

ECOLOGICAL WISDOM IN *WANGSALAN* AS AN EFFORT TO STRENGTHEN CHARACTER EDUCATION WITH CONSERVATION-MINDED

KEARIFAN EKOLOGI DALAM WANGSALAN SEBAGAI UPAYA PENGUATAN PENDIDIKAN KARAKTER BERWAWASAN KONSERVASI

Nur Hanifah Insani

Jurusan Bahasa dan Sastra Jawa, FBS, Universitas Negeri Semarang
Kampus Sekaran, Gunungpati, Semarang, Jawa Tengah, Indonesia
Telephone (024) 86458383, Faximile (024) 86458383
E-mail: enhanyf@gmail.com

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Abstract

Literature has close relationship with the environment. Literature also has an important role in the preservation of environment. Research with this qualitative approach aims to explain the representation of ecological wisdom in the *wangsalan* as an effort to strengthen character education with conservation-minded. Data of words, phrases, clauses and sentences are analyzed using inter-textual and functional pragmatic methods. The results of this study are: (1) The ecological elements contained in the *wangsalan* can be divided into five categories, are flora (for example, *roning mlinjo:so; janur kuning:pupus; kembang tebu:gleges*), fauna (example, wader *bungkuk:urang; kapi jarwa:kethek; ayam wana:bekisar*), nature (for example, *udan riris:grimis; sedhang arga:tlaga, teja bengkok:kluwung*), geography/area (example, *kutha Gudheg:Yogyakarta; kulone Banjar Patoman:Tasik; peken alit:wande*), and cultural outcomes (example, *jangan gori:gudheg; gayung sumur:timba; nyaron bumbung:angklung*); (2) Every lexicon in *wangsalan* has a philosophy that consist character education, such as love of peace or tends to avoid conflict with others and the environment, not impose, kindness, politeness, patience, and respect for others. From the results of the research is known that *wangsalan* contains ecological wisdom that needs to be preserved. In addition, this ecological study in the *wangsalan* can be used as an alternative source to strengthen character education with conservation-minded.

Keywords: *wangsalan*; ecological wisdom; character education; conservation minded

Abstrak

Sastra memiliki keterkaitan erat dengan lingkungan. Sastra juga memiliki peran penting akan kelestarian lingkungan. Penelitian dengan pendekatan kualitatif ini bertujuan untuk menjelaskan wujud kearifan ekologi dalam *wangsalan* sebagai representasi suatu pendidikan karakter. Data yang berwujud kata, frasa, klausa, dan kalimat dianalisis menggunakan metode intertekstualitas dan pragmatik fungsional. Hasil penelitian ini adalah: (1) unsur-unsur ekologi yang terdapat dalam *wangsalan* dapat terbagi menjadi lima kategori, yaitu flora (misalnya, *roning mlinjo:so; janur kuning:pupus; kembang tebu:gleges*), fauna (misalnya, wader *bungkuk:urang; kapi jarwa:kethek; ayam wana:bekisar*), alam (misalnya, *udan riris:grimis; sedhang arga:tlaga, teja bengkok:kluwung*), letak geografi/daerah (misalnya, *kutha Gudheg:Yogyakarta; kulone Banjar Patoman:Tasik; peken alit:wande*), serta hasil budaya (misalnya *jangan gori:gudheg; gayung sumur:timba; nyaron bumbung:angklung*);

(2) setiap leksikon pembentuk wangsalan memiliki filosofi pendidikan karakter; seperti cinta damai/cenderung menghindari konflik dengan lingkungan, tidak memaksakan diri, sifat ramah, santun, sabar, serta menghargai orang lain. Dari hasil penelitian dapat diketahui bahwa wangsalan mengandung kearifan ekologi yang perlu untuk terus dilestarikan. Selain itu, kajian ekologi dalam wangsalan ini dapat dijadikan sebagai alternatif sarana pendidikan karakter.

Kata kunci: wangsalan; kearifan ekologi; pendidikan karakter; wawasan konservasi

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INTRODUCTION

The word ecology comes from Greek '*olkos*' means "house" or habitat (Harsono, 2008, p. 32). Ecology is also commonly defined as the study of the relationships of organisms or groups of organisms to the environment, or science that examines the interrelationships between living organisms and the environment (Odum, 1996, p. 5). As the concept of a literary ecology study, the ecological paradigm can be used to approach a literary work. In the ecological view it is suggested that the existence of organisms is influenced by the environment. That is, there is a reciprocal relationship and interconnectedness between the organism and the environment as a whole. The environment in this case is divided into internal and external environment. The environment internally includes organisms that grow in nature, whereas the external environment is the entire environment outside the habitat of the organism that contributes to the growth and development of the reproduction of organism. In addition, in an ecological approach, literary works are positioned as a species or component within an ecosystem (Wulandari, 2017, p. 109). Therefore, an ecological study of literary works is intended to bring together with literary works.

Based on the results of a survey conducted by the Indonesian Institute of Sciences (LIPI), Indonesia, more over Java's island has experienced ecological crisis in the last 15

years ago. The ecological crisis is increasingly exacerbated by increasing population, economic concentration, infrastructure development and exploitation of natural resources in Java. The consequences are decreasing biodiversity, increasing natural disasters, and the emergence of various social problems especially in big cities (Dian, 2017).

One of the most crucial issues concerns the decline of biodiversity. Not only the ecosystems on the land that began to decrease the species. The ecosystems on the river surface have also been reduced considerably due to widespread waste and waste disposal due to poor community lifestyles. Even more sad, now the decline of ecosystems is not only limited to the surface of forests, rivers and seas only. Underground ecosystems are also affected by the ecological damage that occurs. Whereas underground ecosystems should be protected because it has an important role in the movement of the food chain of organism. The illegal mining conducted by the community and mining by an industry should be strictly bound by law. It is necessary to hold nature conservation to maintain the existence of underground springs that are needed by living things. Law enforcement officials need to act firmly against corporations that apply naughty in the mining process. The weak laws will make ecological conditions worse in Indonesia.

To overcome the ecological degradation that occurred in Indonesia, one way that can

be done by strengthening character education to the young generation who will bear the milestones of Indonesia's future biodiversity. Character education in the younger generation can shape positive attitudes like love the environment. Someone who have good character will surely concern the problem of increasingly the damaged of nature. Then, that awareness will inspire the heart to love the surrounding environment.

The existence of moral degradation and the natural ecological crisis of Indonesia, especially the island of Java must be solved. One way to solve it by studying the ecological wisdom contained in the learning of *wangsalan*. Unfortunately, character education that has long echoed by the government has not been effective to form young generation who love environment. This indicates that the character education process needs to be reexamined. Need a proper pattern to instill character education on the students. Nature is already suffering and needs ecological justice. Therefore, it takes the right character education pattern to immediately save the ecological conditions in Indonesia.

There are various patterns that can be developed to apply conservation-minded character education for students. One of the pattern can be applied by raising the local wisdom of the nation is the learning of *wangsalan*. The literary of *wangsalan* also contains ecological aspects. According to Poerwadarminta, (1939, p. 656), *wangsalan* is defined as words disguised in sentences, similar to the puzzle and the answer has been contained in the next sentence, but only a syllable carried within it, sometimes even only part of the syllable. Jatirahayu (2012, p. 55) also defines *wangsalan* as an expression or sounds like *cangkriman* or guesswork, but the answer of the guess is already available vaguely in the syllables contained in the next word, as well as the next line. While Wijaya (2013, p. 1) provides another definition of *wangsalan*

which is generally interpreted as short formulas whose meanings and meanings of speech are attributed by sound similarities. *Wangsalan* has a bar (*batangan*) that serves as a keyword to find the intent that appears partially on the line of the content (Kadarisman, 2010, p. 131). The intent of the *wangsalan* will be found when there is partial linearity with the bar. From some of definitions, *wangsalan* can be interpreted as a puzzle that is mixed in a sound game where the answer to the puzzle is actually provided in a vague sequence in the next word or line. The *wangsalan* is important to learn in order to increase the understanding of how importance maintaining ecological wisdom. *Wangsalan* contains local wisdom that can be utilized to form the character of students who love the environment.

For the example, we often listen Javanese people make a closing with *wangsalan* like "*Jenang sela wader kalen sesondheran, apuranta yen wonten lepat kawula.*" The first sentence of this *wangsalan* contained from two parts, each part has four (4) and eight (8) syllables. Due too the second sentence. In the first sentence, the word *jenang sela* also has a same meaning with '*kapur*' (chalk). The syllable /*pur*/ as a part of the word '*kapur*' has linearity with the answer '*apuranta*' (forgive us) on the first part of second sentence. The second bar is located on the second bar of first sentence. The word *wader kalen* means '*sepat*' (kind of fish). The sound /*pat*/ comes from the word *sepat* that has linearity with the answer *lepat* (mistake). So that, the second sentence seem the answer of the bar that located on the first sentence. The meaning of the answer is 'please, forgive (me), if there is my mistake'. This sentence is one of way to say sorry to others. How Javanese people say sorry to others actually said indirectly.

There are various ways that can be developed to convey character education in schools. At least, there are three opinions that

develop (Dalimunthe, 2015, p. 103). First, that character education of the nation is given as an independent subject. Second, character education is given integrated in Civics subjects, religious education, and other relevant subjects. Third, character education is integrated in all subjects. Thus, the Javanese language as one of the subjects that students learn in school must also integrate the content of character education in it. The material of *wangsalan* becomes one of the material that contains character education.

The values of character education developed in Indonesia and applied in the learning of religion, Pancasila, and culture are adapted to the goals of national education, are: (1) religious, (2) honest, (3) tolerance, (4) discipline, (5) struggle, (6) creative, (7) independent, (8) democratic, (9) curiosity, (10) spirit of nationality, (11) love of the homeland, (12) communicative, (14) love of peace, (15) reading, (16) care for the environment, (17) social care, and (18) responsibility (Tim Puskurbuk, 2011, p. 3). A person's care to maintain ecological wisdom is one form of character education has been embedded in the aspects of environmental care. Character of environmental care is of course very important to be owned to maintain the existence of ecological wisdom of Indonesia.

Wangsalan also contained many kind of character education that could be implemented in the daily activity, especially for students that going to be build the positive character. As the example is the character love of peace from *wangsalan* 'Kiraku dheweke wis ngerti pangundangku, nanging kok njangan gori'. It means, I think he has been known that I had called him, but he pretended not hear. This *wangsalan* means how to give a complain with others without hurted them. When we don't say with anger or the swear word, the peace should certainly be easier to guard.

Ecological wisdom has contained in the literature since the past. The aims of

course deliberately want to record the natural conditions possessed an area at that time. Nature is depicted not only in terms of sweet words in the language, but also as a means of planting the character to the reader and the next generation of society. Thus, the role of literature then developed as a lighter that can arouse public awareness to love and care more about nature.

Nature and literature has very close relationship. This has been evident from the various literary works written by the poets at the past. In any literary form, including literature, there must be a natural picture in it, whether in poetry, novel, short story, continuous story, or any other type of literary work. Seeing such a reality there must be a good continuity between nature and literature. Literature requires nature as its inspiration, while nature requires literature as its conservation tool (Mu'in, 2013, p. 298). Both of them completed each other.

One of written literary that show more features of environmental elements as a part of the object of writing is *wangsalan*. The evidence is the diction choices about environment used in the literary work. The diction often found in the material of a literary work like, waves, mountains, straits (stones). Not only show the form of inanimate objects, but the mention of various types of flora and fauna also adorn the form of *wangsalan*.

Wangsalan is a part of local wisdom that must be continuously preserved. Local wisdom becomes an alternative source of life wisdom values containing ideas or wise ideas that can be used as a guideline for daily activities in relation to family, neighboring and other neighboring relationships, character building media for formal educational institutions such as schools (Prihanto, Soemanto, & Haryono, 2013). Local wisdom has an important role to transform and shape a global culture so that it is more meaningful to the social and cultural life of a society. *Wangsalan* as one of the representation

of Javanese cultural society certainly also has an important role as part of the production of cultural meaning that must be disseminated to all elements of society.

Research on the environment was conducted by Hardiningtyas (2018, 2016a, 2016b, 2015), making poetry by Balinese poets as the object of discussion. Hardiningtyas (2018), the objective of this research is to analyze Bali's Features between beauty and destruction in poems of Balinese poets published in 1960-2014. The ecocultural nature of Bali's beauty and nature destruction includes (1) beautiful Balinese landscape and harmonious relationship between humans sourced from Hindu *tri hita karana*, (2) nature destruction such as the conversion of agricultural land into tourism objects, coastal damage, due to disaster, and the natural damage caused by humans. Subsequently, Hardiningtyas (2016a) examined the land problem and Bali's environmental crisis in the anthology *Dongeng dari Utara*. The results show that Bali's ecological conflict is developing because of tourism factors that erode agricultural land in Bali.

Meanwhile, the environmental crisis in Bali is a significant problem in the use of the environment and conserving land as a natural element. In 2016, Hardiningtyas (2016b), also examined women's resistance to combating environmental injustice and ecological problems faced by women concerning natural management in the romance of Dorothea Rosa Herliany. This study proves that women and nature have an essential role in the survival of the people of Papua. The struggle of Papuan women in freeing themselves from violence, especially those originating from society's structure and culture, natural conditions, and customs, has given rise to resistance to women's positions. Then, Hardiningtyas (2015), studied the ecological context of the poetry of *Saiban* by Oka Rusmini that shows the problem of rites, the production of offerings from nature,

and offerings to the cosmic. The results of this study indicate that Bali and its nature represent people's cultural conditions and beliefs. The relation of environmental problems with Bali traditions, both similarities and differences between textual and factual situations, shows that *Saiban* is a manifestation of literature and environment.

Research on ecological wisdom has been studied by Holilah (2015) with the title "Ecological Wisdom of Local Culture of Cigugur Indigenous People as the Learning Sources of Social Studies". This study has similarities in terms of cultural ecological wisdom studies. In addition, there are another similarity in the implications of research results that can be used as a source of learning. However, in that research, ecological wisdom used as social studies sources, while in this study used as a means of character education connected with conservation-minded. The fundamental difference with the research conducted on the object of ecological studies. In Holilah research, the selected object is indigenous Cigugur while in this research object of study in the form of *wangsalan*. The research has an effect on this research to see how big the study of ecological wisdom can be used as a learning resources specially to foster students character with conservation-minded.

Related with the research of *wangsalan*, Indiarti (2017) has also conducted a research with entitled "Playing Language Recording Nature: The Realm of Ecology in Wangsalan Using in Banyuwangi". This study has similarity from the core study and the methodology. The core of the study which examines the ecological elements in the *wangsalan* expands the researcher's view of the ecological picture contained in Javanese *wangsalan*. Here, this research would be shown that nature as a part of ecological elements absolutely become the mayor elements to make a *wangsalan*. The fundamental difference of the research lies

in the data sources taken. The data source in Wiwin Indarti's research is *Using Wisdom* which is taken from the cultural wealth of *Using* society in Banyuwangi, while the data source of this research is taken based on the cultural richness of Javanese people in Central Java and Yogyakarta. In addition, in the study, the results of the discussion more refer to mapping the form of *wangsalan* which involves the element of botanical ecology. While in the authors mapping the form of *wangsalan* not just to know the ecological elements contained in it, but deeper until ecological implementation on the process of student characterization. That research supports the author's research in the process of withdrawing the original meaning of a *wangsalan* then be able to be drawn the values of characters that can be used as a source of student character cultivation based on conservation-minded.

As the example is the character never give up that appear from *wangsalan* "*Carang wreksa, wreksa wilis tanpa patra. Nora gampang, wong urip ning donya.*" This *wangsalan* means that it is not easy to life in this world. The education character that want to show through this *wangsalan* is people should never give up to do their life. In the reality, our life are not easy. Sometimes humans feel the happiness, but people will surely feel the bitterness of life. Therefore, the spirit to never give up is needed to be able to survive in any condition of the life.

Of course, the selection of natural elements that serve as the form of *wangsalan* not just arbitrary. There are ecological wisdom in each element selection that can be used as a means of character education with conservation-minded for every human. Therefore, it is important to know the ecological wisdom contained in *wangsalan* so that the character education with conservation-minded can be learned from the elements of nature. The problem that will be discussed this time is how the form of ecological wisdom in the *wangsalan*

as a representation of a conservation-minded character education? This paper aims to explain the form of ecological wisdom in the *wangsalan* as an effort to strengthen character education with conservation-minded. This research is limited to displaying the form of ecological wisdom in the *wangsalan* as well as its implementation to strengthen character education with conservation-minded process. This research is important to save morality and the existence of ecology in the word especially in Indonesia. Local wisdom can be used as a means to build and develop the character of society.

METHOD

This research is a kind of descriptive qualitative and the source of the data from literature studies. The data of the research is in the form of word, phrase, clause, or a sentence that is abstracted as an ecological wisdom that contained in *wangsalan*. The technique of determining the data using purposive sampling based on certain considerations. The data of *wangsalan* obtained from the book of "*Kajian Wangsalan dalam Bahasa Jawa*" issued by Departemen Pendidikan Nasional (Subroto dkk., 2000) and the book of "*Wangsalan Budaya Adiluhung*" written by Ngadi (2017). Data were collected by identification techniques based on literary ecological theory. Methods of data analysis performed with the following steps, (1) read and note, (2) data analysis according to ecological objectives and theories, (3) conclude. For the first, the author read many literature that related with the problem. After that, make any notes to choice the data that relevant as the object of the research. The data then analyze with ecological critical theories. Finally, the researcher makes a conclusion from the interpretation of each data.

There are three approaches that can be used to study this literary ecology. According to Krebs, the phenomenon of the relationship between living things and the environment

can be explained by descriptive approaches, functional approaches, and evolutionary approaches (Leksono, 2007). First, a descriptive approach aim to explain ecology with natural factors (habits, behaviors, and interactions between organisms and linked to vegetation clusters on earth. Secondly, the functional approach is an approach that explains ecology with emphasis on dynamics and causality and analyzes common problems common to different ecosystems. Third, the evolution approach describes organisms and their reciprocal relationships as a product of evolutionary history. In short, a descriptive approach asks about what ecological elements are contained in literary works, a functional approach asking about how the elements - the ecological element is in literature, and the evolutionary approach asks why ecological elements exist in literary works. These three approaches will certainly be very comprehensive to analyze the ecological aspects contained in the literary work. However, in this study the study of literary ecology is conducted using a descriptive approach. This is adapted to the objectives of the study looking to assess ecological wisdom in relation to the formation of student characters.

RESULTS AND DISCUSSION

Written Literature 'Wangsalan': Keep Environmental Existence

Nowadays ecological studies are being intensively conducted. Nature is used as an inspiration of literary object. The picture of nature in the study of ecology is certainly not just a literary sweetener. There is an explicit message to be conveyed by the poets to preserve the existence of nature. This is due to the fact that there has been a connection between literature and ecology. In the literature ecology studies that have been done also have been described the existence of the link between the ecology with literary works, whether in the form of written literature or oral literature. One

of the interesting literary works to be studied from an ecological perspective is a *wangsalan*.

Wangsalan known as one of Javanese cultural products which rich local wisdom in it. Of course this will be something interesting when able to uncover the nature that became the basis delivery of local wisdom in the *wangsalan*. *Wangsalan* that contained educational character is one of cultural part that also related with ecological theory of Bronfenbrenner. The ecological theory of Bronfenbrenner consists of five systems environment, from interpersonal relationships to cultural influences. The five systems are microsystem, mesosystem, ecosystem, macrosystem, and chronosystem (Santrock, 2008). *Wangsalan* is a part of macrosystem that can make children development. Macrosystem is the outer layer of children's environment. The based principle that include in the macrosystem can influence to all of layer's interaction (Salsabila, 2018, p. 146). Hence, the cultural environment can influence the children's development. According to Berk (2000, p. 321), the culture referred to in this subsystem is a pattern of behavior, trust, and all products from a group of humans that are passed down from generation to generation. *Wangsalan* contains the pattern to make good behavior for children. The example, if in the society, parents habitate the character of politeness to their children, so it will influence the structure that parents can do their function as it should be.

For the example, the *wangsalan* that consist in Javanese song (*tembang macapat*) like this.

Pangkur
Jirak pindha mungging wana (kusambi)/
sayèng kaga (kala) we rêkta kang nuroni
(anggur)/
nyenyambi kalane nganggur/
wastra tumrap mustaka (ikêt)/
angikéte wangsalan kang sékar pangkur/
baon sabin ing nawala (karya)/
kinarya langén pribadi//
 (Taken from: *Sêrat Rêrêpèn* (KGPAA

Mangkunegara IV, n.d.)

In that song, *wangsalan* is written in the first, second, fourth and sixth sentence. '*Jirak pindha munggwing wana/ sayèng kaga we rèkta kang nuroni/ ... / wastra tumrap mustaka / ... / baon sabin ing nawala/ ...*'. *Jirak pindha munggwing wana* means kusambi fruit. *Sayèng kaga* means *kala*, and *we rèkta kang nuroni* means grapes (*anggur*). The answer of the first, second, and third puzzle are listed indirectly on the third sentence '*nyènyambi kalane nganggur*'. The answer of fourth sentence is placed in fifth sentence in the word '*pangiket*'. While the answer for sixth sentence is placed on seventh sentence in the word '*kinarya*'. The form of that *wangsalan* actually illustrated ecological object of flora (*kusambi* fruit and grapes) also cultural outcomes '*kala, iket, and karya*'.

Picture 1

Noja Flower (*Bunga Sore*) to Illustrated Kusambi Seed



The other example also could be found in *Sêrat Rêrêpèn pupuh dhandhanggula* as follows.

Dhandhanggula

*Pakis mudha (lung) sêkar awoh tasik (noja) |
alêlungan tan ana sinêja |
jalidri ômba godhonge (kangkung) |
mung ketang kang mawèh kung |
katu alit wungu kang warni (cungcung belut) |
abalut tur jatmika |
bajuning dyah tanggung (entrok) |
kuning bentrok maya-maya |*

sêkar pisang (tuntut) basa kawining nagari (praja) |

patut musthikèng praja

(Taken from: *Sêrat Rêrêpèn* (KGPAA Mangkunegara IV, n.d.)

In that song, *wangsalan* is written in the first, third, fifth, and ninth sentence. *Pakis mudha sêkar awoh tasik / ... / jalidri ômba godhonge / ... / katu alit wungu kang warni / ... / ... / sêkar pisang basa kawining nagari / ... /*. *Pakis mudha* means *lung* (the leaf of pakis is called *lung*) and *sekar awoh tasik* means *noja* (the others name of '*Bunga Sore/kembang pukul empat*' in Bali). *Jalidri ômba godhonge* means *kangkung* (a kind of vegetables). *Katu alit wungu kang warni* means *cungcung belut* (it also called *congcong belut* or *trembilu*), and *sêkar pisang* means *tuntut*. The answer of the first and second puzzle are listed indirectly on the second sentence '*alêlungan tan ana sinêja*'. The answer of third sentence is placed in fourth sentence in the word '*kang mawèh kung*'. The answer of fifth sentence is placed on the sixth sentence in the word '*abalut*'. While the answer for ninth sentence is placed on tenth sentence in the word '*patut*'. The form of that *wangsalan* actually illustrated ecological object of flora (*lung* leaf, *noja* flower, *kangkung*, *cungcung belut*, and *tuntut*).

Picture 2

Congcong Belut (Trembilu plant) to Illustrated The Plant as the Answer of That Wangsalan



Due to ecological wisdom in literary works, the following will be described the ecological objects contained in the *wangsalan*. Commonly, the ecological elements contained in the *wangsalan* can be divided into five categories. There are flora, fauna, nature, geography/region, and cultural results.

First, the element of flora or plant. Most parts of flora such as leaves, flowers, fruits, stems, and tuber are widely used by the Javanese community as a forming element of *wangsalan*. Javanese people are known have Javanese language vocabularies that more varied, so that the number exceeds than Indonesian language words. To mention the term leaf of a tree, for example, there is its own naming in Javanese, not limited in just leaves. Leaf *melinjo* '*roning mlinjo*' is called '*so*'. In an ornament identical to this puzzle usually the answer has been written indirectly from the selection of words that have almost the same pronunciation. '*Roning mlinjo, sampun sayah nyuwun ngaso*'. The question is usually on the front word or phrase, in this case is *roning mlinjo*, while the answer lies in the word that has the equivalent of vowel in pronunciation, that is *ngaso*, then can be concluded that the answer from the puzzle of *roning mlinjo* is *so*. Another leaf as an example used in the *wangsalan* '*nggodhong garing, esuk-esuk kok wis nglaras*'. The question is *godhong garing (kambil)* 'young coconut leaves' called *klaras* from the word '*nglaras*'. '*Janur kuning, kemangi gagange wulung. Ingsun pupus yen tan tinimbangan ing sih*'. The answer from the question *janur kuning* is *pupus*. To mention a name of a plant also can be used *wangsalan* by using the term of other plants that would be able to describe the state of the plant in question, such as '*bayem toya, langkung susah manah kula*'. The frase of *bayem toya* 'water spinach' leads to *kangkung* from the word *langkung*. '*Pandhan wisma, ati panas tan saranta*' with

the question is *pandhan wisma* 'leaves pandan as a house' and the answer shows at the word '*panas*' that leads to pineapple (*nanas*). Another example is *gudhe rambat* to mention '*kara*' nut plant from the *wangsalan* '*Gudhe rambat, teja dawa ing ngawiyat, kekuwunge kaya trah ing madukara*'. '

The flower part also has other terms of reference in the Javanese language. For example, *kembang tebu* 'cane flower' called *gleges (kowe ki kok ngembang tebu, glegas-gleges wae)*, *kembang suruh* 'sirih flower' called *drenges (ditakoni temenan malah ngembang suruh)*, *kembang ganyong* 'sweet potato flowers' called *puspanyidra (kembang ganyong, aja pisan-pisan cidra mring wong tuwa)*, *cubung wulung* 'kecubung flower' called *tlasih (cubung wulung, asiha maring sasama)*, *sekar aren* 'palm flower' called *dangu (sekar aren, sampun dangu-dangu)*. To mention the name of the fruit and other body parts of the plant also has its own terms. For example, '*we, kok banjur ngewoh kesambi*', *woh kesambi* 'kesambi fruit' called *kucaci* that means *pecicilan* 'too active', '*wah, sajake lagi klapa mudha, seneng atine*', '*wohing tanjung, den becik bekti mring biyung*', '*wohing aren rukmi jingga sak upama, ngelingana ya mung Gusti kang kuwasa*', '*balung jagung lo, sampun ketanggulan*', '*carang wreksa, wreksa wilis tanpa patra, nora gampang wong urip ing alam donya*', '*balung janur, mangka usadaning nganggur*', and '*witing klapa jawata ing ngarcapada, salugune wong mudha gelem rekasa*'. All parts of the plant then designed into a puzzle in the *wangsalan*.

Second, fauna. Animal world that includes the names of animals as well as all matters relating to the mention of body parts or the children of animals also have their own term of reference. Almost all types of animals can be used as a basis for forming a *wangsalan*. For example, *wader bungkok* 'humpback wader' leads to *urang* 'shrimp' (*Sajake kowe*

lagi *mader bungkok le, katon ngurang!*), *kapi jarwa (kethek)* 'monkey' (*kapi jarwa, takpethek mangsa luputa*), *singa ranu (baya)* 'crocodiles' (*singa ranu, den setya mring ubayamu*), *kambing wana (kidang)* 'deer' (*kambing wana, bektia mring kadang wreda*), *sepat domba (grameh)* 'gurami fish' (*sepat domba, jagurameh tan prasaja*), *ayam wana (bekisar)* 'bekisar chicken' (*ayam wana, ya nasar tindak dursila*), *bebek rawa (mliwis)* 'pelicans' (*bebek rawa, yen uwis enggal mrena*), *cecak toya (baya)* 'crocodiles' (*cecak toya, aja mingkar ing ubaya*), *nguler kambing (lintah)* 'leeches' (*nguler-kambang lo, alon-alonan bae, satitahe, ora ngaya, alon*), *jalak pita (podhang)* 'the bird of kepodang' (*jalak pita, adhang-adhang sihing bapa*), *kapi kresna (lutung)* 'black monkey' (*kapi kresna, wong patung nora prayoga*), *laler gora (pitak)*, *macan wisma (cat)*, *sarpa kresna (dumung)* 'snake dumung', *sarpa belang (welang)* 'snake belang', *ular lambang (leeches)*, *ula langking (dumung)*, *yuyu agung (pithing)* 'crab', *jangkrik kisma (gangsir)*, *peksi praja (manuk beri)* 'eagle', *maesa wana (banteng)*, *bibis tasik (undur-undur)*, *bandeng kali (wader)*. To mention the name of a child, for example, '*bok aja nganak cecak marang rewang*', *nganak cecak (sawiyah)* 'lizard'; *mutra bebek (meri)* 'duckling' (*kowe ki senengane mutra bebek*), *banyak putra (blengur)* 'goose' (*banyak putra, peksi angumbara, angur padha taberiya barang karya*), *mutra kodhok (pracil)* 'frog', and *mutra pitik (kuthuk)* 'chickling'.

Third, the parts of nature. Nature consists not only of living things, but also has non-biological physical elements, such as water, soil, earth, rocks, mountains, forests, rainbows, fire, clouds, waves, rivers, sun, moon, and crater. In the preparation of *wangsalan*, these objects also take an important part either as a complementary part of another word that can bring up a new word or as a whole phrase that

shows the element of nature. As an illustration is *udan riris, sugih miskin wus ginaris*. In this *wangsalan*, the word *udan* 'rain' is a natural element to be the subject matter for showing the natural element of water, where the supposed answer of *udan riris* is *grimis* 'drizzling'. To show the element of water, the other words that consists in the *wangsalan* like *kawi banyu, tirta, tirta kandheg (mambeg), sendhang arga* 'springs in the mountains' (*tlaga*), *rading toya (asad)*. The element of the earth appears in the word/phrase *nglemah bengkah* 'cracked earth' (*bok aja nglemah bengkah*); *taji kisma*, and *siti* 'land' which is often paired with other words to compose a new word. The word stone that appears from the phrase of "*jenang sela*" is *apu* 'limestone' (*jenang sela wader kalen sesondheran, apuranta yen wonten lepat kawula*) and *sela panglawed* meaning *pipisan* 'milled stone' (*kang sela panglawed ganda*). While the word mountain is mostly used as a complement to other words by using *dasanama* 'synonyms' such as *arda, arga*. The word forest 'wana', river 'kali', fire 'damar' is also more often used in conjunction with other words. Rainbow elements in the *wangsalan* are often termed with the phrase *teja bengkok (kluwung)*, *teja pita (layung)*, and *teja dawa*. Elements that contain fire such as *geni* 'fire bone' are called *mawa* 'fire coal'. Cloud elements appear on the phrase *mendhung seta* 'white overcast' which means *mega*. The waves appear in the phrase *ombak agung* 'big wave' called *alun*. The element of the sun is identical to the word/phrase *surya, surya kembar*, or *surya laku mangsa* 'sun moving in time' (*lingsir*). There is also an element of the crater depicted in the clause *sendhang geng ing pawukiran* 'big pool in the mountains'.

Fourth, geographical element/place. Usually used to indicate the existence of a city as a guess, such as *kutha Gudheg* 'Gudeg city' is Yogyakarta. *Gudheg* is special food

that depicted Yogyakarta overall. When people visited Yogyakarta, certainly will remember to buy Gudheg that very famous in Yogyakarta. So that, Yogyakarta famous with the name 'kutha Gudheg'. *Kutha gudheg iku kasebut kutha telenging "perjuangan" bangsa Indonesia*). The other city that has another nickname is Solo. Here, this city also famous with the name of *kutha Bengawan* 'city of Bengawan'. Sala (Solo) since most of the city is passed by Solo River. The river that rived Solo is Bengawan Solo river. As people well known, that Bengawan Solo is the longest river in Java that stretching from Solo to East Java. This river very beneficial for the lives of society in surrounding. Next, in clause *kulone Banjar Patoman* 'the city on the west of Banjar Patoman' namely Tasikmalaya. It is really right answer because when we saw the map, Tasikmalaya city is on position at west Banjar Patoman city in West Java. The other places, like simple places also can make as *wangsalan*. For the example is the market that can also be created as part of a puzzle like *peken alit* 'small market' means *wande* or *warung*'store', *pêkên alit* urut marga (warung) nora wurung; *balumbang alit pasagi (tambak) | tyas sumarah jiwa raga dadya tambak*. People always called *peken alit* with *wande* or *warung*. This name is to distinguish with market that identically with big market.

Fifth, cultural outcome. There are some of cultural outcomes that can include as the objects of arranging guesses in *wangsalan*. There are food, live equipment, clothing, accessories, part of the building, musical instruments, traditional medicine, etc. The name of the food often appears as a guess like '*eman banget isih enom tur bagus, kok njangan gori*'. *Jangan gori* is the question with *gudheg* is the answer. '*Jenang gula, Mas, welingku wingi*'. *Jenang gula* is commonly called by *glali* or *gulali*. The other examples are *sega mambu (amer)*,

ngapem Landa (roti or cake), pindhang lulang (krecek), jadah tela (gethuk), lotis dheplok (rujak), nape goring (rondharoyal). For guesses related to equipment such as '*gayung sumur, amba sademi pun utus*' *gayung sumur (timba), kang tambang pangêncêng kêlir (paluntur) | wong parigêl tangêh luntura sihir. Jarum jala (coban), dhadhung peksi (kala), enthong palwa (welah), pring dhempet (anda), sunduk sate (sujen), jamang wakul (wengku), jarwa sara (jemparing), buntut edom (bolah), ganjel diyan (jodhog), mutra lesung (alu), ngedom kreteg (paku)*. For guesses related to clothing and accessories like '*tepi wastra, den tresna sapadha-padha*' *tepi wastra (kemadha), kancing gelung (peniti), gêngêlang panuduh (ali-ali) | kongsi lali nêng paseban, jamang kudhi (karah), klambi cendhak (kotang), mantol jepang (kimono), wastra pangageming kakung (bebed), têkên palwa: (satang) sela kang rininjing (guling) | satangine saking pagulingan*. While for musical instruments like '*nyaron bumbung, ngantos cengklungen anggen kula ngentosi*' *nyaron bumbung (angklung), gander wreksa (gambang), saron agung (demung), bonang kepencil (kethuk), and gender kawat (clempung)*.

The existence of environmental elements (ecology) as a compiler of a monopoly certainly illustrates that the Javanese society long time ago has appreciated the existence of the environment. Nature and its whims are used as an important part to show the existence of the environment as a source of community life. The form of community's appreciation of the environment is shown, one of them from *wangsalan*.

Character Education in Ecological Wisdom of Wangsalan

The actual selection of ecological elements to compose a *wangsalan* is not arbitrary. Every part of the environment certainly has its own

philosophy and usefulness. Of course, the community must pro-actively find out how much ecological use for his life. Like in the developing theory that ecology (environment), human, and culture will be interlocked. So the literary depiction of ecology in the *wangsalan* also has a close relationship with the cultural values to be conveyed in the formation of *wangsalan*. From cultural values, people can learn moral character.

Ecological studies contained in the *wangsalan* still feel raw if not studied further in terms of cultural wisdom. As stated by Richard Kerridge who views eco-criticism as *a broad cultural eco-criticism*, when eco-criticism is developed toward a wider scope than eco-criticism to nature physically, then the object of its study will certainly become wider, that is, the widespread culture (Mu'in, 2013, p. 303). Thus, it would be important to know the wider cultural studies of the Javanese vocabularies which were largely written by utilizing nature as an inspiration for literary writing.

Culturally, the life of Javanese people in the past, most of whom looked at farming as a farmer would be one of the factors that influence the writing of *wangsalan*. The geographic condition of the fertile soil of Java with the mountains spread from west to east Java makes the Javanese people depend on the nature under it. So that, there are many kinds of Javanese vocabulary related to the natural surroundings, like plants, animals, and their constituent environment.

People can't choose vocabulary in vain to make a *wangsalan*. Apparently, when it examined more deeply, there is a close relationship between the selections of a vocabulary with a moral message to be conveyed through *wangsalan*. The character of love peace or tend to avoid conflict with the environment contained in the *wangsalan*, "*Janur gunung, kulone Banjar Patoman*,

Kadingaren, wong bagus gasik tekane." The message to be conveyed in the *wangsalan* is a hint of disguise to someone who does not usually come early in the morning. The bars form *janur gunung* are palm trees, which are written in disguise from the word *kadingaren*. While the bar of the phrase *kulone Banjar Patoman* is Tasikmalaya that is implied from the word *gasik*. The two bars are each a natural element of a plant and a geographical location of a place. The interesting thing about the ecological selection of *janur gunung (aren)* here is its relation to the word *kadingaren* 'not as usual'.

Palm trees are already widely known by the public about its existence. Unfortunately, the palm tree is rarely used maximally by the community. Most of these sugar palm trees are just taken only to be made as palm sugar. More than that, its usefulness is still underestimated. This could be due to the growth of palm trees that are not as fast as other plants. For the examples one of kind palm trees is *palem putri (Veitchia merillii)* (Beec) H.F Moors) that slowly to grow, it takes 2-4 weeks from seeds to sprouts but the height can reach 20 meters (Sumiasri dkk., 2010, p. 51). It takes a long time for a tree to grow so tall it can be taken benefit by the community. The unusual nature of palm trees like other plants is what inspired the emergence of the word *kadingaren* as one of the words to convey satire to the others. The Javanese people are well known as the figure of the humble person 'feeling uneasy' to convey a purpose to others, especially to convey the shortcomings of others. For that chosen a kind of sarcastic expression for the respect of others and to avoid conflict with the environment. By not rebuking or scolding someone directly in front of the crowd will certainly keep someone from feeling offended so as to minimize the occurrence of contention with other people.

Furthermore, the character does not impose

itself looks in the *wangsalan*, "*roning mlinjo, sampun sayah nyuwun ngaso*". The ecological wisdom seen in that *wangsalan* looks in the word bar of *roning mlinjo* which means 'so' (leaf of melinjo tree). In this *wangsalan*, the answer of the puzzle *roning mlinjo* implied from the word *ngaso* 'rest'. From this *wangsalan* looks a cultural for permission before doing something so upheld. This sentence is usually delivered by someone when he was tired when working then want to rest for a moment so that the body can be refreshed again to resume activities so that later work results will be more leverage. From the results of research botanists, leaf melinjo has a high antioxidant content that can make a person feel relaxed so he will have enough time to rest. According to the research that have been done by Dewi dkk. (2012, p. 75) is founded that resveratrol of melinjo has activities antibacterial and antioxidant, have good role as a food preservation, inhibits off flavor and improve flavor. The content of resveratrol contained in melinjo is higher than ginkgo biloba. The antioxidant activity of flavonoid compound in melinjo is equivalent to the antioxidant activity of vitamin C (Noegraha, 2010). Seeing this fact, it is not wrong if the natural elements of leaf melinjo used as a basis to express anxiety that have to rest for a moment 'ngaso'.

The character of diligent contained in the *wangsalan*, "*Wohing tanjung, bocah becik mepeng makarya*." The message from that *wangsalan* is a flattery for a child who is diligent to work. The bars form *wohing tanjung* are *kecik* (sapodilla seeds), which are written in disguise from the word *becik*. The interesting thing about the ecological selection of *wohing tanjung* (*kecik*) here is its relation to the word *becik* 'good, kind, charity, favour'.

Tanjung is a kind of plant that have many advantages. Each element of tanjung tree has its advantages. The flower of tanjung tree spread

good smell in the morning, so that people use it became fragrances, due to for clothes, room, or just for room decoration. Tanjung tree has a lot of leaf so this plant usually like to be use as a shade plant because of the lush canopy. Tanjung plant also has advantages in health. Papagan boiled water is used as a strengthening drug and fever. Papagan water and flowers are also used to relieve strokes accompanied by fever. The bark boiled of the tanjung tree is efficacious to overcome toothache and eliminate smelly breath. The trick, the cooking waterr is used as mouthwash minimum for four days. The boiled water is also useful for washing wounds. The leaves also have many benefits. Fresh tanjung leaves can be used as a poultice for headaches by finely ground. Tanjung leaves can be chopped like tobacco and mixed with bit of secang and rolled with old banana leaves. This herb then smooked like cigarettes to treat mouth ulcers. Its roots mixed with vinegar can be used to treat sore throats. This root skin contains a lot of tannins and a few non toxic alkaloids (Tiana, 2016). Tanjung leafes also can help out asthma, dizziness, thrush, inflammation of the nose, inflammation of the throat; the flowers and skin help out fever, swollen gums, scabies, urination, unsteady teeth, eczema; young fruit is used for diarrhea, puerperal fever (Sudarman & Harsono, 1975, pp. 176–178).

Tanjung's fruit also can be eaten. The shape of the fruit is small to oval. The taste of the fruits is like unripe and little sweet. Because of the taste, so people consume this fruit as a medicine for gastric pains and stomach acid (Saiful, 2017).

With all of benefits that include in tanjung tree, so it is indicate that tanjung tree have a lot of kindness for people. Overall all of part of tanjung tree has farmacology's activity like antihelmintic, antianxiety, anti-hyperlipidemic, anti-ulcer, anticonvulsant, anti-inflammatory, analgesic, antipyretic, antioxidant, antiurolithiatic, antiatherosclerotic,

antimicrobial effect, antibacterial effect, antifungal effect, antidiabetic effect, cytotoxic, diuretic effect and hypotensive effect (Kadam, Yadav, Deoda, Shibatare, & Patil, 2012, pp. 64–74). Because of that activities tanjung tree is very useful as a medical plant. With all of kindness comes from tanjung tree so it is right if *wohing tanjung* be called as *kecik* that direct to word *becik* (kindness).

Picture 3

Tanjung's Fruit to Illustrated The Frase of *Wohing Tanjung*



Javanese people usually plant tanjung tree surrounding their house with the perception that tanjung tree will transmit good energy for that family. Tanjung trees also could be found surrounding the palace, like Yogyakarta palace or Surakarta palace. They believe that a shady of *tanjung tree* can provide the shade of the palace dwellers and everyone who see it. Hopely, when the heart is calm, the mind will calm down so it will direct itself to do positive action in their life.

The other *wangsalan* that raised the wisdom is young coconuts '*degan*'. It is seen in the *wangsalan* "*Mamet tirta, tirta manis wit kalapa. Suka rene, kalegan ancasing driya.*" The meaning is happy space, fulfilled the desire of his heart. This *wangsalan* describes kindness character. In this *wangsalan* there

is a natural ecology on the word *wit kalapa* 'coconut tree' which leads to the answer *degan* (young coconut fruit) is implied from the word *kalegan* 'have spare time', as well as cultural elements in the wrd *mamet tirta* 'take water' which means *ngangsu* 'take water from well'. Javanese ancient in long times ago, when they will take water in the well using bamboo that had been tied with a bucket. While, young coconut will become a favorite drink to drink especially when many people feel thirsty during the day. After drinking *degan*, the body will feel more refreshed so that they will feel happy again. Based on the research that young coconut water contains several content such as sugar, vitamin C, protein, calcium, potassium, and magnesium, whereas high potassium that content in it can reduce blood pressure in hypertensive (Oktaviani, 2013). So, it would be appropriate if the clause *tirta manis wit kalapa* 'coconut sweet water' synergy with the word *kalegan* that commonly used as a word to flatter others, thus will bring out the friendly nature of the Javanese.

Picture 4

Kecubung Wulung* Tree (Wulung Amethyst Plant) to Illustrated the Question of *Wangsalan



Wangsalan '*cubung wulung, asiha maring sesama*' also described ecological wisdom from

kecubung wulung plant. Usually *kecubung wulung* famous as devil plant because it can cause poisoning in humans. However, behind that *kecubung wulung* has tremendous benefits. Overall the part of *kecubung wulung* form the root, branch, leaf, flower, fruit, until the seed contains alkaloid. Alkaloid is a compound that contains atropin, hiosiamin, and skopolamin which is anticholinergic. Amethyst also contains hiosine, fatty substances, calcium oxalate, meteloidina, norhiosiamine, norskopolamina, cuskohigrina, and nicotine (Kurniawan, 2010).

An expert on medicinal plants, Dr. Setiawan Dalimartha, explained that substances that are useful as asthma relievers are hypophoramine and scopolamine which are anticholinergic. The effects of these substances greatly relieve asthma sufferers. Alkaloids can dilate the respiratory tract which narrows due to an asthma attack. Then, scopolamine also has depressant activity for the central nervous system so that it is often used as an anti-motion drug (Kurniawan, 2010).

From all of part, the root and seed of *kecubung wulung* contain the biggest alkaloid. With the calming trait from *kecubung wulung*, so it was right when *kecubung wulung*'s seed is named *tlasih*. *Tlasi* or *selasih* comes from the word *asih* means love, affection. This affection nature arises from the womb of alkaloid especially that become antidepressants to an asthma attack. The soothing content of *selasih* can reduce the appearance of anxiety, especially for the sufferer. Therefore, it was appropriate if *kecubung wulung* was used to make *wangsalan* which leads the love character for humans.

From the fauna, the character of politeness describes in the *wangsalan* "*Ayam wana, ya nasar tindak dursila*". The meaning is, red jungle flow (*bekisar*), do not be hard and act evil. Red jungle-flow is often called *bekisar*. The red jungle-flow has a hard character, strong aggressive, and easily provoked. The male of

red jungle-flow looks more aggressive, more vigilant and explore faster if they are startled with other predators (Garnham & Hanne, 2018, p. 4). It is a character that must be possessed by forest dwellers who must survive in nature from other predatory attacks. The bar of partridge on the word '*nasar*' which means hard. Usually this phrase is used to circumvent someone who has a violent character and often acts outside the norm of decency. This subtle satire of course will not offend other people so that there is still a character of mutual respect among others.

The character of modesty and never give up describes in the *wangsalan* "*Gayung sumur, kewan gung granane dawa. Aja kempa, mangesti saliring karya*." There are two main questions in that *wangsalan*. First, *gayung sumur* (dipper well) with '*kempa*' as the clue for the answer '*timba*'. Second, *kewan gung granane* (animal that has long nose) with the clue from the word '*mangesti*'. So the answer is *esthi*, synonym of elephant.

From the first *wangsalan* the character that want to be shown is give up. We know that the depth of well is different. There is a deep well, but there is also a shallow well. In the past, people need dipper to take water from the well. The dipper works by pulling the handle up start from the bucket filled water until well drilled. It need hard work and struggle to get a bucket of water. So, when people want to get something it can imagine like the dipper which must be stretched until the goal to get water achieved. When stretched it, of course need strategy, power, and struggle so the bucket hold water. Something the pull must be strong with full power, but sometimes the pull must also be loosened. It should be something flexible. It also should be an injection of enthusiasm as not to be discouraged. When our goal hasn't reach well, we shouldn't hopeless or give up. Instead, we have to be enthusiastic, never give up and think that life is like a dipper. Sometimes

tugging is needed to get a variety in life. Build positive mind so that we will always have good spirit in our lives.

The second guess of the *wangsalan*, *kewan gung granane* describes the character of modesty and persistent. Elephants are animals that are so glorified. Elephants are considered as symbols of usefulness. It can seemed from elephant's body that very large and big. The body of elephants then become a symbol of change. In Yogyakarta palace, elephant become one of glory symbol. Elephant is a symbol of wisdom that is expected to guide Sultan's behaviour in a wise direction (Kusuma, 2010). Hopely, every decision can be taken wisely by thinking about the good and the worst.

Elephant also become symbol of intelligence. It can appear from Ganesha statue with elephant as the head and the body is in the form of people. With the unique shape Ganesha almost with his intelligence. The space of elephant's head making him able to save and receive a lot of memory especially about science. Although smart, but his behavior still humble, modesty, persistent, and not arrogant. People should had the character like elephant if they will get safe life.

Another *wangsalan* that shows fauna is *lha rak mbalung ula, apa-apa dipangan*. The guess of this *wangsalan* is *mbalung ula* and the answer comes from the clue *apa-apa dipangan* (everything be eaten). In Javanese people, someone who eat everything, not only food but also money and position often called *nggragas*. So that, *balung ula* is called *ragas*.

The fact is snakes have no bones. It body is immediately covered in skin without bones. Therefore, snakes can eat all of kinds of food from animals until humans. The flexibility of the snake's body that can expanded make snake can eat many kinds of food. The value that can inferred from this *wangsalan* is human should not be greedy like snake. God create human

anatomy have bones in their body. This bones has a function to limit human action in their life, including to limit the food to eat. If human eat carelessly, of course it will make bad impact on their health. Humans must limit what they want to eat, in here, the perception also include how people got money to buy their food, if they want to get longevity.

Picture 5

Lintah (Leech) to Illustrated the Question of Wangsalan 'Uler Kambang'



Another *wangsalan* that also contained moral character is *uler kambing, yen trima alon-alon*. The guess for this *wangsalan* is *uler kambing* (floating caterpillar) and the clue to answer the question is *alon-alon*. Actually, the answer for the question is *lintah* (leech). So how can the answer, leech, can be related with the word *alon-alon*? The fact, the word *alon-alon* is synonym from the word *saktitahe*. So, that the word *saktitahe* related with the word *lintah*, which has the same syllable *-tah*. Moreover, if it traced, leech is a kind of animal that grateful for the manifestation. The shape of leech is small, black, and highly disliked by humans because it is parasitic. Leech is animals that like to suck human blood. Leech can survive in all places, both on the land, in the sea, and in the fresh water. Leeches are God's creation who are very receptive. It was proven from the acceptance of the condition of his body

including the habitats where he must leave.

By looking at these facts, so it can be inferred that the word *sak titahe* that means rough and unhurried. The leech also walk very slow and unhurried, so that it is right if the word *alon-alon* can replaced the word *sak titahe*. The moral value that can inferred from this *wangsalan* is human must have an unhurried character to do all of activities. If humans have unhurried character so they can do every job carefully and will get maximal results.

Furthermore, one of *wangsalan* that shows nature as the object of his study is "*Mendhung seta, lega legawaning driya*." Means, *mega*, sincere desire of his heart. The bars of *mendhung seta* 'overcast' are found in the word *lega* 'relief, glad' which is actually meant to mention the word *mega* 'cloud' especially the white cloud. As it is known that *mega* can be shaped like cloud that very smooth, clean, white, like cotton. *Mega* composed of vapor particles that illustrate something so clear that anyone who sees clouds in the sky will feel calm in his heart. Besides that as we know that cloud contains water droplets and ice crystals so that it looks calm and shaded (Tjasyono, 2011, p. v). So, it is right when the word *mega* affiliated with the word *lega* that will bring peace in the heart of anyone who saw it.

Picture 6

Alun (Billow) to Illustrated the Question of Wangsalan 'Ombak Agung'



Another *wangsalan* that shows nature is *ombak agung, pakulun nyuwun panggunggung*. The question from this *wangsalan* is *ombak agung* (billow). Clue of the answer located on the word *pakulun*, with the real answered is *alun*. Javanese people always called big waves or billow with *alun*. The word itself refers to something big. There are many shape of the waves, both big waves that called billow or small waves that called ripple. So that, it was right if Javanese people said *ombak agung* with *alun*. First, because of syllable equation *-lun*, second because of the shape (big shape) with equations in the large form.

The moral value that can inferred from *wangsalan*, '*ombak agung, pakulun nyuwun panggunggung*' is a request to be appreciated. From that *wangsalan* we can show one of ecological element in the form of waves. In the fact, when we want to find waves we must go to the beach. Our journey to find waves also doesn't easy. We must explore the nature, especially on the ocean and when we got it, we must keep it well. We should not damage the flow of wves if we don't want to destroy by the waves itself.

The other *wangsalan* that shows cultural outcome is *nyaron bumbung, nganti cengklingen anggonku ngenteni*. The guess of this *wangsalan* is *nyaron bumbung*. The clue of this question is *cengklingen*, and the real answered is *angklung*. The word *cengklingen* and *angklung* has syllable equation (*-klung*). Moreover, the word *cengklingen* means waiting until bored. This situation related with how was *angklung* played, that to play *angklung* form tone to tones it need patient. As we had known that to play *angklung*, every player must waited their turn. They must not grab the other player chance to make beautiful rhythm. So, this condition was correct if illustrated with the

word 'cengklungen'.

The moral value that can be inferred from this *wangsalan* is be patient. Humans must try to be patient to produce something best in all of activities in their life. Patient is the key to one's success. Besides being patient, learning to respect the rights of others is also an important thing to do. Someone who wants to respect the rights of others will certainly be appreciated by others too, vice versa. So, if you want to get peace in your life you need to learn to be patient and respect the rights of others. Don't let us take something that is not our right because it will harm yourself later.

In addition to some examples of *wangsalan* above of course there are still many ecological wisdoms that really depicted in the form of literature. Almost all ecological objects used as the study object of *wangsalan* are able to describe the growing culture in Javanese society. Both of the study is able to become an overview of character education that should be understood and embedded in the community to be taught to the younger generation of the nation.

CONCLUSION

Concerns about the degradation of biodiversity make it necessary to re-promote nature conservation. To support that, the young generation needs to be equipped with the strengthening of character education. One way to instill character education for students to be more loving environment by synergizing ecology in learning. *Wangsalan* learning can be one source of learning to maintain ecological wisdom. The diversity of flora, fauna as a biotic element as well as nature, geography/region, and cultural products as abiotic elements contained in *wangsalan* is an overview of ecological wisdom that can be used as a means of character education. Every *wangsalan* has an ecological object that

also contains character education in it. This research may still be sharpened his discussion to explore the values of character education in *wangsalan* as well as ecological criticism based on *wangsalan*. From this research is expected to provide benefits for the reader audience as a material to add insight about the ecological wisdom contained in the *wangsalan*. Then, his hopes that the image of the ecological wisdom contained in the *wangsalan* can be a source of character education for the younger generation. With the growth of the character of love of the environment of course it will greatly give a positive impact to the existence of ecology around our environment.

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