

Cultural Values Associated With the Use of Ecolexicon “Bamboo” in Karonese Proverbs

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Abstract—One of the consequences of the close interrelationship between languages and their respective environments is the influence of the environment on the creation and maintenance of proverbs. Many proverbs use ecology-related lexemes (vocabulary from the "ecolexicon") to make their point. Previous studies were concerned with the general classification of ecolexical items used in proverbs. Such studies have neglected to study the use of bamboo in explorations of the flora-related ecolexicon, and this gap is especially notable when it comes to the study of proverbs. In response, this paper aims at (i) formulating the function-based typology of the bamboo-related ecolexicon used in Karonese proverbs; and (ii) finding out the cultural values of bamboo-related ecolexical items used in Karonese proverbs. This study was conducted using a descriptive qualitative method, taking Kabanjahe, the capital of Karo Regency, North Sumatra Province, Indonesia, as the research location. The data were bamboo-related ecolexical items used in Karonese proverbs, collected from five informants through an unstructured, open-ended interview. The data were analyzed qualitatively using an interactive model of data analysis. The findings promote research on the typology of bamboo-related ecolexical items based on how Karonese people utilize bamboo. The characteristics of bamboo-related ecolexical data also metaphorize the real-life setting in Karonese culture, contributing to the formation of several cultural values that have been passed down from generation to generation.

Index Terms—ecolexicon, bamboo-related ecolexical items, bamboo typology, Karonese proverbs, cultural values

I. INTRODUCTION

As a newcomer in macrolinguistics, ecolinguistics continues broadening its studies to explore the interrelationship between language communities and their environment. The urgency of studying such interrelationship is motivated by interdependence between language and its ecosystem (Yang, 2014, p. 107), i.e., language verbally represents the open ecosystem where it is used. The availability of an ecosystem influences the survival of a language. Besides, the vocabulary of language related to its ecosystem varies due to different geographical areas. Furthermore, the appearance of the surrounding ecosystem influences the life of language users, i.e., humans. Many aspects of human life – e.g., livelihood, culture, custom, and way of thinking – are strongly influenced by the available surrounding ecosystem.

One of the reflections of human culture through language is found in proverbs. The close relationship between proverbs and culture has been mentioned in several studies (Ahmed, 2005; Mele, 2013; Rong, 2013; Zhao, 2013; Dagnew & Wodajo, 2014). The local culture influences the choice of words, themes, and moral lessons in proverbs. One of the characteristics of word choice in proverbs is the use of ecolexicon, ecology-related lexical items (Krikmann, 2001; Mele, 2013). Those ecolexical items (fauna-, flora- and abiotic-related lexicon) are derived from the available local ecosystem that can be used as the source of language studies. Therefore, the study of ecolexicon in proverbs is always beneficial for language and culture development. The ecolexical items chosen in proverbs are motivated by the natural characteristics of the related ecosystem, which are observed and explored by the local people. Besides, they are chosen to provide tangible examples of the ecological elements metaphorized in proverbs. The use of ecolexicon in proverbs has attracted some researchers to explore moral lessons or values associated with it (Ahmed, 2005; Dagnew & Wodajo, 2014; Widawati et al., 2018). One of the ecolexical items frequently used in proverbs is bamboo, flora-related ecolexicon. In many cultures, especially in the regions where various species of bamboos grow well, bamboo is frequently used as a parable in their proverbs, one of which is in Karonese culture.

Historically, Karo is a North Sumatran local tribe living in Karo Regency. Located on a plateau with a height of between 600 to 1,400 meters above sea level, Karo Highland is called Taneh Karo Simalem, a fertile, cool, peaceful, and prosperous land (Azhar, 2018, p. 1). Due to its fertility, various bamboo species grow well in Karo Highland. Besides, bamboos play a critical role in the life of society of people in Karo Highland. Several studies reported the use of bamboos as a traditional medicine in Karonese culture (Situmorang et al., 2015; Nasution et al., 2020; Br Bangun & Bangun, 2021), other studies explored the utilization of bamboos for ecosystem maintenance in Karo Highland (Sari, 2011; Br Ginting et al., 2015; Aswandi & Kholibrina, 2021); and other studies reported the economic benefits of bamboos for people in Karo Highland (Sari, 2011; Affandi et al., 2017). Considering the critical role of bamboos for people in Karo Highland, Tarigan and Sofyan (2018) have formulated a typology of bamboos in Karo Highland based on their species. Their study was particularly conducted for the purpose of language maintenance. Their study provides an opportunity to explore other possible typologies of bamboos on a different basis, one of which is based on how the local people utilize them. It can be stated that this study departs to complete the findings from the study done by Tarigan and Sofyan (2018).

Furthermore, in addition to studies on the benefits of bamboos for people in Karo Highland, several studies on bamboos have examined the language maintenance of words associated with bamboos (Sibarani, 2014), cultural values of bamboos (Yu, 2008), positive characters associated with bamboos (Pham, 2016), and bamboo-related products (Arshad et al., 2014). However, none of those studies focused on exploring the cultural values associated with the use of bamboos in proverbs. Therefore, this study tries to complete the previous studies by exploring cultural values of bamboo-related ecolexicon through proverbs.

Based on the rationale and the gap left from the previous studies elaborated above, this paper aims at (i) formulating the function-based typology of ecolexicon bamboo used in Karonese proverbs; and (ii) finding out the cultural values of ecolexicon bamboo used in the Karonese proverbs. The results of the study are expected to preserve the Karonese cultural values that can be learned and implemented by the next Karonese generation. Besides, the results of the study can help language maintenance, particularly the Karonese bamboo-related ecolexical items.

II. THEORETICAL FRAMEWORK

Studying ecolexicon (ecology-related lexicon) in proverbs means studying language environment covering both physical and social environments (Sapir, 2001). From the aspect of the physical environment, the choice of ecolexicon in proverbs is influenced by the local geography, such as the local topography (Zulyeno, 2019), the local flora and fauna (Krikmann, 2001; Lin, 2013), and the local climate (Leite et al., 2019; Garteizgoeascoa et al., 2020). Meanwhile, from the aspect of social environment, the meaning of ecolexicon used in proverbs is influenced by the local social environment that builds up its people's way of thinking, including religion (Ukoma et al., 2020; Babalola & Alu, 2019), ethics (Tarigan et al., 2020), organization, and art (Tarigan, 2017).

The interaction of the local physical environment and social environment in proverbs can be seen in how meaning is generated from the ecolexicon used in proverbs. The same ecolexicon may have different meanings in a different social environment. For example, the meaning of "dog" (fauna-related ecolexicon) in Minangkabau proverbs is associated with dirt (Wati & Amri, 2020). This is motivated by the religion believed by most of the Minangkabaunese people. Meanwhile, in English proverbs, it is associated with loyalty (Al-Janabi, 2020), as in "Love me love my dog" (p. 11).

Furthermore, in Arabic culture, using different animal-related ecolexical items in proverbs shows different cultural knowledge associated with them (Salamh & Maalej, 2018). Moreover, the use of ecolexicon in proverbs also shows people's dependence on nature to survive. For example, Dayak people (indigenous people of Borneo) consume the forest products, learn from nature, and grow along with nature. Therefore, one of Dayak's proverbs says, "forest is our supermarket" (Sada et al., 2019, p. 9). Using "forest" as the ecolexicon in this proverb indicates their high life dependence on nature. Thus, studying ecolexicon used in proverbs used in different physical and social environments is interesting to explore how it is used and interpreted.

From the perspective of anthropological linguistics, it is possible to explore cultural values contained in proverbs because they contain cultural values that need to be preserved. As the reflections of local culture (Widyastuti, 2010), proverbs contain messages that describe the local people's ideas, feelings, and actions, which lead to revealing shared conceptions of what is good and desirable in a certain culture, i.e., the cultural ideals (Schwartz, 2006, p. 139), which can be used as the basis to explore the cultural values in proverbs.

Furthermore, the study on ecology-related lexicon in proverbs is useful for language maintenance. Ecolexical items are susceptible to extinct, or at least to shift, because they have a large number of varieties. Therefore, linguists are suggested to be more sensitive to "the threats posed to language in recognizing the impending extinction in biodiversity" (Romaine, 2007, p. 129). Language maintenance, including the maintenance of ecology-related lexicon, can formulate the basis for language regeneration and ultimate well-being (Mühlhäusler, 1992). Responding to such suggestion, one of the real efforts has been done by Tarigan and Sofyan (2018) who did a study on language maintenance of Karonese ecolexicon through a traditional game.

III. METHOD

This descriptive qualitative research took Kabanjahe, the capital of Karo Regency, North Sumatra Province, Indonesia, as the research location. The data were bamboo-related ecolexicon used in Karonese proverbs. The data were obtained from 5 informants selected purposively based on their age, i.e., 50 to 70 years old native speakers of Karonese domiciled in and never left Kabanjahe. They were selected because the preliminary research results revealed that many Karonese people younger than 50 years old had limited knowledge of the use of bamboo-related ecolexicon in Karonese proverbs. In addition, to collect more representative data, the informant criteria suggested by Samarin (1988) were used. The informants were communicative, willing to be informants, honest and unshunned by the surrounding community, insightful, and well-informed about Karonese proverbs. Based on the research ethics, the names of the informants were not mentioned in the paper.

The data were collected using an unstructured, open-ended interview. The interview was conducted to collect the Karonese proverbs that contained bamboo-related ecolexical items. In order to get the desired data, the informants were given an example of Karonese proverb that contained bamboo-related ecolexicon. Besides, during the interview, the elicitation technique was applied particularly to explore the meaning of bamboo-related ecolexicon used in the Karonese proverbs. Furthermore, the interview was assisted by note-taking and recording techniques. The interview was audiotaped and transcribed.

The data were analyzed in several steps, referring to Miles et al. (2014). First, the collected data were sorted to get the precise data, bamboo and bamboo-related ecolexicon used in the Karonese proverbs. The data collection resulted in 11 bamboo-ecolexical items used in the Karonese proverbs. Then, all the bamboo-ecolexical items were categorized based on their characteristics to formulate a typology of bamboo-related ecolexicon. The typology formulation followed the typological memoirs used in Krikmann's (2001) research. Next, the meanings contained in the Karonese proverbs were analyzed to get the cultural values associated with the use of ecolexicon bamboo in the Karonese proverbs. Finally, the typology of Karonese ecolexicon bamboo and the cultural values reflected through the use of ecolexicon bamboo in the Karonese proverbs were displayed on a table.

IV. RESULTS AND DISCUSSION

Human is the only creature given the virtue for having language. In its development, language becomes human power because it can be used as a weapon for subjugation. Furthermore, language is a tool to measure human's social status; in other words, human is socially judged based on their language. Language is the reason for humans to listen and to be listened. Considering such an essential role of language in human life, the Karonese past generation reminded the next generation to use their language through a proverb carefully. Notably, such meaning is delivered through the use of ecolexicon bamboo, as shown in (1).

- (1) *Bagi kotok-kotok dung peranin*
 like kotok-kotok after harvest
 Like sounds of bamboos after harvest

The proverb in (1) was obtained from Informant 3. *Kotok-kotok* is a stick-like figure made of bamboos tied with a rope placed in a rice field, typically used by Karonese people, to drive birds away. *Kotok-kotok* is an onomatopoeic word since it is formed from the sound the tied bamboos make. Whenever the wind comes, it blows the tied bamboos resulting in such sounds as "*kotok...kotok...kotok*" that scare away the birds. Considering its function, *kotok-kotok* is only needed before harvest. Bamboo is chosen as it is easy to get and grows in many varieties in Karo Highland. Tarigan et al. (2016, p. 16) reported that there are ten recognizable types of bamboos growing well in Karonese Highland: *buluh belangke* (a bamboo with long and big segments), *buluh belin* (a big, thick, and solid bamboo), *buluh cina* (a bamboo as small as a pencil), *buluh duri* (a thorny bamboo), *buluh awar* (a good looking bamboo for its yellow stripe), *buluh kai* (a yellow bamboo with green stripe), *buluh kayan* (a bamboo with short segments), *buluh kerapat* (a thin bamboo with relatively long segments), *buluh laga* (a bamboo with straight thin segments), and *buluh rires* (a bamboo used to make a traditional food called *rires* or *lemang*). Out of such ten types of bamboos, *buluh belangke* is chosen as the material of *kotok-kotok* as its long and big segments can produce strident sound.

Based on the results of the interview, the use of ecolexicon bamboo as a parable in the Karonese proverb in (1) is associated with the sound it produces. Then such sound is connected to rice planting and harvesting. The sound of bamboos is needed during the planting session or before harvest, but once the rice has been harvested, such sound is no longer needed. Therefore, the Karonese proverb in (1) means a speech is useless when it is not heard by other people. This implicitly encourages Karonese people to be known as knowledgeable people who do not speak too much. The meaning of this proverb is also found in the Indonesian proverb but with a different ecolexicon. In Indonesian culture, "water" is used as a parable, as in the proverb "Rippling water signifies its shallowness" (Zulyeno, 2019, p. 756). This means that people who speak too much (indicated by disorganized ideas in their speech) tend to have less knowledge.

The other Karonese proverb associated with knowledgeable character reflected through the use of ecolexicon bamboo is shown in (2).

- (2) *Bagi sinaka buluh*
 like split bamboo
 Like splitting bamboos

The proverb in (2) was obtained from Informant 3. Bamboos are used in the Karonese society for various purposes, one of which is for making a fence. Based on the results of the interview, the fence in many Karonese traditional houses is made of bamboos. Usually, the bamboos are split, and splitting bamboos is not easy because the split bamboos in making a fence must be symmetric. In other words, splitting bamboos cannot be simply done by cutting the bamboos with a machete. It needs a specific technique. In Karonese culture, splitting bamboos is done by stepping on the lower edge and pulling up the top edge. This is reflected in the proverb's meaning in (2), which implicitly means solving a problem should be done most effectively. In other words, having knowledge related to the problem is the crucial factor in managing and solving the problem. Many people may be able to solve a problem, but a practical solution always needs knowledge. The proverb is very helpful as a guide for living as everyone must encounter problems in their life. A number of conflicts may arise due to the inability to solve problems effectively. In English proverbs, being knowledgeable is symbolized by a fox, fauna-related ecollexicon, as in "An old fox is not easily snared." A fox is recognized as an ingenious animal (although its ingenuity often relates to fraudulence) (Chadwick, 1994), and the older it is, the more experience it has.

In addition, the knowledgeable character associated with the use of ecollexicon bamboo in the Karonese proverb is shown in (3).

- (3) *Cio teruh buluh duri*
 like shelter bamboo thorn
 Like taking shelter under a thorny bamboo tree

The proverb in (3) was obtained from Informant 2. Bamboo has a number of varieties, one of which is thorny bamboo. As many bamboos grow in Karo land, many people used to take shelter under bamboo trees. Nevertheless, not all bamboos can be used as a shelter, such as thorny bamboos. Taking shelter under thorny bamboos does not make someone feel comfortable. They may even hurt themselves. The results of the interview show that the word "thorn" used in the proverb in (3) symbolizes terrible guys. This implicitly requires people to be knowledgeable of one whom they safely depend on in order to survive. Being knowledgeable makes a person wise, as (s)he evaluates a matter carefully before making a decision. In other words, a wise person knows "fundamental pragmatics of life" (Baltes & Smith, 1990, p. 87), i.e., knowing important and uncertain aspects of life meaning and conduct (Bundock, 2009). Therefore, a wise person knows which bamboo is safe to take shelter and which is not. Although being independent is desirable, humans' dependence on others to fulfill their needs is undeniable.

Moreover, being knowledgeable is related to knowing usefulness and uselessness, and knowledgeable people can undoubtedly avoid uselessness. The use of ecollexicon bamboo in the Karonese proverbs associated with avoiding uselessness is shown in (4).

- (4) *Bagi si ngelulus bangkar*
 like Particle roast dry bamboo
 Like roasting dry bamboos

The proverb in (4) was obtained from Informants 1, 2, 3, and 5. This indicates that the proverb in (4) is one of the well-known proverbs in Karonese community living in Kabanjahe. Bamboo is one of the plants having an economic value from which several Karonese people's incomes are sourced. Bamboos are processed to produce a variety of commodities such as handicrafts and local cooking utensils. In addition, bamboos are also used as building materials. Processing bamboos usually begins by drying them. Based on the results of the interview, Karonese people usually dry bamboos by roasting. Once dry, bamboos do need to be dried anymore. This is the proverb's meaning in (4), i.e., roasting dry bamboos is a useless action. In another culture, e.g., Indonesian culture, the ecollexicon used to describe useless action is water, an abiotic-related ecollexicon, as in "Like chopping water" (Lubis, 2018, p. 12). Water is a liquid that is impossible to chop.

Furthermore, the other character value reflected in the use of ecollexicon bamboo in the Karonese proverbs is the importance of unity or being together, as shown in (5).

- (5) *Bagi buluh belin sada ndapuren*
 like bamboo big one cluster
 Like a bamboo cluster

The proverb in (5) was obtained from Informants 1, 2, and 4. Bamboo grows in clusters because its propagation is through shoots. A cluster of bamboos can survive in any natural condition. Although plants naturally need water to survive, bamboos can survive in drought conditions as long as they live in their cluster. Moreover, by being together in a cluster, they can prevent landslides and erosion. Karonese people observed such characteristics and composed a proverb associated with such characteristics in a proverb like in (5). *Buluh belin* is one of the bamboo varieties growing well in Karo Highland. It is a big, thick, and solid bamboo. The results of the interview reveal that the proverb means that power or strength comes from togetherness. A piece of bamboo cannot survive in all conditions, but a cluster of bamboos can overcome any natural problems and challenges. This proverb inspires Karonese people to have a spirit of unity and oneness. By being together, they can overcome any challenges in their life. The spirit of unity is also associated with other ecollexicon in other cultures. For example, in Indonesian culture, there is such a philosophy of *lidi* (coconut leaf bone), which means "A piece of *lidi* cannot do anything, but a bundle of *lidi* can do everything."

Moreover, the ecolexicon bamboo used in the Karonese proverbs is associated with honesty or truthfulness character, as shown in (6).

(6) *Pinter* *bagi* *balembang* *ku* *pantar*
 straight like bamboo to terrace

As straight as bamboo

The proverb in (6) was used as the example of Karonese proverb given to the informants. This was intended to give a comprehensive explanation of the kind of data expected from them and to obtain the meaning of the proverb based on their knowledge.

Bamboo is one of the branchless plants. Its stem is straight and long, and it has no branch. The results of the interview indicate that the proverb in (1) is associated with honesty in Karonese culture. Honest people tell and do something as it is. They never deflect the truth. Karonese people believe that truth always wins, although honesty sometimes hurts both mentally and physically. Honesty is always voiced in Karonese traditional ceremonies such as *erpangir ku lau* (bathing in a river) tradition, marriage ceremony, and religious ceremony (Tarigan et al., 2020). Bamboos are used as a parable for honesty because they grow so well in Karonese land that every generation can easily witness their straight stem. In another culture, e.g., Chinese culture, the proverb associated with honesty is represented by cattle, a fauna-related ecolexicon (Liu, 2013).

The other character value associated with using ecolexicon bamboo in the Karonese proverbs is humbleness or modesty, as shown in (7).

(7) *Buluh* *belin* *nungkirken* *ku* *banana*
 bamboo big head to bottom

The upper part of the bamboo looks down

The proverb in (7) was obtained from Informants 1, 2, and 4. One of the characteristics of *buluh belin* (bamboo with big, thick, and solid stem) is that the upper part of its stem always looks down as if it would bow to the earth, no matter how big it is or how long it is. Based on the results of the interview, this proverb encourages Karonese people to remember where they come from, no matter how talented they are or how successful they are, just like the upper part of bamboos that always looks down regardless of their height. The meaning of this proverb should always be voiced because some people forget where they come from and change their behavior due to changes in their socioeconomic status. Thus, the proverb in (7) advises Karonese people to always stay humble in their life. The encouragement to stay humble in the Karonese proverb can be seen in (8).

(8) *La pedah adangken,* *adi* *bedil* *terbuluh,* *timah* *na* *terbatu*
 no need boast like rifle bamboo lead Poss. Hold

Do not boast yourself, like a rifle inside a bamboo whose bullet cannot penetrate bamboo segments

The proverb in (3) was obtained from Informants 2 and 5. The bamboo stem consists of several segments (internodes) connected with nodes. The number of nodes depends on the bamboo species and the bamboo length. Bamboo nodes are so hard that they are difficult to penetrate. Thus, when a bullet is fired from one end of the bamboo stem with ten internodes, the bullet has to penetrate the ten nodes to reach the other end of the bamboo. Karonese people believe that the bullet cannot reach that end. Compared to a rifle, bamboo is much weaker, but it can hold the power of the deadly, arrogant weapon. The comparison between rifle and bamboo in the proverb in (8) illustrates that nobody is the most powerful, so there is no reason to boast or underestimate others. Based on the results of the interview, the proverb teaches Karonese people to always stay humble. There must always be someone stronger, more prosperous, smarter, and more successful.

The encouragement to stay humble or not to be arrogant, as contained in the proverbs in (7) and (8), is also voiced in other cultures through their proverbs and is sometimes delivered by ecolexicon. In Indonesian culture, for example, the word peanut, flora-related ecolexicon, is used as the parable as in the famous Indonesia proverb, "Do not be like a peanut seed forgetting its shell!". This proverb means that anyone should not forget their origin.

The other character value associated with using ecolexicon bamboo in the Karonese proverbs is appreciating what other people have done, as shown in (9).

(9) *Bagi belobo* *i* *tengah juma,* *i* *tading ken* *dung* *peranin*
 like bamboo clapper Part. middle field Part. leave Infl. after harvest

Like a bamboo clapper in the middle of a field that is just left after the harvest session

The proverb in (3) was obtained from Informants 1, 2, and 4. *Belobo* is a bamboo-related ecolexicon in the Karonese language. It refers to a clapper made of bamboo, placed in the middle of a rice field. When hit, it produces loud sounds that scare and repel wild animals that will damage the rice field. However, it is no longer needed after harvest. Based on the results of the interview, the proverb in (9) means that *belobo* is used when needed, but it is left or ignored when it has no more benefit. In real-life, it is common to see people flattering and exalting the words or deeds of a person during his/her term of office, but when his/her term ends, then all the glory ends as well. The proverb's meaning implicitly encourages Karonese people to appreciate what others have done, despite their shortcomings. Therefore, the next Karonese generation is expected to learn from such shortcomings to complete the theme in the future.

Moreover, the other character value associated with using ecolexicon bamboo in the Karonese proverbs is being a socially good person, as shown in (10).

- (10) *Bagi cibakut bas taduken*
 like catfish inside bamboo fish container
 Like catfish inside a bamboo fish container

The proverb in (3) was obtained from Informant 1, 2, 3 5. *Taduken* is a fish container made of bamboo used by Karonese people to keep the hooked fish. The fish inside the *taduken* produces uncontrolled movement and unidentified hopeless sound. However, the fisher does not care about it and continues fishing for other fish. The results of the interview reveal that the parable in this proverb illustrates a person who does not keep his/her social relations with other people. (S)he will be excluded from society and no one in the society will care about whatever happens to him/her. As a matter of fact, human is a social creature who cannot live without other's help, and being excluded from society is the worst punishment.

Based on the results of data analysis, several findings are delivered. The first one is related to the typology of bamboo-related ecolexicon in the Karonese language. The typology is constructed based on the uses of bamboos comprising five ecolexical items: (i) *kotok-kotok*, (ii) *belobo*, (iii) *balembang*, (iv) *bangkar*, and (v) *traduken*. *Kotok-kotok* in Karonese language is always associated with bamboo as it is made of bamboo. No other materials other than bamboo are used to make *kotok-kotok*. The bamboo is cut into two pieces, and each of the pieces is tied with *balembang* (bamboos with long, straight small stem), which is further tied to one of the poles of a field hut. *Kotok-kotok* is formed from how it sounds, i.e., *kotok...kotok...* The sound is produced when it is blown by the wind or pulled by the farmer. The sound is expected to drive away birds that can harm the growth of paddy. The use of bamboo for this purpose is mentioned in several previous studies (Zulvita et al., 1993; Ardjansyah et al., 2017). They report that bamboos effectively drive away birds from rice fields.

Another bamboo-related ecolexicon is *balembang*. It does not refer to any specific bamboo species, but it refers to any long, straight small bamboo. In Karonese language, all bamboos whose segments are long, straight, and small are called *balembang*. It is mainly used in the Karonese traditional rice plantation to replace ropes to drive away birds from the rice field. In making *balembang*, the long, straight small bamboo is cut off evenly from one of its ends to the other end. The result is a long bamboo slab resembling a thick rope, which is called *balembang*. The *balembang* is stretched along the rice field whose ends are tied to the holes of a field hut, called *pantar*. In several cuts of the *balembang*, *kotok-kotok* is hung, so when farmers wiggle the *balembang*, the *kotok-kotok* will produce such a noise that makes birds fly away fearfully.

Belobo is another tool made of bamboo used by Karonese farmers in the rice fields. Unlike *kotok-kotok*, which is made in a stick-like shape, *belobo* looks like a clapper, and it is used to drive away bigger animals. *Belobo* produces such a relatively loud sound that can scare and repel wild animals – such as rats, wild boars, and wild buffalos – from the rice fields.

The other bamboo-related ecolexicon is *bangkar*, which refers to dry bamboo. Like the first three bamboo-related ecolexical items mentioned above, *bangkar* also does not refer to any specific bamboo species. As it is dry, even very dry, it is flammable. Therefore, *bangkar* is often used by Karonese people as a substitute for firewood, which is cheap and easy to get. Moreover, *bangkar* is a good material for making bamboo charcoal a substitute for wood charcoal or mineral coal (Gupta & Kumar, 2008).

Furthermore, the other bamboo-related ecolexicon in the Karonese language is *taduken*, a fish container made of bamboo. It is a place to keep hooked fish and is usually brought for fishing in a river. *Taduken* is not made of particular bamboo species, but it is made of bamboo with a large stem cavity, usually indicated by its thin wall. In addition, the bamboo used as the material to make *taduken* has relatively long segments because *taduken* consists of only one bamboo segment. Therefore, a large stem cavity and long segment enable a fisher to keep more fish inside the *taduken*. On the top of the *taduken*, a rope is tied and the length of the rope depends on or is adjusted to the length of the fisher's waist. Then, the strap is wrapped around the fisher's waist during fishing.

The second finding is related to the character value associated with using ecolexicon bamboo in the Karonese proverbs. Based on the results of data analysis, six noble characters including (i) being knowledgeable, (ii) being unity, (iii) being honest, (iv) being humble, (v) appreciating others, and (vi) being a socially good person are associated with the use of ecolexicon bamboo in the Karonese proverbs. First, being knowledgeable is the most substantial reason to succeed in life because it makes everything in our life easier. Like the meaning of the proverb in (2), splitting bamboo into two pieces becomes more manageable when done using knowledge; on the other hand, it could be a difficult task when done by a person who does not know about it. The use of bamboo as the symbol of intelligence does not refer to the bamboo itself, but it refers to what people can do with bamboo. Bamboos can be utilized as a building material (Syeda & Kumar, 2014; Kaur, 2018), a material for making different kinds of crafts (Yu, 2008; Arshad et al., 2014), and other composite materials (Chaowana, 2013; Liu et al., 2016; Huang et al., 2019). Only can a knowledgeable do such bamboo utilization.

Second, unity is a Karonese cultural spirit transmitted from generation to generation. For that reason, Karonese people accentuate unity, togetherness, and deliberation in their social life (Sitepu, 2013); they avoid disputes. As a result, Karo becomes one of the strong tribes in North Sumatra Province from the perspectives of both social and economic power (Sari, 2011). In addition, the unity spirit of the Karonese people is reflected through their solidarity in maintaining religious harmony (Lubis, 2017). Such unity spirit is symbolized by ecolexicon bamboo in the Karonese

proverb. Bamboo is chosen because it grows in clusters, showing mutual help for its survival. The use of bamboo to symbolize unity is also applicable in Vietnamese culture. In addition to unity, bamboo is also a symbol of spirit, hard work, optimism, courage, and perseverance to Vietnamese (Pham, 2016).

Third, honesty is a character always voiced in Karonese culture not only through its proverbs but also through its traditional ceremonies such as *mengket rumah mbaru* (welcoming ceremony to a new house), *didong doah bibi sirembah ku lau* (wedding ceremony), and *merdang merdem* (rice planting ceremony). In those ceremonies, honesty is considered the determinant of a successful life (Tarigan, 2017). Honesty in this context implies straightness or branchlessness. Bamboo as a symbol of honesty is also recognized in Chinese culture. Yu (2008) argues that the characteristic of bamboo viewed from its straightness exemplifies honesty.

Fourth, humbleness or modesty is a character encouraging Karonese people not to flaunt or boast of themselves despite their excellence. The use of bamboo as a symbol of modesty refers to the characteristics of its upper part that always arches, heading to the earth. It represents modesty as it looks down at the earth, on which it grows and from which it gets food. The earth can never be effaced from its life history although it becomes bigger and taller. The use of bamboo as a symbol of modesty is also recognized in Chinese culture. The bamboo's structural property makes it an illustrative example of a modest personality in China (Yu, 2008).

Fifth, appreciating others is one of the noble characters beginning to fade. Appreciating others means appreciating or acknowledging what has been done by other people. A new leader, for example, should sincerely acknowledge what has been done by his/her predecessors, not simply vilifying their efforts and throwing them out of the community. This is the phenomenon often found in today's society. About appreciating others, John F Kennedy, the 35th President of the United States (1961-1963), once said, "As we express our gratitude, we must never forget that the highest appreciation is not to utter words but to live by them." Therefore, a sense of appreciation should be fostered so that the situation described in the proverb in (9) can be avoided.

Sixth, being a socially good person is one of the purposes of life taught by the early Karonese generation. This mainly refers to the nature of humanity as a social creature who needs others to survive. No one can fulfill their basic needs without others' help. Farmers, for example, might be able to fulfill their food needs by themselves, but they might not be able to fulfill their needs for clothing, education, and health without other people's assistance. Therefore, every human needs to be a socially good person. The encouragement to be a socially good person through proverbs is also found in the research results done by Make et al. (2014). They found that the proverbs in Wolaita, one of the nationalities of Ethiopia, encourage the people to enhance their cooperation with others and promote mutual respect among them in their society (p. 245). Such encouragement is also in line with Ahmed (2005), who found that most Sudanese proverbs call for social solidarity.

Based on the findings elaborated and discussed above, the use of ecolexicon bamboo in the Karonese proverbs has the patterns described in Table 1.

TABLE 1
THE PATTERN OF THE USE OF BAMBOO ECOLEXICON IN THE KARONESE PROVERBS

Ecolexicon	Typology	Meaning	Cultural values
<i>Kotok-kotok</i>	Tool made of bamboo	A stick made of bamboos placed in a rice field to drive birds away	Encouragement to be knowledgeable
<i>Belobo</i>	Tool made of bamboo	A clapper used to drive away bigger animals from rice fields	Encouragement to appreciate and acknowledge what other people have done
<i>Traduken</i>	Tool made of bamboo	Fish container made of bamboo to keep hooked fish	Encouragement to be socially good
<i>Balembang</i>	Bamboo-related ecolexicon	Long, straight small bamboos replacing ropes	Encouragement to be honest
<i>Bangkar</i>	Bamboo-related ecolexicon	Dry bamboos	Encouragement to be knowledgeable by avoiding uselessness
<i>Buluh belin</i>	Bamboo species	Big, thick, and solid bamboos	Encouragement to accentuate unity Encouragement to be humble

Table 1 shows that the typology of ecolexicon bamboo used in the Karonese proverbs falls into three types: a typology based on a tool made of bamboo, a typology based on bamboo-related ecolexicon and a typology based on bamboo species. The typology of ecolexicon bamboo based on its species has been studied by Tarigan and Sofyan (2018). This study promotes a typology of ecolexicon bamboo based on its utilization by Karonese people.

V. CONCLUSIONS, IMPLICATIONS, AND SUGGESTIONS

The use of ecolexicon bamboo in the Karonese proverbs gives birth to the typology of bamboo-related ecolexicon generated from how Karonese people utilize bamboos. The choice of certain bamboo-related ecolexicon is motivated by its easily observable characteristics. Those characteristics metaphorize the real-life setting in Karonese culture, contributing to the formation of several cultural values that need to be passed down from generation to generation.

The results of the research benefit both language maintenance and cultural values preservation. Several bamboo-related ecolexical items used in the Karonese proverbs are no longer recognized by today's Karonese generation due to several factors, one of which is the use of bamboos only for very limited purposes. Thus, this study revitalizes those

almost-distinct ecollexical items in order that the Karonese language can be maintained. This is in line with Sibarani (2014) who found the decreasing number of bamboo-related ecollexicon in Batak Toba language due to the local people's less contact with bamboos. So, studies on bamboo-related ecollexicon are helpful in language maintenance efforts. Besides, the results of this research also propose a typology of bamboo-related ecollexicon, which is very useful in the lexical categorization of the Karonese language. Moreover, the results of this study develop the theory of ecolinguistics in exploring the interrelationship between language and its environment, particularly those related to bamboos. Then, in terms of cultural values, the messages contained in the proverbs need to be revitalized and preserved.

This study only focuses on bamboo, a flora-related ecollexicon used in the Karonese proverbs. Thus, it is suggested to future researchers to explore the other types of flora-related ecollexicon in other places or cultures because different geographical areas have different kinds of plants. Besides, the informants taken in this research are native Karonese people whose ages are between 50 and 70 years old. The ecollexical items used in the proverbs are not tested to the native Karonese people whose ages are below 50 years old to confirm their knowledge of those ecollexical items. Therefore, future research can identify the existence of those Karonese ecollexical items through a study that mainly focuses on language maintenance of bamboo-related ecollexicon in Karonese language. Furthermore, other sources of data and proverbs as used in this study are always possible to be explored to reveal more interrelationships between language and its environment.

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REFERENCES

- [1] Affandi, O., Zaitunah, A., & Batubara, R. (2017). Potential economic and development prospects of non timber forest products in Community Agroforestry Land around Sibolangit Tourism Park. *Forest and Society*, 1(1), 68-77. <http://dx.doi.org/10.24259/fs.v1i1.1096>
- [2] Ahmed, S. (2005). *Educational and social values expressed by proverbs in two cultures: Knowledge and use of proverbs in Sudan and England* (Unpublished Dissertation). Berlin: Technische Universität Berlin. Retrieved on January 10, 2020, from http://www.harep.org/Social%20Science/ahmed_salw.pdf
- [3] Al-Janabi, M. K. H. (2020). Domestic animals in English and Iraqi rural proverbs: A pragmatylistic study. *Journal of the College of Languages*, 41, 1-26. <https://doi.org/10.36586/jcl.2.2020.0.41.0001>
- [4] Ardjansyah, A., Hernowo, J. B., & Priyambodo, S. (2017). Pengaruh serangan burung bondol terhadap kerusakan tanaman padi di Bogor. *Media Konservasi*, 22(2), 101-110.
- [5] Arshad, M. Z., Mat Il, I., & Ibrahim, A. H. (2014). Sarawak bamboo craft: Symbolism and phenomenon. *Proceedings of the SHS Web of Conferences* 5, 00002, pp. 1-7. <http://dx.doi.org/10.1051/shsconf/20140500002>
- [6] Aswandi, A., & Kholibrina, C. R. (2021). Empowering women on bamboo utilization and conservation in the Lake Toba Catchment Area of the North Sumatra Province of Indonesia. *Environ. Sci. Proc.* 3(47), 1-7. <https://doi.org/10.3390/IECF2020-08026>
- [7] Azhar (2018). History of Dakwah Al-Jam'iyatul Washliyah in Tanah Karo, North Sumatera. *Glob. J. Arts, Humanit. Soc. Sci.*, 6(2), 1-8.
- [8] Babalola, J. A. O., & Alu, C. O. (2019). African proverbs: A tool in teaching biblical truth in the 21st century. *Asia-Africa Journal of Mission and Ministry*, 19(0), 3-14. <http://dx.doi.org/10.21806/aamm.2019.19.01>
- [9] Baltes, P. B., & Smith, J. (1990). Toward a psychology of wisdom and its ontogenesis. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 87-120). New York: Cambridge University Press.
- [10] Br Bangun, R. S., & Bangun, S. (2021). Kuning in Karo community: Medical anthropology study in Bunuraya Village, Tiga Panah District, Karo Regency. *Indonesian Journal of Medical Anthropology (IJMA)*, 2(1), 53-56. <https://doi.org/10.32734/ijma.v2i1.5303>
- [11] Br Ginting, K., Purwoko, A., & Simanjuntak, J. (2015). Local wisdom on forest management in Serdang, Rural District of Barusjahe, Karo District. *Peronema Forestry Science Journal*, 4(4), 1-14.
- [12] Bundock, A. (2009). The science of wisdom: An exploration of excellence in mind and virtue. *Griffith University Undergraduate Student Psychology Journal*, 1, 1-7. Retrieved on June 10, 2020, from <https://research-repository.griffith.edu.au/handle/10072/340328>
- [13] Chadwick, J. V. (1994). The Fox: A medieval view, and its legacy in modern children's literature. *Between the Species*, 10, 71-75. Retrieved on March 21, 2020, from <https://pdfs.semanticscholar.org/1632/a2607cccd1b6cccbda2261b82a4be0e7be72.pdf>
- [14] Chaowana, P. (2013). Bamboo: An alternative raw material for wood and wood-based composites. *Journal of Materials Science Research*, 2(2), 90-102. <https://doi.org/10.5539/jmsr.v2n2p90>
- [15] Dagnev, T., & Wodajo, M., (2014). The socio-cultural functions of Kafa proverbs. *African Journal of History and Culture*, 6(6), 94-99. <http://dx.doi.org/10.5897/AJHC2014.0198>
- [16] Garteizgogeaescoa, M., Garc á-del-Amo, D., & Reyes-Garc á, V. (2020). Using proverbs to study local perceptions of climate change: a case study in Sierra Nevada (Spain). *Regional Environmental Change*, 20, 59. <https://doi.org/10.1007/s10113-020-01646-1>
- [17] Gupta, A., & Kumar, A. (2008). Potential of bamboo in sustainable development. *Asia-Pacific Business Review*, IV(3), 100-107. <https://doi.org/10.1177%2F097324700800400312>

- [18] Huang, Y., Ji, Y., & Yu, W. (2019). Development of bamboo scrimber: A literature review. *Journal of Wood Science*, 65, 25. <https://doi.org/10.1186/s10086-019-1806-4>
- [19] Kaur, P. J. (2018). Bamboo availability and utilization potential as a building material. *Forestry Research and Engineering: International Journal*, 2(5), 240-242. <http://dx.doi.org/10.15406/freij.2018.02.00056>
- [20] Krikmann, A. (2001). Proverbs on animal identity: Typological memoirs. *Folklore*, 17, 7-84. <http://dx.doi.org/10.7592/FEJF2001.17.proverbs>
- [21] Leite, L., Dourado, L., Morgado, S., & Antunes, M. C. (2019). Teacher education and popular culture: Proverbs about the climate and weather. *Journal of Turkish Science Education*, 16(1), 1-17. <https://doi.org/10.12973/tused.10262a>
- [22] Liu, J. (2013). A comparative study of English and Chinese animal proverbs—From the perspective of metaphors. *Theory and Practice in Language Studies*, 3(10), 1844-1849. <http://dx.doi.org/10.4304/tpls.3.10.1844-1849>
- [23] Liu, X., Smith, G. D., Jiang, Z., Bock, M. C. D., Boeck, F., Frith, O., Gatoo, A., Liu, K., Mulligan, H., Semple, K. E., Sharma, B., & Ramage, M. (2016). Engineered bamboo nomenclature. *BioResources*, 11(1), 1141-1161. <http://dx.doi.org/10.15376/biores.11.1.1141-1161>
- [24] Lubis, S. (2018). The equivalence and non-equivalence of proverbs across cultures. *International Journal of Social Sciences*, 1(1), 9-17. <https://doi.org/10.31295/ijss.v1n1.13>
- [25] Lubis, M. A. (2017). Budaya dan solidaritas sosial dalam kerukunan umat beragama di Tanah Karo. *Sosiologi Agama: Jurnal Ilmiah Sosiologi Agama dan Perubahan Sosial*, 11(2), 239-258. <https://doi.org/10.14421/jsa.2017.112-06>
- [26] Make, M., Kabede, A., & Alemayehu, F. (2014). The social implications of Wolaita proverbs: Functional analysis. *International Journal of Languages and Literatures*, 2(1), 225-246.
- [27] Mele, M. L. (2013). Kanuri proverbs: Metaphoric conceptualization of a cultural discourse. *Journal of African Cultural Studies*, 25(3), 333-348. <http://dx.doi.org/10.1080/13696815.2012.749783>
- [28] Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook*. 3rd Edition. Thousand Oaks: Sage Publications, Inc.
- [29] Mühlhäusler, P. (1992). Preserving languages or language ecologies? A top-down approach to language survival. *Oceanic Linguistics*, 31(2), 163-180. <https://doi.org/10.2307/3623012>
- [30] Nasution, J., Suharyanto, A., & Dasopang, E. S. (2020). Study ethnobotany of minyak Karo. *Budapest International Research in Exact Sciences (BirEx) Journal*, 2(1), 96-100. <https://doi.org/10.33258/birex.v2i1.740>
- [31] Pham, J. (2016). *Bamboo: The unity of the Vietnamese spirit*. *Chopsticks Alley*. Retrieved on April 21, 2020, from <https://www.chopsticksalley.com/post/2016/11/08/bamboo-the-unity-of-the-vietnamese-spirit>
- [32] Romaine, S. (2007). Preserving endangered languages. *Language and Linguistics Compass*, 1(1-2), 115-132. <https://doi.org/10.1111/j.1749-818X.2007.00004.x>
- [33] Rong, H. (2013). Proverbs reveal culture diversity. *Cross-Cultural Communication*, 9(2), 31-35. <http://dx.doi.org/10.3968/j.ccc.1923670020130902.1346>
- [34] Sada, C., Alas, Y., & Anshari, M. (2019). Indigenous people of Borneo (Dayak): Development, social cultural perspective and its challenges. *Cogent Arts & Humanities*, 6(1), 1-12. <https://doi.org/10.1080/23311983.2019.1665936>
- [35] Salamh, S. B., & Maalej, Z. A. (2018). A cultural linguistics perspective on animal proverbs, with special reference to two dialects of Arabic. *AWEJ for Translation & Literary Studies*, 2(4), 21-40. <http://dx.doi.org/10.24093/awejtls/vol2no4.2>
- [36] Samarin, W. J. (1988). *Ilmu bahasa lapangan*. Yogyakarta: Kanisius.
- [37] Sari, N. (2011). *Inventarisasi dan pemanfaatan bambu di desa sekitar Tahura Kabupaten Karo: Studi kasus di Desa Sembahe, Sibolangit dan Tongkoh Kabupaten Karo Bukit Barisan* (Unpublished bachelor's thesis). Medan: Universitas Sumatera Utara.
- [38] Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology*, 5(2-3), 137-182.
- [39] Sibarani, T. (2014). Ekolinguistik kebambuan dalam masyarakat bahasa Batak Toba [Ecology of bamboos in Batak Toba speech community]. *Medan Makna*, 12(2), 95-104.
- [40] Sitepu, B. P. (2013). *Kajian organologis kulcapi pada masyarakat Karo buatan Bapak Pauji Ginting* (Unpublished Thesis). Medan: Universitas Sumatera Utara.
- [41] Situmorang, R. O. P., Harijanja, A. H., & Silalahi, J. (2015). Karo's local wisdom: The use of woody plants for traditional diabetic medicines. *Indonesian Journal of Forestry Research*, 2(2), 121-131. <http://dx.doi.org/10.20886/ijfr.2015.2.2.830.121-130>
- [42] Syeda, A., & Kumar, B. S. J. (2014). A case study on bamboo as green building material. *International Journal of Engineering and Advanced Technology*, 4(2), 78-82.
- [43] Tarigan, B. (2017). *Kebertahanan dan ketergeseran leksikon flora bahasa Karo: Kajian ekolinguistik* (Unpublished Doctoral Dissertation). Medan: Universitas Sumatera Utara.
- [44] Tarigan, B., & Sofyan, R. (2018). Maintaining Karonese ecolexicon through traditional game cengkah-cengkah. *Int. J. Appl. Linguist. English Lit.*, 7(4), 177-183. <http://dx.doi.org/10.7575/aiac.ijalel.v.7n.4p.177>
- [45] Tarigan, B., Setia, E., Widayati, S., & Mbeti, A. M. (2016). Language maintenance and shift of flora's lexicons in Karonese traditional food: An ecolinguistic perspective. *Communication and Linguistics Studies*, 2(1), 13-17.
- [46] Tarigan, B., Sofyan, R., & Zein, T. T. (2020). Meanings of flora and fauna related ecolexicon in the Karonese proverbs. *Proceedings of the 1st International Conference on Applied Social Sciences, Business, and Humanity, ICO-ASCNITY*, 2 November 2019, Padang, West Sumatra, Indonesia. <http://dx.doi.org/10.4108/eai.1-11-2019.2293987>
- [47] Ukoma, A. N., Egwu, R. O. U., & Ogechukwu, C. I. E. (2016). African traditional religious philosophy and life's problems (Use of proverbs, idioms, wise saying and folklores/myths). *World Applied Sciences Journal*, 34(3), 323-329.
- [48] Wati, B. M., & Amri, U. (2020). Peribahasa negasi Minangkabau di Nagari Batipuah Baruah Kabupaten Tanah Datar [Minangkabau proverbs of negation used in Batipuah Baruah Village of Tanah Datar Regency]. *IMLAH: Islamic Manuscript of Linguistics and Humanity*, 2(1), 70-80.
- [49] Widawati, R., Fuadin, A., & Damayanti, W. (2018). Ethical values in Indonesian proverbs as character education investments. *Advances in Social Science, Education and Humanities Research*, 251, 470-475. <https://dx.doi.org/10.2991/acec-18.2018.107>

- [50] Widyastuti, S. (2010). Peribahasa: Cerminan kepribadian budaya lokal dan penerapannya di masa kini. *Proceedings of National Seminar of Yogyakarta University of Technology*, pp. 1-10.
- [51] Yang, J. (2014). Brief introduction to language ecology and language instruction. *Open Journal of Social Sciences*, 2, 106-110. <http://dx.doi.org/10.4236/jss.2014.212015>
- [52] Yu, X. (2008). *Bamboo: Structure and culture: Utilizing bamboo in the industrial context with reference to its structural and cultural dimensions*. New York: Simon & Schuster.
- [53] Zhao, W. (2013). A comparative study of the deep structure of culture reflected in English and Chinese social proverbs. *Journal of Language Teaching and Research*, 4(2), 392-400. <http://dx.doi.org/10.4304/jltr.4.2.392-400>
- [54] Zulvita, E., Fetriatman, & Harun, N. (1993). *Kearifan tradisional masyarakat pedesaan dalam pemeliharaan lingkungan hidup di daerah Propinsi Jambi*. Jakarta: Departemen Pendidikan dan Kebudayaan.
- [55] Zulyeno, B. (2019). The position of water and river in classical Persian literature. *International Review of Humanities Studies*, 4(2), 756-763. <http://dx.doi.org/10.7454/irhs.v4i2.182>



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