

The Representation of Environmental Knowledge in Javanese Proverbs: An Ecolinguistic Study

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Abstract. Proverbs often emerge from the lived experiences of a community, including its ecological setting, subsistence activities, biological resources, and cultural interactions with plants, animals, and natural processes. This study explores the representation of environmental knowledge embedded in Javanese proverbs from an ecolinguistic perspective. As a form of oral tradition, Javanese proverbs reflect the worldview, values, and ecological awareness of the community, particularly in relation to their agrarian way of life and close interaction with nature. The data used in this study are taken from books on Javanese proverbs, and online sources discussing Javanese proverbs. To collect the data, we use an observation method, with a note taking technique. Using qualitative content analysis, this research will identify how Javanese proverbs convey ecological wisdom through metaphors drawn from plants, animals, abiotic environment, natural phenomena, and farming activities. The findings will reveal that these proverbs encode not only traditional environmental knowledge but also promote values such as harmony with nature, sustainability, and intergenerational responsibility. By examining these linguistic expressions through the approach of ecolinguistics, the study will highlight the role of language in preserving indigenous ecological perspectives and reinforcing environmentally ethical behavior within the Javanese cultural context.

Keywords: Javanese proverbs, environmental knowledge, ecolinguistics

1 Introduction

Humans, language, and culture are three components that interact with each other because all three produce and need each other. Humans who live in groups will be bound by social values and norms that are adhered to in a particular environment. Humans will create language when interacting with others in order to convey ideas, information, thoughts, and feelings that they want to express. However, besides that, language can also be a container or means to store and convey cultural values that are preserved in a community. Language can be an instrument to revive the culture of a community, because language can act as a container to create an idea, overcome obstacles that arise, and establish mutual agreements. It is an absolute requirement in the concept of culture that language is part of the culture itself. Humans know culture through language and language is able to reflect things that are values/norms believed in by society [1].

Javanese society is one part of the community that is still very strong in preserving and inheriting its culture and language, not only utilized in the form of learning, but also applied in daily activities. One form of interaction between language and culture of Javanese society, one of which is reflected in the many forms of Javanese proverbs that are produced and still exist today. Javanese proverbs are often used by people to express things that cannot be said directly. Javanese people have basic guidelines in the communication process, namely harmony and avoiding direct conflict. In the use of proverbs, they use euphemisms to express certain things so that they can be accepted by the person they are talking to. Javanese proverbs are widely used in the education and role model process to build the character, nature, and behavior of Javanese people [2].

Javanese proverbs in the form of *paribasan*, *bebasan*, or *saloka* contain valuable teachings that usually offer advice, recommendations, commands, prohibitions, and reprimands. Javanese people are very careful in applying their approach to all aspects of life, including the ability to distinguish and interpret both circumstances and natural signs. This sharp awareness reflects the high sensitivity of Javanese people in living their lives, which includes their relationship with the Almighty, fellow human beings, and the surrounding environment [3]. For example, the proverb *bebek diwuruki nglangi* describes 'a person who is already smart but still needs to be taught', *hyang kalingga surya* which describes 'a wise person will provide enlightenment/understanding to many people' and *katon cepaka sewakul* which explains 'a person who is liked by many people'. Referring to the examples above, it can be explained that Javanese people are able to form Javanese proverbs by analogizing certain conditions through the selection of lexicons that exist in their natural environment. Humans and their natural environment are interrelated and create a variety of languages. The cultural environment can specifically be linked to the quality and condition of the living environment and language. Ecolinguistic studies are needed in this case to analyze the interaction between language and the natural environment or to combine linguistics and ecology [4]. Ecolinguistics is a study that examines the realm of language and globalization because it includes the earth or more precisely the biosphere. The place where all elements of life live and support each other. This also includes the elements of the hydrosphere (water), lithosphere (rocks), and atmosphere (air) on earth. The need for ecolinguistics arose because several previous scientific approaches paid little attention to the relationship between humans, language, and other living things that could not be distinguished from their ecological environment. In essence, humans would only be a temporary phenomenon if they were not interconnected with the biosphere [5].

Through an ecolinguistic approach, this study will see Javanese proverbs being able to express ecological wisdom through metaphors taken from biotic (plants and animals),

abiotic (water, air, and soil) natural environmental components, as well as certain natural phenomena. Dananjaya classifies Javanese proverbs into five categories, namely fauna, flora, humans, family members, and body parts [6]. Referring to this opinion, in addition to the five categories above, Javanese proverbs also use lexicons that contain elements of the abiotic natural environment such as the proverb *edhom sumurup ing banyu* which means 'it is difficult to find something that is uncertain' and *ngempukake watu* which describes 'a person who does not hesitate to face difficult things'. The two proverbs contain two abiotic elements, namely water and stone. Next, this study will see how ecological wisdom can be conveyed in Javanese proverbs through metaphors taken from the abiotic natural environment and also flora and fauna in general, and become something that reflects the lives of Javanese people towards each other or in treating the surrounding environment.

Several studies of proverbs analyzed using an ecolinguistic perspective focused on fauna lexicon in Javanese [6], flora lexicon in Javanese [3], fauna lexicon in Balinese [7], fauna lexicon in Sundanese [4], flora and fauna lexicon in Minang [8], flora and fauna lexicon in Nias [9], and fauna lexicon in Indonesian [10]. The following study examined flora and fauna lexicon taken from Kuningan folklore [11], flora and fauna lexicon in Javanese in Pekalongan batik motifs [12], and the last study examined flora and fauna lexicon in Bima language expressions [13]. It can be concluded that research on flora and fauna lexicon in proverbs in various regional languages has been studied quite a lot, especially in Javanese. What distinguishes this study from previous studies is the lexicon that will be studied. This research will focus on the lexicon of the abiotic natural environment that has not been studied before to find the relationship between these abiotic elements in Javanese proverbs as a reflection and outlook of Javanese society towards the surrounding environment.

2 Methods

This study adopts a qualitative descriptive approach. Creswell explains that qualitative research is guided by a methodology that seeks to gain knowledge related to existing human problems and social phenomena [14]. This research is descriptive because the research analysis will be realized through a detailed and in-depth description of the phenomenon, one of which is by examining certain vocabulary that is in accordance with the phenomenon. The data used in this study are Javanese proverbs that specifically contain lexicons with elements of the abiotic natural environment. The data source comes from a collection of Javanese proverbs entitled *Peribahasa Jawa sebagai Cermin Watak, Sifat, dan Perilaku Manusia Jawa* [2].

Data collection was carried out using observation and recording techniques [14]. The researcher observed the appropriate and needed Javanese proverb data and then

recorded them thoroughly for further analysis. Qualitative research data analysis includes: 1) data reduction by obtaining the main and important things to find the theme and pattern; 2) data display to present data that is easy to understand and organized; 3) drawing conclusions [15]. This study applies the three stages above and will also apply qualitative content analysis techniques. According to Liamputtong, content analysis is a combination of qualitative and quantitative methods, a combination of interpretive approaches and positivist approaches. Content analysis begins with qualitative data in the form of text, compiling hypotheses in accordance with the researcher's perspective analysis. Next, it is continued by compiling coding and reviewing the results of the analysis in the form of descriptions or elaborations [15].

3 Result and Discussion

Based on the data collected by the researcher, the lexicon related to the abiotic natural environment, in addition to flora and fauna used in Javanese proverbs, includes the lexicon *surya* (sun), *segara* (sea), *watu* (stone), *banyu* (water), *candra* (moon), *geni* (fire), *gluduk* (lightning), *udan* (rain), *bumi* and *gunung*. The emergence of these data in Javanese proverbs shows that Javanese people do not only rely on flora and fauna components, but also depend heavily on the surrounding abiotic natural environment for their survival. This is in accordance with Haugen's opinion that language ecology is a science that studies the relationship between language and the environment [12]. This approach examines how language ecology has been conceptualized in four specific ways, one of which is as natural ecology (investigating language integrated with biology and the surrounding ecosystem, such as flora, fauna, climate, and topography). The following will describe Javanese proverbs using the lexicons of the abiotic natural environment, which are classified into 3 categories, namely positive character, negative character, and moral and social behavior.

3.1 Positive Character Category

Javanese proverbs that explain a person's positive character are reflected in the following two forms of proverbs:

3.1.1 *Hyang Kalingga Surya*

Javanese proverbs that contain abiotic natural elements are found in the solar lexicon in the proverb that reads *hyang kalingga surya*. If translated literally, the proverb means 'a god who is shaded by the sun'. The meaning of the proverb is 'a wise person and gives light to many people'. Data analysis of words included in the abiotic environmental lexicon is found in the word *surya* which means sun. The sun is one of the abiotic components that is very important in the sustainability of the ecosystem of life of all living things on earth, both humans, animals, and plants. Specifically, Javanese society as an agrarian society, is very closely related to the world of agriculture, and this makes

them very dependent on the sun. The sun as an abiotic element for Javanese society greatly helps their farming life because the sun is the main component in determining *pranata mangsa*. *Pranata mangsa* is a traditional calendar related to seasonal rules that have long been known to Javanese farming communities based on the apparent rotation of the sun [16]. Thus, the lexicon of the sun in Javanese society symbolizes the source of life.

Related to the proverb *hyang kalingga surya* which means a wise person for Javanese people is not only a knowledgeable and intelligent person, but also a person who can provide 'light' or benefits to others. A wise person is likened to *Hyang* or a highly respected ancestral spirit, and appears in the beliefs of the Javanese community. The proverb *hyang kalingga surya* reflects the nature of Javanese society which not only respects knowledge but also respects morals. Javanese society is not individualistic, but rather prioritizes common interests to maintain balance between the physical and spiritual.

3.1.2 *Jembar Segarane*

The Javanese proverb *jembar segarane* has an abiotic element located in the lexicon *segara* which means sea. If translated, the proverb means 'the sea is wide'. However, in terms of the meaning of the proverb, *jembar segarane* means 'a person who likes to forgive others'. The sea as an abiotic element that greatly influences the ecosystem of various living creatures that live in water and also influences humans who make the sea their main livelihood. The lexicon of the sea which describes something that is very wide, very deep, and can accommodate various things such as garbage, storms, and waves for Javanese people is used to reflect people who are broad-hearted in dealing with various characters of people and always forgive their mistakes. The reason Javanese people prefer the lexicon 'sea' and do not use the lexicon 'land' is because the sea as something very deep and has no clear boundaries, becomes a noble element because the sea is one of the places for traditional rituals such as *sedekah bumi*, and has the characteristic of returning to calm even though it has previously been thrown stones. This is very appropriate to describe a forgiving person. In contrast to land which tends to be rigid and hard, unable to accommodate many things like the sea, and is silent or passive. This makes the lexicon of land less appropriate to describe someone who forgives easily.

The meaning of the proverb *jembar segarane* very much reflects the habits of Javanese people who highly value forgiveness and peace rather than prioritizing revenge and anger. This is in accordance with the expression *nerimo ing pandhum* which means accepting or being generous towards all forms of giving. Even though it is something bad, such as facing someone with a bad temper, Javanese people will still be generous or accept it with an open heart. However, in this expression, a misconception arises that gives the impression that Javanese people tend to surrender and are passive in facing challenges and trials. The term *nerimo ing pandhum* is essentially accompanied by the sentence *makaryo ing nyoto* which means 'acting in real terms'. Before implementing

nerimo ing pandhum, there needs to be an effort first to continue the attitude of surrender then [17].

3.2 Negative Character Categories

Javanese proverbs that explain a person's negative character are reflected in the following two forms of proverbs:

3.2.1 *Kakehan Gludug Kurang Udan*

Javanese proverbs that contain abiotic natural elements in the proverb *kakehan gludug kurang udan* contain the lexicon *gluduk* which means lightning and *udan* which means rain. This proverb has a literal meaning of too much lightning but not enough rain. The meaning of this proverb is a person who promises a lot and agrees to a lot, but no real action is realized. Lightning is a natural phenomenon in the form of a flash of light that appears before rain, and produces a loud and clear sound. Lightning that only produces sound without any direct results/benefits, is like someone who talks a lot and only makes empty promises. While *udan* or rain is a natural phenomenon in the form of water falling to the earth, becoming a source of life and fertility, especially for agrarian communities. Rain is like someone who provides real work results without having to exaggerate by talking a lot.

The proverb *kakehan gludug kurang udan* describes the life of Javanese people who avoid being excessive in speaking, which in the end only gives rise to promises without any real action or results from the words. The ethics of Javanese society refer to living *sakmadya* (sufficiently) [18]. This reflects that Javanese people do not go overboard in doing something, such as in speaking. They rely more on action and talk less in doing something. Next, based on the proverb *kakehan gluduk kurang udan*, it is depicted that Javanese people always learn from nature by observing the natural cycles that occur and then use them to form values in their lives. In addition, Javanese people also use nature as a source of Javanese cultural wisdom and depict the harmony of the relationship between Javanese people and their environment.

3.2.2 *Malik Bumi*

The Javanese proverb that reads *malik bumi* contains an element of abiotic natural lexicon in the form of earth. The lexicon of 'bumi' as a whole cannot be categorized as an abiotic element because the earth also includes biotic elements such as flora and fauna. However, in certain contexts, the earth can be classified as an abiotic component because the earth is not a living creature and it also contains various abiotic natural components that are very much needed by living creatures. The proverb *malik bumi* if translated means 'turning the earth upside down. In terms of meaning, the proverb means 'a person who turns his nature upside down. The earth is a place where various species of living creatures live to carry out their survival, for example humans. The

earth in this concept can also be symbolically connected to the weak/land because the land is a place for living creatures to stand and is the main component of the earth. Both the earth and the soil, both describe something that is solid, consistent, balanced, and stable. The existence of the earth and all its contents have been neatly arranged so that the components in it cannot be turned upside down.

The Javanese proverb that says *malik bumi*, reflects Javanese society that values a person's consistent or fixed attitude and character. A person's changeable nature is likened to 'turning the earth upside down', destroying a fixed order through a change in attitude that can leave a bad impression. According to the Javanese, a change in attitude that is certainly heading in a bad direction, such as someone who initially always tells the truth, then becomes a liar, is considered to disrupt the balance and harmony of life. Thus, turning the earth upside down is the same as disrupting various life orders and will disrupt the solid moral consistency according to the Javanese people

3.3 Moral and Social Behavior

Javanese proverbs that explain a person's moral and social behavior are reflected in the following two forms of proverbs:

3.3.1 *Ora Ono Banyu Mili Menduwur*

Javanese proverbs that contain abiotic elements are reflected in the use of the *banyu* lexicon in the proverb *ora ono banyu mili menduwur*. If translated, this proverb means 'there is no water flowing upwards'. The meaning of the proverb is 'there is no child's behavior that does not come from his parents'. According to Nurhakim, the properties of liquid or water include having a fixed size, having an unstable shape depending on the container, being able to dissolve other objects, being able to seep through small gaps, and flowing from high to low places [19]. Thus, the researcher connects several properties of water that can reflect the nature of a child in Javanese culture, namely first, the shape of the water that matches the shape of its container, reflects a flexible nature, namely the character of a child who is easy to shape; second, water that always flows downwards means obeying the laws of nature, reflects order and destiny; third, water that can be clear or cloudy reflects the morals of a child who can be good or bad depending on the origin (parental education); and fourth, water always flows from upstream to downstream, depicting the inheritance of values from parents that children receive.

The proverb *ora onok banyu mili menduwur* reflects Javanese society that values the importance of family and lineage. This illustrates the ethics in Javanese education in teaching children by example in the form of actions, not just words. Javanese people consider a child's behavior to be a reflection of the family's character. This proverb is still relevant among Javanese people today, one of which is in finding a beloved partner. Javanese people say that in finding a partner you must look at *bibit*, *bebet*, *bobot*. This

is applied in various Javanese cultures today which sometimes still consider *bibit*, *bebet*, *bobot*. One of them is *bibit* which looks at who the parents are, the child's attitude and behavior are formed by parents with certain characters.

3.3.2 Tirta Candra Geni Raditya

The Javanese proverb that reads *tirta candra geni raditya* contains four types of abiotic components which when translated means 'water, moon, fire, sun'. The proverb means 'a judge or leader must have a clear nature like water, calm like the moon, firm like fire, and bright like the sun'. Water, moon, fire, and sun are four elements of the abiotic environment that are very much needed by living things on earth for their survival. Without the four or even one of these abiotic components, the life of living things, especially humans, becomes unstable.

Likewise, an idealistic judge or leader according to Javanese society must have a personality that manifests values that come from the universe such as a clear nature which means fair, calm in facing problems, firm in making decisions, and bright which means being able to provide solutions to problems that are presented. The personality of a leader must be in harmony with the laws of nature in order to create a harmonious life and have a good impact on many people. In accordance with Kartodiharjo's opinion that life in line with natural law aims to maintain equilibrium or a condition of complete stability in life. According to the Javanese view, the reflection of a balanced situation is reflected in two components of the cosmos, namely *pangiwa* and *panengan*. *Pangiwa* are various elements that are rough, evil, full of desire to destroy. While *panengan* is an element that is smooth, calm, good, and full of desire to build [20]. Thus, the harmony and harmony of Javanese people's lives are also influenced by the harmony of natural law.

4 Conclusion

Proverbs in the form of abiotic natural environmental lexicons reflect the life and culture of Javanese people including views of life, values, and ecological awareness. In addition to being related to flora and fauna, humans are also very closely related to the abiotic environment which greatly influences their survival, as in Javanese proverbs can be seen in the lexicon *surya* (sun), *banyu* (water), *bumi* (earth/soil), *geni* (fire), *gluduk* (lightning), and *udan* (rain). Javanese society as the majority who have an agrarian way of life, really need various abiotic components, one of which is to help the survival of their livelihoods. Through an ecolinguistic approach, this study can see that based on the proverbs that have been analyzed previously, Javanese society is very close to nature which is seen through their knowledge of the abiotic environmental situation in particular and how they utilize these abiotic components in everyday life.

Javanese society considers the balance and harmony of life, referring to the harmony of natural law.

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