The disease classification on Javanese language: An anthropological linguistics study

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Abstract

The disease is an important topic in the Javanese life. This study aimed to describe the disease classification to find out the Javanese worldview to disease. This study uses an anthropological linguistics approach to qualitative research design. The term of diseases discuss is highly dependent on disease lexicon in the Javanese language. The data collection refers to the participation observation and interviews. The Javanese language has at least 463 disease lexicons that have been tested in accordance by theory and can be defined as a term of disease. The disease classification is based on Javanese disease lexicon in line with the Berlin's Theory, level 0 is Unique Beginner category, level 1 is Life Form category, level 2 is Generic category, level 3 is Specific category, and level 4 is Varietal category, plus Covert category. The results of this study conclude that the Javanese perspective to the disease consist of how the identification and classification comes from their thinking and character.

Keywords

anthropological linguistics, classification, disease, Javanese, worldview

1 Introduction

Every culture has developed a health system that supports the timeless interrelationships of the times. The medical behavior of individuals and groups will not be understood if it is separated from culture in general (Pellegrino, 1963, p. 10). Pellegrino's statement (1963) shows that "every ethnic has a different health system, including in the case of disease" (p. 10).

The Javanese (JV) recognizes the word *lara* 'sick' and *lêlara* 'disease' (Prawiroatmojo, 1981, p. 292). The *lara* 'sick' word is always compared to a *waras* 'healthy' word. The definition of sick can be determined by healthy understanding. Healthy according to JVJ is able to do daily work, work with passion, good body, and has a passion of life (Murniatmo, 1992, p. 24); *waras* is *saras*, *sênggang*, *pulih mari lara*, *ora lêlaranên* 'healthy, have spare time, recover from illness, not easy to be sick' (Poerwadarminta, 1939, p. 75).

Sick is a condition that opposite to healthy; it cannot work, uncomfortable body, do not want to eat, physical and mind disrupted, and cannot travel (Murniatmo, 1992, p. 28); The *lara* 'sick' in *krama* 'polity' Javanese language (JVL) is *gêrah* wich the meaning *nandhang ora kêpénak ing badané* 'suffered uneasy in his body' (Poerwadarminta,

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1939, p. 794). The person who *nandhang lara* 'got sickness' is called *wong lara* 'sickness person'. *Wong lara* 'sickness person' is a sick person and feel something bad in his body, which in modern medicine was called "patient", that is the sick person who treated by a doctor; sufferer (sickness) (*Tim Penulis*, 2007, p. 854). JV does not recognize the term as "patient". The term approaching the "patient" is "sufferer" meaning the person suffering (distress, illness, disability, etc.) (*Tim Penulis*, 2007, p. 255).

The *lêlara* 'disease' is a specific type of pain that can be known type, symptoms, name, cause, to the treatment (Murniatmo, 1992, p. 31); *Lêlara* is *apa-apa sing njalari lara* 'everything that causes sick' (Poerwadarminta, 1939, p. 974). *Lêlara* 'disease' does not always mean there is sick, especially if the patient does not like to complain and still can move as usual. *Lêlara* 'disease' is not a *têmbung lingga* 'single word', but the formation word from the *lara* 'sick' word which has *swara* 'the repeated word of the initial form of the word and the sounds'). The word *lara* 'sick' had been from *dwipurwa* being the *lalara* 'sicks', then had been *salin swara* (change sound from *a* to *ê*), thus becoming a *lêlara* 'disease' (Poerwadarminta, 1939, p. 784). That is why the term *lêlara* 'disease' in JVL uses not only nouns (N), but also verbs (Vb) and adjectives (A). The examples of disease in JVL are as follows.

(1) *Bèlèk* 'red eyes', is red eyes and full of dirt on the eyes.¹



Fig. 1 *Bèlèk* 'Red Eyes'* Source: Tasman and Jaeger, 2001, p. 10

(2) Bèrèng 'mouth sickness' is pain in the mouth due to infection or germs.



Fig. 2 Bèrèng 'mouth sickness'* Source: Devani and Barankin, 2007, pp. 1022–1023

(3) *Borok* 'ulcers', is scaly, oily, reddish, and itchy skin.¹



Fig. 3 Borok 'ulcers'* Source: Werfel, et al., 2014, p. 509

Based on preliminary observations, the term of JVL disease is more than 400s. The term JVL disease can be known through disease lexicon. From the introduction of the term disease can be described JV's view of

¹ The ulcers understanding above is the understanding according to the informants, meaning that ulcers can occur in various parts of the body, including the head. But in Poerwadarminta (1939, p. 75) explains that ulcers can have a specific meaning *gudhig ing êndhas* 'scabies in the head' or a more general meaning *nandhang lara borok* 'ulcers suffering'.

^{*)} Figure 1, 2, 3 were taken from the source of the book because at the time of the research site no one was exposed to *bèlèk* 'red eyes', *bèrèng* 'mouth sickness', and *borok* 'ulcers'. The description is to tell the reader what kind of disease is.

disease. The description is made by an anthropological linguistic approach, by looking at linguistic facts in a wider social and cultural context (Foley, 1997, p. 3).

This research is to answer the question of how the classification of disease in JV and how the JV's view of the disease based on the classification that has been found. This is interesting because it can reveal various aspects related to JV's view of disease. The results of this study attempted to describe the form of linguistic units that named the disease according to JV, the classification of disease according to JV based on language units, the way JV looked at the disease, and the cause of JV looked at the disease as reflected in the disease lexicon and its classification.

Furthermore, the results of this study are expected to complement the documentation of disease classification according to JV and can be useful in the preparation of disease classification theory using the Berlin et al. (1973, p. 215) theory, a more comprehensive. In addition, it was expected to provide an overview to the wider audience to better recognize the Javanese culture seen in JVL, especially with related to disease.

2 Methods

This research method is using qualitative research design. Bogdan and Biklen (1998) state that "qualitative methodology is a research procedure that produces descriptive research reports in the form of written or oral words of people and observable behavior" (pp. 27–30). This research data depends on the name of disease in the JVL.

The selection of research location is Tulungagung because the city was known as one of the warehouse "traditional medicine" in Java, making it easier to find disease lexicon. In addition, the majority of people in Tulungagung's city are still living in traditional Javanese ways. The selections of informants based on the criteria, among others, are classified as normal in their circles, adults, men or women, healthy, have clear language habits (Bailay, 1978, pp. 81, 91). Informants in this study are traditional healers who understand Javanese's disease and culture. The data collected were lexicons of disease in the form of linguistic units that named the disease according to JV in the form of disease lexeme. The research data collected using two ways, namely the participation of observation and interview. Participation of observation is observation involving researcher in field observation and researcher acting as observer or part of the research. An interview is a meeting of two or more persons to exchange information through question and answer so as to know the meaning of a disease or other related topics. Interview is a means of verification of information from the informants, so that obtained reliable data.

Furthermore, the author will conduct data analysis following Ahearn (2012), "Once anthropologist linguistics has all the data they need, the interpretation becomes a pattern-finding process to find answers to research questions on which to base research or to answer questions that arise during data analysis. For most anthropologist linguistics, this involves reading and re-reading all field notes and other documents, copying interviews and natural conversations, and analyzing responses from surveys conducted. Some experts then conduct an in-depth analysis of the conversation data, while others focus on data on language policy or ideology on a wider scale." (p. 43).

Data analysis through testing is using questions in JVL. How to test whether a lexicon belongs to the category of disease lexicon or not, the definition of the disease, the JV's response to the disease using the theory presented by Spradley (2007, pp. 140–149). Steps had taken ranging from domain and category determinations, ethnographic hypotheses, and definite definitions to determine the JVL's lexicon disease, thus selected JVL's disease lexicons.

Furthermore, the author has classified and explains the lexicon of the disease obtained according to anthropological linguistic views. This research is included in ethno linguistic or anthropological linguistic studies (Duranti, 1997, p. 2) because it departs from linguistic facts. According to Foley (1997), "anthropological linguistics is a study done by looking at linguistic facts in a wider social and cultural context" (p. 3). Anthropological linguistics views and examines language from an anthropological, cultural, and linguistic perspective to discover the meaning behind its use. Anthropological linguistics is an interpretive discipline that explores language to find cultural understanding.

In anthropological perspective, language is part of culture (Koentjaraningrat, 1984, p. 182). In contrast, culture is generally inherited more thoroughly by language. So, language is the main vehicle for inheritance and cultural development. This is in line with the opinion of Duranti (1997) which states that "describing a culture as well as describing the language" (p. 27).

The classification of JVL's disease is included in folk taxonomy, so it will use the classification reference of Berlin et al. (1973, p. 214). Based on the classification of the disease, the authors will match with information from the informants to produce the formulation of the disease according to JV. Based on the formulation of the disease according to JV can be seen JV's perspective on the disease, which includes thinking and attitude of JV against disease. In the next stage, the author will interpret JV's perspective on the disease and its causes.

3 Findings and Discussions

3.1 Form and Pattern Disease Lexicon

The form of linguistic units on JVL disease at least is 463 lexicons of disease. The lexicon of the disease has been tested in accordance with the theory, so it can be identified as a disease term. The identification of the lexicon of the disease is determined by the possible semantic relationship between the term covering the 'disease' and its enclosed terms, which can be described as: X is one of the Y. For example, *gudhig* 'scabies' is one type of disease. There are 15 semantic relationships that characterize JVL diseases, as follows.

- (1) X is an abnormal / unusual type of Y, both born, inner, and mind.
- (2) X is a Y type that interferes with daily activities / cannot work / cannot travel; either because of a physical, mental, or mental disorder.
- (3) X is a type Y that can be seen its form / shape / color.
- (4) X is a type of Y that can be felt by the sufferer.
- (5) X is a type Y that makes the body uncomfortable/uncomfortable.
- (6) X is a Y type that makes not sleep well.
- (7) X is a Y type that causes it.
- (8) X is a type of Y that can be cured or treated.
- (9) X is a type Y that is settling for a long time.
- (10) X is a type Y that states the place of pain.
- (11) X is a Y type similar to the nature of a particular object.
- (12) X is a Y type that can be contagious.
- (13) X is a type of Y that can be non-infectious.
- (14) X is a type Y that can be an outbreak.
- (15) X is a type Y that can be deadly.

Based on the details of the statement (1)-(15) the first step to identify the name of the disease is to choose the terms used by JV to name the disease. When the term covers involves the types of things (terms are covered) then the domain will use certain terms as names. At the time when called of the disease, JV will give *borok* 'ulcers', *korèp* 'ringworm', and *mumêt* 'dizzy' for examples. Note Figure 4 to see the ethnographic hypothesis of JV's disease.

Lêlara 'Disease' is a type bisul 1ittle ulcers', korèp 'ringworm', gudhig 'scabies', raja singa 'gonorrhea', bèlèk 'red eyes', gondhok 'goiter', borok 'big ulcers', masuk angin 'catch a cold', mumêt 'dizzy', mutah 'yomit', kêsiku

'trance', *kêsurupan* 'trance'

Fig. 4 Ethnographic Hypothesis of Disease Source: Research Data JV speakers recognize the forms of *korèp* 'ringworm', gudhig 'scabbies', and *raja singa* 'gonorrhea' as lexicon of disease. Lexicon is a language component that contains all information about the meaning and usage of the word in the language (Kridalaksana, 1993, p. 127). Form is the picture; likeness; form, appearance (*Tim penulis*, 2007, p. 135). Thus, the lexicon of the disease is the appearance or appearance of a language component containing all information about the meaning and usage of the word in the language that refers to the meaning of the disease.

The *korèp* 'ringworm', *gudhig* 'scabies' and *raja singa* 'gonorrhea' are the form disease lexicons in JV. Those form are lexeme. The term lexeme follows Berlin et al. (1973, p. 217). The term used to mark lexicons of the disease using lexeme, not words because of the use of a lot of less accurate words, so Lyons (1968, p. 197) proposed the use of lexeme.

Berlin et al. (1973, p. 217) uses the term lexeme to mark the smallest units of the taxonomic system it creates. Lexeme is a semantic unit in the taxonomy of the people. According to him, lexeme consists of two kinds, namely primary lexeme (LP) and secondary lexeme (LS). LP is generally more easily recognizable than LS because the LP form is simpler than the LS form. The lexicons of JVL disease are in the form of LP and LS.

JV recognizes LP in the lexicons of the disease easily because of the word is monomorphic, such as *barah* 'leprosy', *bidhur* 'skin redness containing water and itching', and *busung* 'malnutrition'. There are also LP's which not monomorphic words, such as *mata iwakên* 'ulcers are very hard', *bêlak rambat* 'broken and bleeding soles of the feet', and *masuk angin* 'catch a cold'. The LS is usually a polymorphic word, such as *bisul lada* 'small ulcers', *gudhig badhêg* 'bad smell scabies' and *wudun sêma* 'big ulcers and fester'.

JV including children can easily distinguish between two types of diseases, such as *gondhok* 'goiter' and *busung* 'malnutrition'. They can be distinguished because the *gondhok* 'goiter' and the *busung* 'malnutrition' are the unique forms and the "single term" expression which can denote semantic units and language differences. The characteristics seen in both types of diseases are easy to distinguish. *Gondhok* 'goiter' form of gland enlargement in the neck, while the *busung* 'malnutrition' in the form of enlargement in the stomach.

JVL's lexicon in the form of LP consists of 364 lexicons or 78.61 % and LS consisting of 99 lexicons or 21.38 %. LP consists of two, namely simple LP there are 167 lexicons or 36.06 % and the complex's LP consists of 197 lexicons or 42.54 %. Examples of simple LP are *borok* 'ulcers', *cacar* 'smallpox', and *gondhok* 'goiter', while the LP complex are *raja singa* 'gonorrhea', *mata iwakên* 'ulcers are very hard', and *masuk angin* 'catch a cold'. Complex's LP more than a simple LP occurs because, (1) understanding of disease according to JV is everything which not normal in a person, so that looks not a disease, labeled disease by JV, such as *kêsurupan* 'trance', *diédanaké* 'maked a crazy', and *kandhuwan wingit* 'sick because do something wrong in the haunted place' and (2) *lêlara* 'disease' as the highest category marker in the classification of disease is the word formation, resulting in many of the disease lexicon in JVL was the word formation.

The LS form of the disease lexicon consists of two, namely (1) LS two subordinate lexeme there are 89 lexicons or 19.22 % and (2) LS three subordinate lexeme consists of 10 lexicons or 2.15 %. LS has a complex LP-like shape in which one of its constituents shows super ordinate and the other as subordinate. Examples of LS *cacar banyu* 'chickenpox, measles', *korép gajah* 'big ringworm', *gudhig watu irêng* 'black stone scabies'. LS have a complex LP-like shape but can be identified differently. LS consist of two constituent expressions with different positions. One of the constituents in the LS expression indicates that the other super ordinates and constituents show sub ordinate. Super ordinate and sub ordinate are terms that relate in semantic relationship between the meaning of Specific (S) and Generic (G) meaning, or between taxonomic members and taxonomic names. For example, it is between cats, dogs, and goats on the one hand and animals on the other hand. Animals are called super ordinates (hyponym) of cats, dogs, and goats. Cats, dogs, and goats are called sub ordinates (cohyponym) (Kridalaksana, 1993, p. 74).

Identification of LS in lexicon of JVL disease can be done on LS with two sub ordinate lexemes and on LS with three sub ordinate lexemes as follows. First, in the form of *cacar banyu* 'chickenpox, measles' is an LS that (a) one of its constituents, *cacar* 'smallpox', as a taxon-labeling its direct or super ordinate, and (b) another constituent, *banyu* 'water', becomes sub ordinate and a group whose members are also given label by LS which includes constituents with the taxa of smallpox (i.e., *cacar banyu* 'chickenpox', *cacar kêthèk* 'monkey smallpox', and cacar *tumbar* 'coriander smallpox'). This is an LS with two lexemes sub ordinate or LS consisting of two lexemes. In JVL the number of LS two subordinate lexemes there are 89 lexicons or 19.22 %.

Secondly, in the form of *gudhig watu irêng* 'black stone scabies' is LS because (a) one of its constituents, *gudhig watu* 'stone scabies', is a taxon-taxa which becomes its direct or super ordinate, and (b) another constituent, *irêng* 'black', becomes sub ordinate and one group its members are also labeled by LS which includes the constituents labeled taxon *gudhig watu* (i.e. *gudhig watu irêng* 'black stone scabies', *gudhig watu qutih* 'white stone scabies', and *gudhig watu ijo* 'green stone scabies'). This is an LS with three lexemes

sub ordinate or LS consisting of three lexemes. In JVL the number of LS three lexemes subordinates there are 10 lexicons or 2.15 %. The percentage and appointment of the figures are not intended to be the end result of the research, but to facilitate the depiction in mapping the analyzed data so as to obtain accurate results to classify the disease in Javanese language and formulate the Javanese view of the disease based on the classification that has been made. See the lexemic form of JVL disease in **Fig. 5**



Fig. 5 Form of Disease Lexicon on Javanese Language Following Berlin's Theory Source: Research Data Following Berlin et al. Theory (1973, p. 217)

Every form of disease lexeme in JVL turns out to have a regularity that forms a certain pattern. The patterns can be described as follows.

- (1) Monomorphic Noun Pattern (NM). NM is N consisting of one morpheme (Wedhawati et al., 2001, p. 185). Example: *lepra* 'leprosy'.
- (2) Monomorphic Adjective Pattern (AM). AM is A consisting of one morpheme (Wedhawati et al., 2001, p. 185). Example: *gatêl* 'itch'.
- (3) Verbal Monomorphic Pattern (VbM). VbM is the origin Vb or Vb that has not been subject to affixation or repetition (Wedhawati et al., 2001, p. 75). Example: *édan* 'crazy'.
- (4) Polymorphism Nominal Pattern (NP). NP can be formed through four morphemic processes, namely (a) affixation process, (b) repetition process, (c) plural process, and (d) combination process (Wedhawati et al. 2001, p. 222). Example: *monyongên* 'tumor'.
- (5) Polymorphism Adjective Pattern (AP). AP can be formed through four morphemic processes, namely (a) affixation process, (b) repetition process, (c) plural process, and (d) combination process. AP can be a single form, free or bound complex or compound form. The form of free or complex can be categorized as Vb, N, or A (Wedhawati et al., 2001, p. 185). Example: *sumlenget* 'hot body and uncomfortable'.
- (6) Polymorphemic Verb Pattern (VbP). VbP is formed through several morphemic processes, namely (a) affixation process, (b) repetition process, (c) plural process, and (d) combination process. Base form of VbP can be a single form, either free form, bound form, or complex form. The free form can be categorized as Vb, N, or A (Wedhawati et al., 2001, p. 75). Example: *dipèlèt* 'given a mantra'.
- (7) Noun Phrase (FN) Simplex Modification N Followed by N Pattern. The pattern of the simplex FN modification N followed by N is the lexicon of the form of FN consisting of N and N. This phrase consists of a core constituent in the form of N and a modifier of N (Wedhawati et al., 2001, p. 211). Example: *wudun tapak* 'ulcer on the soles of the feet'.
- (8) Noun Phrase Simplex Modification N Followed by A Pattern. The pattern of the simplex FN modification N followed by A is the lexicon of the form of FN consisting of N and A. This phrase consists of a core constituent in the form of N and a modifier of A (Wedhawati et al., 2001, p. 212). Example: *untu krowok* 'cavities'.
- (9) Noun Phrase Modification Simplex N Followed by Vb Pattern. The pattern of Modification FN Simplex N Followed Vb is the lexicon of the form of FN consists of N and Vb. This phrase consists of a core constituent of N and a modifier of Vb (Wedhawati et al., 2001, pp. 240–245). Example: *mata*

² According to Berlin et al. (1973, p. 215) theory, the details of lexeme under LS are LS two words and LS three words. The mention is less precise, because previously had used lexeme which means different from the word. The mention of words as LS details can confuse understanding. Therefore, in this mention the author uses the details of LS with LS two lexemes subordinate and LS three lexemes subordinate to facilitate understanding.

mlêthèk 'eyes almost out due to infection'.

- (10) Noun Phrase Complex Modification Followed by A. The FN pattern of the complex modification FN followed by A is the lexicon of FN disease composed of FN and A. This phrase consists of a core constituent in the form of FN and modifier of A (Wedhawati et al., 2001, pp. 214–215). Example: *cacar banyu uwuk* 'rotten chickenpox'.
- (11) Compound Word Pattern. A compound word is a combination of two or more words that have a completely different meaning from the words of the component, while the syntactic behavior is like the syntactic behavior of words (Poedjosoedarmo, 1979, p. 152). The compound word pattern of two words means the compound word consists of two words that have a unity of meaning. Example: *masuk angin* 'catch a cold'.
- (12) Unique Morpheme Pattern. The unique morpheme pattern is a complex LP-shaped disease term and a unique morpheme pattern. The lexicon is not included in existing patterns, but is in the lexicon of JVL disease. The unique morpheme pattern is given by JV according to the condition or nature of the disease. Example: *lara sangar* 'sick that does not heal'.

3.2 Disease Classification

Based on linguistic units naming the disease, the classification of JVL's disease uses the theory of Berlin et al. (1973, p. 215) contains five levels of Unique Beginner (UB), Life Form (LF), Generic (G), Specific (S), and Varietal (V) plus Covert Category (CC). In the category of UB there is the term lêlara 'disease' which is the highest level in disease classification. The UB category at level 0, *lêlara* 'disease' is a word formed from the word *lara* 'sick' which changes with the process of *dwipurwa* 'the repeated word of the initial form' becomes *lalara* 'sicks', and experienced the process of *salin swara* 'sound change' become *lêlara* 'disease'.

The next category is LF, for example *lara kulit* 'skin pain', *lara mata* 'eye sore', and *lara wêtêng* 'abdominal pain'. This LF category is not yet in accordance with the principle "if a taxa is labeled with LP and not terminal or directly includes taxa labeled with LP, the taxa is LF (Berlin et al., 1973, p. 217). It could be that lexicons such as *lara kulit* 'skin pain' that are currently the beginning of LF will form a particular LP as a marker of the LF category. In lexicons of *lara kulit* 'skin pain' turns out to be the category of G, such as *cacar* 'smallpox', gudhig 'scabies', and *borok* 'ulcers'. The lexicon is the category G. This indicates that lexicons like *lara kulit* 'skin pain' is actually very early LF. This is due to the development of JVL. Berlin (1972, pp. 51–86) states that ethno botany lexicon is growing, and then the lexicon of JVL's disease is like a plot in **Fig. 6**



Fig. 6 Growth Flow of the Disease Lexicon in Javanese Following Berlin's Theory Source: Berlin, 1972, p. 53

The next is G category, such as *cacar* 'smallpox', gudhig 'scabies', and *bisul* 'ulcers'. From G category appears S category; Some G categories have details with S category—such as *cacar banyu* 'water chickenpox', some have no S category. From S category there have V category—*cacar banyu uwuk* 'rotten chickenpox' and some do not have it.

In addition to the UB, LF, G, S, and V categories, the classification of the disease is CC. The CC category lies in a *abuh* 'swollen' that leads to "a kind of disease" or not a lexicon of disease but is considered a "name of the disease", such as *lara sikilé abuh* 'leg swelling', *abuh nganggo tatu* 'swollen with wound', and *pêranakanê abuh* 'the womb is swollen'. Evidence of *abuh* 'swollen' abdomen is a CC seen when the authors ask for drugs for *abuh* 'swollen' to the informants, they answer depending on the type and cause. The informants called the terms "a kind of illness" under *abuh* 'swollen' lexicon. It shows that CC is known in the classification of disease according to JV. The CC category lexicon is categorized as G, but its subordinate lexicon which recognized by JV as "a kind of disease". The taxonomic structure of JVL's disease is found in **Fig. 7**.

1

In the classification process, the JV labeled the disease based on seven rules, namely (1) the affected part of the illness—*bon turuk* 'ulcers on the genitals', (2) pain suffered—*watuk ngikil* 'whooping cough', (3) a prominent feature or marker of his illness—*bèlèk* 'red eyes', (4) the form of his illness—*korèp gajah* 'big ringworm', (5) its disease-like nature—*raja singa* 'lion king refer to *gonorrhea*', (6) the time of his illness—*kêsurupan* 'possession that often in the afternoon', and (7) the cause of his illness—*disanthèt* 'given mantra'.



Level 4 V cacar banyu anyir cacar banyu uwuk

Fig. 7 Structure of Taxonomic Disease in Javanese Language Following Berlin's Theory Source: Research Data following Berlin et al., (1973: 217) Theory

In addition to illness labeling, JV also uses seven naming rules of attribute of disease, namely (1) objects, e.g.: *cacar gêni* 'fire smallpox', (2) living things, either plant or animal, e.g.: *cacar tumbar* 'coriander smallpox', (3) color, for example: *korèp abang* 'red ringworm', (4) size, e.g.: *cacar gêni cilik* 'a small fire smallfox', (5) *odor*, e.g.: *cacar banyu anyir* 'rotten chickenpox', (6) condition, e.g.: *wudun matêng* 'matured ulcers', and (7) unique morphemes, for example: *busung kèkèt* 'malnutrition with intestinal stickiness due to infection'.

Each lexicon of the disease has meaning according to the denotative and figurative meanings attached to the lexicon, i.e. (1) the meaning of the form of the disease, e.g. *kukul tumbar* 'coriander acne'; (2) meaning of disease, e.g. *gatêl* 'itch'; (3) the meaning of the patient's condition, e.g. *édan* 'crazy'; (4) the meaning of the nature of the disease, e.g. *cacar ula* 'snake smallpox (malignant pox)'; (5) the meaning of the color of the disease, e.g. *korèp abang* 'red ringworm'; (6) the meaning of the odor of the disease, e.g. *gudhig badhêg* 'scabies that smells rancid'; (7) the meaning of sounds of illness, e.g. *watuk sêrak* 'hoarse cough'; (8) the meaning of the cause of the disease, e.g. *diguna-guna* 'given mantra'; (9) the meaning of the place of the disease, e.g. wudun tapak 'big boils on the soles of the feet'; and (10) the meaning of getting something out, such as *watuk gêtih* 'bleeding cough'.

3.3 Javanese's View of Disease

Based on the identification and classification of JVL disease, reflected JV's perspective on disease. The Javanese world view (Magnis-Suseno, 1999, pp. 62–137) states that life and death, ill fortune and illness are unfathomable fates. Sapir and Whorf in Kramsch (1998, pp. 11–14) state that language determines one's view of the world and its surroundings. No one recognize reality in its environment without language. Language has a close relationship with the culture. Culture shapes one's language in recognizing the world and its environment. The language of a person shows his culture.

JV's characters are the cause of his perspective on disease as reflected in disease lexicon, disease identification and classification. Widayat (2006, pp. 79–90) in his writings "*Metruk: Menyuarakan Karakter Orang Jawa*"—'Metruk: Javanese's Character Shows' using the characters in the puppet to describe the character of JV.

JV's point of view of disease includes eight things, namely as follows. First, the detailed naming of the disease in the Javanese language is caused by the JV's character that is *prêmati* 'meticulous and able to keep secrets' and views the disease related to life and death of a person. Second, the naming of JVL *ngoko* 'lowest'

disease because of JV thinking that regard disease as problem of all circles, do not recognize hierarchy as in JVL. Third, the naming of disease based on characteristic or prominent features is caused by JV thinking that label everything with something memorable. It also deals with JV's closeness to the environment and its natural surroundings. Fourth, the naming of disease based on the phenomenon that arises due to the careful thinking of JV. If a new disease symptom has been cured, it will not worsen the situation. That is why the names of diseases such as *watuk* 'cough', *flu* 'cold', *mumêt* 'dizziness' which is a symptom of disease, has been called disease by JV.

Fifth, the sense of pain according to JV who consider the pain is when not able to move, it is based on JV thinking that sick is not something "big" and need to "complain". There are many JV's sick, such as *lara gula* 'diabetes mellitus', *budrêg* 'hypertension', *cacingen* 'worm disease', but because they do not interfere with their activity, they do not feel pain. Sixth, the sense of disease according to JV is caused by thinking and character of JV that is up to be *tanggon* 'steadfast, not easy to despair', *wêgig* 'able to solve the problem', *mugên* 'concentrate', *mumpuni* 'master of things', and *sumarah* 'surrender to God'. JV considers every disease there is a cure, if not healed after being converted to everywhere, it means to be resigned to the provisions of God. Seventh, the classification of disease has LF category in the early stages because the character of JV is adaptive and open to the development of the times. JVL also had developed, seen from the many terms of the same disease with modern medical diseases, such as *cacar* 'smallpox', *ayan* 'epilepsy', and *lepra* 'leprosi'. Eighth, the classification of the disease has a category *tak katon* 'unseen' or CC caused JV thinking that considers that everything does not have to be explicit. JV often avoids anything negative to give positive expectations. For example, people affected by *cacar* 'smallpox' called *lara ayu* 'beautiful pain' so that the patient still feels himself good and eager to undergo treatment.

4 Conclusions

Based on the results of research there are two important things, namely the classification of diseases in the JVL and JV's perspective to the disease. First, based on linguistic units naming the disease, the classification of JVL disease contains five levels consisting of UB, LF, G, S, and V plus CC categories. Classification of JVL diseases above is accordance to Berlin et al. (1973, pp. 214–242) with two notes. The first is LP complex lexicons in JVL disease more than the simple LP. This is due to (1) the understanding of the disease according to JV is abnormal, so that it is not a disease, is labeled disease by JV, such as *kêsurupan* 'trance', and (2) the *lêlara* 'disease' as the highest category marker in the disease classification is the formation word, so many term diseases in JVL in the form of the formation word. The second note, the LF on the lexicon of JVL disease is not in accordance with the rules of Berlin et al. (1973, p. 214). JVL's was developed and JV's was growth. May these two things be thought for the refinement of the Berlin's theory.

JV gives the label and attributes of the disease based on things close to life to be easy to remember and identify. Each lexicon of the disease has a meaning according to the denotative and figurative meanings attached to the lexicon, namely (1) disease form, (2) sense of disease, (3) condition of sufferer, (4) nature of disease, (5) color of disease, (6) smell of disease, (7) sound of disease, (8) causes of disease, (9) site of disease, and (10) get something out.

Second, JV's view on the disease includes: (1) the detailed naming of the disease in JVL, (2) naming the disease in *ngoko* (lowest) JVL, (3) naming the disease based on prominent characteristics or prominent features, (4) naming the disease based on symptoms, (5) understanding of illness according to JV, (6) disease sense according to JV, (7) disease classification has LF category at early stage, and (8) classification of disease have category *tak katon* 'unseen' or CC. JV's view of the disease is more due to the character and nature of JV in the face of disease. Disease is considered a problem that must be resolved as soon as possible so that humans have a longer life expectancy and do not cause widespread outbreaks.

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References

- Ahearn, L. M. (2012). *Living Language: An Introduction to Linguistic Anthropology*. New York: Wiley-Blackwell Publications.
- Bailay, K. D. (1978). Methods of social research. New York: The Free Press.
- Berlin, B. (1972). Speculation on the growth of ethnobotanical nomenclature. *Language in Society*, 1(1), 51–86.
- Berlin, B., Breedlove, D. E., & Raven, P. H. (1973). General principles classification of classification and nomenclature in folk biology. *American Anthropologist*, 75(1), 214–242.
- Bogdan, R. C., & Biklen, S. K. (1998). *Qualitative research for education: An introduction to theories and methods*. Boston: Allyn & Bacon, Inc.
- Devani, A., & Barankin B. (2007). Can You Identify This Condition? *The College of Family Physicians of Canada*, 53(6). 1022–1023.
- Duranti, A. (1997). Linguistic anthropology. Cambridge: Cambridge University Press.
- Foley, W. A. (1997). Anthropological linguistics: An introduction. Oxford: Basil Blackwell.
- Koentjaraningrat. (1984). *Kebudayaan, mentalitas, dan pembangunan* [Culture, mentality, and development]. Jakarta: Gramedia Pustaka Utama. [In Bahasa Indonesia].
- Kramsch, C. (1998). Language and culture. Oxford: Oxford University Press.
- Kridalaksana, H. (1993). *Kamus linguistic* [Linguistic dictionary]. Edisi Ketiga. Jakarta: Gramedia Pustaka Utama [In Bahasa Indonesia].
- Lyons, J. (1968). Introduction to theoritical linguistics. Cambridge: Cambridge University Press.
- Magnis-Suseno, F. (1999). *Etika jawa: Sebuah analisa falsafi tentang kebijakan hidup jawa* [Java ethics: a philosophical analysis of javanese living policy]. Jakarta: Gramedia Pustaka Utama.
- Murniatmo, G. (1992). *Pengobatan tradisional Daerah Istimewa Yogyakarta* [Special region of Yogyakarta traditional treatment]. Jakarta: Departemen Pendidikan dan Kebudayaan, Direktorat Jenderal Kebudayaan, Direktorat Sejarah dan Nilai Tradisional, Proyek Penelitian Pengkajian dan Pembinaan Nilai-nilai Budaya. [In Bahasa Indonesia].
- Pellegrino, E. D. (1963). Medicine, history, and the idea of man. *The Annals of the American Academy of Political and Social Science*, 346(1), 9–20.
- Poedjosoedarmo, S. (1979). *Morfologi: Bahasa Jawa* [Morphology: Javanese language]. Jakarta: Pusat Pembinaan dan Pengembangan Bahasa Departemen dan Kebudayaan.
- Poerwadarminta, W. J. S. (1939). *Baoesastra Djawa*. [Baoesastra Djawa]. Groningen, Batavia: J.B. Wolters Uitgevers Maatschappij. NV [In Javanese].
- Prawiroatmojo, S. (1981). Bausastra Jawa-Indonesia. Jakarta: Gunung Agung [In Bahasa Indonesia].
- Spradley, J. P. (2007). *Metode Etnografi*. [Etnography method], (Elizabeth, M. Z., Trans.). Yogyakarta: Tiara Wacana [In Bahasa Indonesia].
- Tasman, W., & Jaeger, W. A. (2001). *The Wills Eye Hospital Atlas of Clinical Ophthalmology*. Philadelphia: Lippincott Williams & Wilkins.

- Tim Penyusun. (2007). *Kamus Besar Bahasa Indonesia* (Indonesia dictionary). Jakarta: Balai Pustaka. [In Bahasa Indonesia].
- Wedhawati, Setiyanto, E., & Nurlina, W. E. S. (2001). *Tata Bahasa Jawa Mutakhir* (The latest javanese grammar). Jakarta: Pusat Departemen Pendidikan Nasional [In Bahasa Indonesia].
- Werfel, T., Schwerk, N., Hansen, G., & Kapp, A. (2014). The diagnosis and graded therapy of atopic dermatitis. *Dtsch Arztebl Int.*, 111(29–30), 509–520.
- Widayat, A. (2006). *Metruk:* Menyuarakan karakter orang jawa [Metruk: Voice of the character of the Javanese]. *Kejawen: Jurnal Kebudayaan Jawa*, *1*(2), 79–90. [In Bahasa Indonesia].