East Java. This number might develop if other differences that contain the same thing were involved. The following is a phonological calculation of Javanese language in East Java.

OA	Number of difference (S)	Number of map compared (n)	Vocabulary distance (d%)	Description
1-2	11	272	4,04 %	speech differences
1-3	17	272	6,25 %	speech differences
2-3	11	272	4,04 %	speech differences
2-4	15	272	5,51 %	speech differences
2-6	13	272	4,77 %	speech differences
3-4	5	272	1,83 %	no difference
4-5	14	272	5,14 %	speech differences
4-6	17	272	6,25 %	speech differences
5-6	8	272	2,94 %	no difference

Table 3. Phonological dialectometry in Javanese in East Java

Based on the calculation of phonological dialectometry, Javanese language in East Java the following division groups were obtained:

a. OA which shows no difference or vocabulary distance with a percentage of 0% - 3% was found in OA 3-4 and OA 5-6.

b. OA which shows the difference of speech with the percentage of 4% - 7% was in OA 1--2, OA 1 - 3, OA 2 - 3, OA 2 - 4, OA 2 - 6, OA 4 - 5, and OA 4 - 6 .

c. OA which shows sub dialect differences with a percentage of 8% - 11% was not found.

d. OA which shows dialect differences with a percentage of 12% - 16% was not found.

The calculation of the phonological differences shows speech differences in OA 1-2, OA 1-3, OA 2-3, OA 2-4, OA 2-6, OA 4-5, and OA 4-6. This proves that there were many phonological similarities between Javanese languages between OAs. The following is a figure of the phonological differences in Javanese language in East Java.

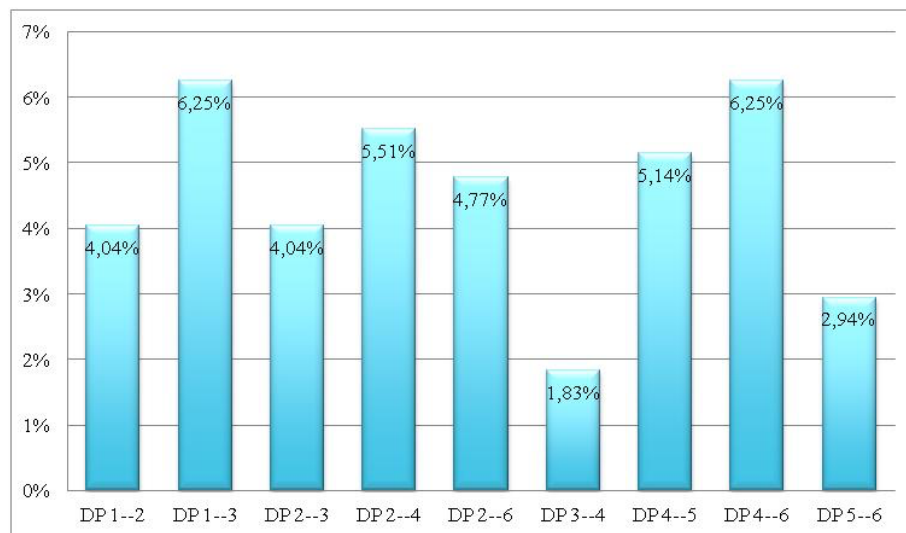


Figure 3. The percentage of phonological differences in Javanese in East Java

Phonological differences in OA 1--2, OA 1-3, OA 2-3, OA 2-4, OA 2-6, OA 4-5, and OA 4-6 indicated that there were speech differences while those in OA 3-4 and OA 5-6 showed no speech difference. The following is a map of the phonological differences in

Javanese language in East Java which shows the difference in speech in the OA-OA compared.

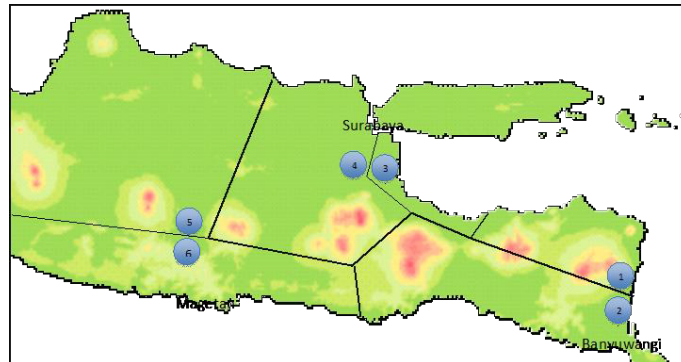

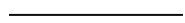


Figure 4. A map of phonological differences in Javanese in East Java

Notes:

-  = Different speech  
 = no difference

The map of Javanese phonological differences showed thickening in OA 1--2, OA 1-3, OA 2-3, OA 2-4, OA 2-6, OA 4-5, and OA 4--6 which indicated the different lines of speech. OA 3-4 and OA 5-6 did not indicate any thickening because there was no difference in the OA-OA compared.

### 3. Conclusion

Conclusions from the results of the study on lexical differences and phonological differences in Javanese language in East Java are: 1) the most lexical of Javanese is in the western and eastern parts of East Java, while the least is in the center of East Java Province, i.e. Surabaya, 2) lexical differences in Javanese in East Java produced five dialects and two subdialects, 3) phonological differences in Javanese in East Java produced seven speeches.

## References

- AYATROHAEDI (1983) *Dialektologi: Sebuah Pengantar*, Jakarta: Pusat Pembinaan dan Pengembangan Bahasa, Depdikbud.
- CHAMBERS, J.K. & Peter TRUDGILL (2004)<sup>2</sup> *Dialectology*, Cambridge: Cambridge University Press.
- GRIMES, B.F. (2000) *Geographical Linguistic. Summer Institut of Linguistic (SIL)* <Retrieved from <http://www.yahoo.com> (accessed Desember 2015)>.
- KARTIKASARI, E., K. LAKSONO, A. SAVITRI & D. SURYARINI (2018) "A Study of Dialectology on Javanese "Ngoko" in Banyuwangi, Magetan, and Solo", *Humaniora*, 30(2), 128-139.
- LAKSONO, Kisyani (2004a) *Bahasa Jawa di Jawa Timur Bagian Utara dan Blambangan (Kajian Dialektologis)*, Jakarta: Pusat Bahasa Departemen Pendidikan Nasional.
- LAKSONO, Kisyani (2004b) "Identifikasi Kosakata Krama dalam Bahasa Jawa Dialek Jawa Timur dan Dialek Using" dalam *Masyarakat Linguistik Indonesia*, Jakarta: MLI bekerjasama dengan Yayasan Obor Indonesia.
- LAKSONO, Kisyani & A. SAVITRI (2009) *Dialektologi*, Surabaya: Unesa University Press.
- LAUDER, Multamia Retno Mayekti Tawangsih (1993) *Pemetaan dan Distribusi Bahasa-Bahasa di Tangerang*, Jakarta: Pusat Pembinaan dan Pengembangan Bahasa.
- MAHSUN (1995) *Dialektologi Diakronis*, Yogyakarta: Gadjah Mada University Press.
- MAHSUN (2005) *Metode Penelitian Bahasa*, Yogyakarta: Grasindo Jaya.
- MEILLET, Antoine (1970) *The Comparative Method in Historical Linguistics*, Trans. Gordon B. Ford, Paris: Libraire Honore Champion.
- NADRA & RENAWATI (2009) *Dialektologi Teori dan Metode*, Yogyakarta: Elmatere Publishing.