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# **The existence of lexicon Taru Pramana on Balinese traditional medicine: An ecolinguistic perspective**

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**Abstract**--This paper explains the existence of lexicon Taru Pramana on Balinese traditional medicine by using ecolinguistic perspective. Taru Pramana known as medicinal plants or herbal medicine in Bali where their existence is need to be preserved as one of the cultural heritages that reflects the local wisdom. The ecolinguistic perspective help this research concern in documenting the lexicon by listing the lexicon and their benefits or functions to avoid the extinction of the use of lexicon itself. The results show that the lexicon of medicinal plants in the concept of Taru Pramana has experienced a shift in the term of their naming and functions referring to the habits of the community in modern times which caused the medical plants no longer used in traditional ways as loloh (to drink) or boreh (to rub) but through several chemical processes.

**Keywords**--ecolinguistic, Taru Pramana, lexicon, traditional medicine.

**Introduction**

Humans and environment are two components that regularly interact and depend on each other to ensure the survival of both. The relationship continues to develop in terms of socio-cultural context which is largely influenced by modernization. This development causes the lexicons that commonly used in

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ancient time no longer be used and not even known by the modern generation. Technological grows rapidly and influenced the young generation with many languages and lexicons. This phenomenon can shift the existence of lexicons, especially those related to the culture and tradition. The change of the language and environment was studied through eco-linguistic study (Stibbe, 2010). The eco-linguistic study also reflects the nature of ecology and it seen as the core (Crystal, 2011).

Balinese people have utilized plants that naturally grow in nature for medicinal purposes as inseparable relationship between humans and environment. Various types of treatment by using plants then documented on *Lontar Usada Taru Pramana*. *Lontar* is a document that written on the palm leaf. *Lontar Usada Taru Pramana* contains the information of 167 medicinal plant species and its function in treating types of diseases in traditional ways. *Taru Pramana* is believed by Balinese people in the past as a powerful plant which can cure various diseases. This time the medical plants or *Taru Pramana* which is written in *Lontar* is not widely known by the modern generation. This will bring the information and the knowledge of traditional Balinese medicine loss in the society or it might the traditional treatment will disappear if it is not reintroduced. Previous research done by Antari, Suwantara & Erna (2017) to see the correlation of pemogan community knowledge about Usada Taru Pramana. The result shows that Pemogan Villager knowledge about medicinal plants in Taru Pramana is not correlated with the utilization conservation and behavior of herbal medicine.

Herbal medicine derived from plants and can be obtained in nature were often used as the cost is very affordable or even free. However, now a days the existence of the plants and their benefit slowly disappear. The lexicon of Taru Pramana supposed to be passed down from generation to generation. Various names for the same plant are the other factors apart from modernization which causes confusion over the benefits of a medicinal plant. The diversity of names and types of medicinal plants in Bali is an indicator that the environment has a variety of medicinal plants that need to be redescribed by remapping the lexicon of the medicinal plants for the sake of their sustainability. Those all happen because of the development of Bali island as the tourism destination changes the infrastructure and leads to the changes of both social and physical environment (Kardana, Mahayana & Rajistha, 2020).

The island got the influence by various culture from all over the world. The changes also give the impact to lexicon where it usually used by the community slowly disappear. People's behavior changes due to the growth of the area as tourist destination. The changes of environmental and people's behavior both give the impact to the language use by the society (Fill, A., & Muhlhausler, 2001). Kosat & Umiyati (2018) observing the lexicon of Uma Baloko to find the activities that relates to the lexicon and categorized them into biotic and abiotic environment as it was really important to examines the lexicons and their sense relation as interrelation between ecology and language. Rajistha (2016) done the research about lexicon of nature in metaphors by using eco-linguistic approach to figure out the existence in Balinese language. Analysis of eco-lexicon can be in the form of word class (noun, verb, or adjective) and in the form of phrase (noun phrase, verb phrase, or adjective phrase). According to Sarmi, et all (2016), that is

really important to analyze the lexicons especially mention in their research about the bamboo and coconut trees which the lexicons is associated with two entities. Yuniawan (2017) in their research found that the study of eco-linguistic is very important before the environment affected with exploitation and destruction.

Another research that is concern with the environmental analyzed the water in Toba Batak language community. Simanjuntak (2019) found that the knowledge of young generation about natural term begun to decrease due to the impact of technology. The new lifestyle causes the environmental damage and so does the language. It brings the lexicon “water” need to be described again to maintain its cultural function. In line with the lexicon water, Nirmalasari (2018) describes the lexicon of a kite in Muna Speech Community called kaghati. Their research is conducted by involving 150 respondents from Muna regency and the findings elaborate the lexicon of kaghati shape which consist of ten lexicons as nominal and abiotic category.

This research focuses on lexicons related to the traditional medicine of Taru Pramana environment. This lexicon slowly disappears in the society. By doing this research, a shift in the meaning and function of Taru Pramana’s lexicon can be revealed. This ecolinguistics research provide the language documentation of the lexicon taru pramana which has different point of view in the society nowadays. The documentation of lexicon gives the great benefits for the next generation as the habits, culture and language continues to change in Balinese language, the study that examines about taru pramana’s lexicon is quite urgency to be done.

This research has been done by using purposive sampling system taken place in Batuyang Batubulan Village, Gianyar district, Bali Province at September 2020 till February 2021. The research population is the community of Gang Pipit Selatan in Batuyang Batubulan. Research sample is taken from 100 person from a variety social and educational background which is divided into 50 samples from young generation between 15 – 25 years old and 50 samples from the old generation between 50 – 80 years old. A questionnaire used as the tool in this research. The questionnaire consists with some questions and pictures related to the lexicon of taru pramana in Balinese traditional medicine. Data analysis done by calculating the level of understanding of the lexicon taru pramana listed in questionnaire. The analysis completes with the explanation of each lexicon descriptively as the linguistic information.

## **Literature Review**

### **The Study of Ecolinguistics**

Ecolinguistics is the study of ecology and linguistic which is defined as the interaction between language and environment. According to Bang, J.Chr & Door, (1993), ecolinguistics as the part of applied linguistics focus on the ways of language involve in ecological crisis. Ecology as widely known is the study of biological species, meanwhile the study of linguistics in ecolinguistics starts from the lexicon. Lexicon in ecolinguistic is a list of words which describes about the biotic and abiotic natural environmental. Ecolinguistics seeks to create healthy environment by incorporating local ecological wisdom into language (Mbetse, 2015).

Sapir (1912) explains that ecolinguistics is the interaction between language and environment happen through a language speaker and it caused the development of the language where the new lexicons appear, shift the lexicons by replacing it with another lexicons, or extinction the lexicons which means the loss of certain lexicons. (Haugen (1972) said that the environment of a language is a speaker in the form of cultural and social setting.

## Method

This study aimed to describe the existence of Lexicon Taru Pramana by using a qualitative descriptive approach. Haryono (2011) said that language creation can occur following the development of the times which is in accordance with Hasan (2018) explained about the language development subject to the function of the word. The data were sourced from the Balinese community located in Batubulan Gianyar Bali. The community was selected because they still use the traditional medicine to cure the sickness which is proper for this research. Data were obtained by observing and interviewing the community to reveal what kinds of Balinese medicine which is based from the plants that they still used until now.

## Finding and Discussion

Lexicon is a list of words which explain about the environment of language (Kridalaksana, 1982). According to Fill & Muhlhausler (2001), the environment if language includes the natural, cultural, physical and social part of language. The concept of Taru Pramana's Lexicon consists of the explanation of their latin name, categorization of the word class, and benefit of each lexicon as Balinese traditional medicine. The results show that some medicinal plants are not exist and not even known both in terms of name, form and benefits by the community. Some of th medicinal plants were found to have Latin names which are another designation for the lexicon of Taru Pramana which found in Lontar which Balinese people used to use it in ancient times. The lexicons are *gamongan*, *dadap*, *kepah*, *semanggi*, *kemerakan*, *krasi* and *pule*. The entire lexicon is a natural plant that grows in nature. Unlike some medicinal plants written in lontar taru pramana where can be cultivated, these plants that experience a shift in their benefits grow naturally without human intervention. This is the reason why these medicinal plants no longer recognized by the younger generations. The description of each lexicon can be seen as follows;

Table 1  
Lexicon of Taru Pramana that experience a shift in benefits

No.	Lexicon in Balinese Language	Scientific Name	Word Class	Benefits found in Lontar
1.	Gamongan	<i>Zingiber zerumbet</i>	Noun	Treat tingling hands
2.	Dadap	<i>Erythrina variegata</i>	Noun	Flatulence, Heartburn
3.	Kepah	<i>Streculia foetida</i>	Noun	Pain in the bones
4.	Semanggi	<i>Hydrocotyle sibthorpiodes Lam</i>	Noun	Itchy skin

5.	Kemrakan	<i>Caesalpinia pulcherrima</i>	Noun	Treating seizures, Fever, Diarrhea in children
6.	Krasi	<i>Lantana camara</i> Linn	Noun	Reduce hangover
7.	Pule	<i>Alstonia Scholaris</i>	Noun	Relieves fever, Inflammation

The lexicon of medicinal plants above shows a small part of the diversity of medicinal plants in Bali. Overall, the lexicons of Taru Pramana which is categorized as flora were very close to Balinese society in ancient times and they were used as medicines. Currently the existence of these lexicons is difficult to find. This happen because of some people may not know the name of these medicinal plants even though they live side by side. Because of this, the benefits of these medicinal plants are lost. So that plants which used to known as Taru Pramana in Bali which has a lot of benefits then seen just as reeds, shrubs or ornamental plants.

### **Gamongan (*Zingiber zerumbet*)**

Lexicon gamongan in Latin is known as *zingiber zerumber* which is a kind of spice that useful as medicine for Balinese people. The rhizome can be used as a medicinal mixture or herbal medicine. Written in lontar Taru Pramana, gamongan which is a biotic plant, is used as an itching medicine. Gamongan lately has rarely been found in Bali. Gamongan in Indonesian is known as lempuyang and usually use for infection because it contains high antioxidants. The lexicon gamongan in Balinese is rarely known by the young generation because it is replaced by the use of the lempuyang lexicon taken from Indonesian language. The disappearance of the gamongan lexicon occurred due to a shift in naming from Balinese to Indonesian, so that the lexicon needs to be re-described in more detail and also the existence of other names which turn out to lead to the same lexicon so that the meaning and benefits of gamongan can be preserved. Meanwhile, the benefits of gamongan grows as more research has been done and it was found that gamongan has high antioxidants so that gamongan is currently being used through a modern process and mixture with some drugs in tablet or capsule form. The benefits of gamongan did develop, but the gamongan lexicon in Balinese society began to disappear and replaced by the use of lexicons in Indonesian or Latin.



Figure 1. Gamongan

### **Dadap (*Erythrina variegata*)**

Dadap is one of the lexicons that also get changes in benefits for the population in Bali especially by the younger generation. Dadap has latin name *Erythrina variegata*. Dadap is a plant that is currently known as a living fence and shade. As written in lontar Taru Pramana which is believed to be a guide to traditional medicine system in Bali and now perform as a cultural heritage explain that the leaves are useful to treat fever and heartburn that have been used from ancient times in the traditional Balinese healing system. in ancient times, when Balinese people experienced fever or heartburn, dadap leaves were crushed and mixed with sliced onion and coconut oil by rubbing them on the stomach to reduce fever. The leaves consist of three litters with a green or light green color. The leaves also can be cooked as vegetable. In Balinese society, besides being used as a medicines and food, people known this lexicon as a magic wood so that both the leaves and stems are always used in religious ceremonies in Bali. The younger generation in Bali has minimum information related to the shape and benefits of the lexicon dadap. This is very worrying because the young generation in Bali does not have sufficient knowledge of lexicon dadap causing a loss of knowledge about the benefits of dadap itself as medicinal plants and shifted to become a shade tree.



Figure 2. Dadap

### **Kepah (*Streculia foetida*)**

Kepah is the lexicon that has several other names. In Indonesian language, it is known as kepuh and the latin name of kepah is *Streculia foetida*. Variations in naming often leads confusion for the younger generation. When they hear or read about the lexicon kepah, they began to wonder if it was the same lexicon as the had imagined and they have heard in Indonesian language. It was very surprising that the young generation can recognize kepah through the photos shown to them. It means that kepah is still exist in society because they now the form of kepah but sadly they do not know the lexicon and the benefits of kepah used by the ancestors as traditional medicine in Bali. It can be seen in the picture that kepah is a type of tree that is closely related to cottonwood. This tree is very tall and it can be found in some cemeteries in Bali and it is believed that the sacredness of this tree is able to heal the sick and then used by the healer in the healing system in Bali. The wood is light with broken white color inside but rough outside. The older stalk trees were used to make boats and coffins. The leaves were used to wash hair and as a rub to relieve pain in sprained or broken limbs. In lontar taru pramana it is written that as a tree with healing power the benefits of kepah are to treat fractures. Currently kepah is only used as a raw material for making cotton or used in making pillows.



Figure 3. Kepah

### **Semanggi (*Hydrocotyle sibthorpiodes* Lam)**

Semanggi or in English known as clover has been used for medicinal purposes for the Balinese. It was often used to treat itchy skin in the past when modern medicine did not exist yet. The latin name of semanggi is *Hydrocotyle sibthorpiodes* Lam. This plant has soft stems that thrive in moist, open and shady places on roads, ditches and fields. To get medicinal benefits of Semanggi, the old generation claimed that it can be obtained by crushing the leaves and then rubbing it on the itchy part. Semanggi still can be found lately but the existences are very rare. This medicinal plant to some people who do not know its benefits looks like a wild plant that has no benefit. Although at present time there are many modern medicines to treat itching can be obtained easily. It should be realized that clover is also contained in modern medicine by using technology with more hygienic packaging, however the name written on the package is in latin form. This makes the lexicon begins to experience extinction in language use.



Figure 4. Semanggi

### **Kemrakan (*Caesalpinia pulcherrima*)**

Kemrakan which is a lexicon in Balinese has another name in Indonesian namely kembang merak, while in Latin it is called as *Caesalpinia pulcherrima*. Since this lexicon has many names, the young generation rarely recognize the plant. It is also because of this plant is difficult to find today both in urban and rural areas. The lexicon kemrakan has shifted in terms of its utilization. Kemrakan is a plant that has many benefits in traditional healing. As taru pramana in Balinese medicine, this plant can cure diarrhea, fever and seizures in children. This plant is often found in garden or yard, but as an ornamental plant. This happen because of the benefits of the plant are not known by most people. This plant eventually experienced a shift from its initial use in traditional medicine become an ornamental plant.



Figure 5. Kemrakan

### **Krasi (*Lantana camara* Linn)**

In Indonesian, krasi known as tembelekan with Latin name *Lantana camara* Linn. Balinese people in ancient times found krasi to have benefits as medicine and it written in lontar taru pramana. This plant used to be very easy to find but has recently become rare. By the young generation, this plant known only as an ornamental plant. In lontar taru pramana, this plant is part of medicinal plants that previously used in traditional medicine to relieve the feeling of hangover. This plant is easily found on the edge of natural forest and belongs to the weed category. Research about this plant has been carried out in India as a drug for respiratory. However, for the Balinese people, the benefits of this medicine have recently disappeared together with the idea about what is lexicon krasi itself.



Figure 2. Krasi

### **Pule (*Alstonia Scholaris*)**

Pule is a tree with the Latin name *alstonia scholaris*. The lexicon pule is currently not known as a medicine but as a shade tree. This tree is from a type of perennial plant that lives in Bali, Java and Sumatra. Pule also known as cork wood. This tree is widely used for roadside greening. When seen in lontar taru pramana, the bark of the pule tree can be used as a medicine to treat the heat, fever and sore throat. Today, the younger generation of Balinese people begins to leave pule as traditional medicine. The loss of pule as medicine has threatened the existence of the pule lexicon in the community which has been known in the traditional Picture medicine system.



Figure 7. Pule

For further understanding about the benefits of the lexicon *gamongan*, *dadap*, *kepah*, *semanggi*, *kemerakan*, *krasi* and *pule* as the traditional Balinese medicine, the method of using those plants which are categorized as medicinal plants or Taru Prmana must be known. In Balinese traditional medicine, there are two methods that are usually used in utilizing medicinal plants, they are in the form of *loloh* and *boreh*. Traditional medicine in the form of *loloh* is the use of medicinal plants by taking the juice to be drunk, while *boreh* is a treatment by crushing medicinal plants into a solid liquid which is applied by rubbing or smearing it on the affected area. The following are applications of the seven Taru Pramana's lexicons which is still exist but how to use it began to be unknown.

Table 2

The application of lexicon Taru Pramana in traditional ways and their existence

No.	Lexicon	Application	Existence		Ecological Category
			Past	Now	
1.	Gamongan	<i>Loloh</i> (drink)	(+)	(-)	Biotic
2.	Dadap	<i>Boreh</i> (rub)	(+)	(+)	Biotic
3.	Kepah	<i>Boreh</i> (rub)	(+)	(-)	Biotic
4.	Semanggi	<i>Boreh</i> (rub)	(+)	(+)	Biotic
5.	Kemrakan	<i>Loloh</i> (drink)	(+)	Exist (-)	Biotic
		<i>Boreh</i> (rub)	(+)	Exist (-)	Biotic
6.	Krasi	<i>Loloh</i> (drink)	(+)	Exist (-)	Biotic
		<i>Boreh</i> (rub)	(+)	Exist (-)	Biotic
7.	Pule	<i>Loloh</i> (drink)	(+)	Exist (-)	Biotic
		<i>Boreh</i> (rub)	(+)	Exist (-)	Biotic

The table above shows that several types of medicinal plants can be used in the form of *loloh* or *boreh* and some are both. *Gamongan* can be used in the form of *loloh* meanwhile *dadap*, *kepah* and *semanggi* can be used in the form of *boreh*. Medicinal plants that can be used in the forom of *loloh* and *boreh* are *kemrakan*, *krasi* and *pule*. All those lexicons still exist but some of them changes in terms of their benefit and naming, so it is necessary for those seven lexicons to get attention especially in the data collection with the aim of language conservation so that the lexicon Taru Pramana does not disappear easily. By collecting data on the lexicon along with its benefits which are part of language conservation, the future generation will be able to understand each lexicon as a cultural heritage and at the same time can take the advantage of this cultural heritage in terms of

medicine because they have fully understood its functions, benefits and the most important one is how to use it.

## Conclusion

The lexicon Taru Pranama that still exist in Bali which experience a shift in their functions and names are *gamongan*, *dadap*, *kepah*, *semanggi*, *kemerakan*, *krasi* and *pule*. The lexicon *gamongan* better known as lempuyang taken from Indonesian language as they experience the naming shift but the function remains the same. The lexicon *dadap* still use by the society but *dadap* experience a shift in its function which was originally use to cure a heartburn into a shade tree. Other lexicon such as *kepah*, *kepah*, *semanggi*, *kemerakan*, *krasi* and *pule* also experienced the same thing in the shift of naming and fuctions. By knowing what happen to those lexicons and reintroduce them to the young generation and it can be pass to the next generation as cultural heritage.

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## References

- Antari, N., Suwantara, T., & E. (2017). The Correlation of Pemogan Community Knowledge about Usada Taru Pramana with the Behaviour of Utilization and Conservation of Herbal Medicine. *Traditional Medicine Journal*, 22(3), 206.
- Bang, J. Chr & Door, J. (. (1993). *Ecolinguistics: A Framework*. Blackwell Publisher. <http://www.jcbang.dk/main/ecolinguistics/E>
- Crystal, D. (2011). *Dictionary of linguistics and phonetics*. John Wiley & Sons.
- Fill, A., & Muhlhausler, P. (2001). *The Ecolinguistics Reader: Language, Ecology and Environment*. Continuum,Print.
- Haugen, E. (1972). *The Ecology of Language*”, in Dil, A. S. (ed.). Stanford University Press.
- Kardana, I. N., Mahayana, I.M.A., & Rajistha, I. G. N. A. (2020). The Dynamics of Balinese Lexicon in Sanur Tourism Area: An Ecolinguistic Approach. *International Linguistics Research*, 3(4), 142.
- Kosat, P M Y & Umiyati, M. (2018). Lexicon of Uma Baloko Establishment of Kodi Speech Community of Southwest Sumba. *RETORIKA: Jurnal Ilmu Bahasa*, 4(2), 113–121.
- Kridalaksana, H. (1982). *Kamus Linguistik*. Gramedia.
- Mbete, A. M. (2015). Masalah Kebahasaan dalam Kerangka Pelestariannya: Perspektif Ekolinguistik. *Jurnal Tutur*, 1(2), 181–188.
- Nirmalasari, et all. (2018). Ecolexicon of Kaghati Shape in Muna Speech Community. *International Journal of Linguistics, Literature and Translation (IJLLT)*, 2(1), 33–41.
- Rajistha, I. G. N. A. (2016). Beblabadan Bahasa Bali dalam Perspektif Ekolinguistik. *RETORIKA: Jurnal Ilmu Bahasa*, 2(1), 79–94.
- Sapir, E. (1912). Language and Environment. *American Anthropologist*, 14, 226–242.
- Sarmi, Nyoman, et all. (2016). The Intergenerational Understanding and Use

- Level of Bamboo and Coconut Tree Lexicons in the Speech Community of Using. *E-Journal of Linguistics*, 10(1), 1–15.
- Simanjuntak, T. A. (2019). Ecolinguistic “Water” In Toba Batak Language Community. *Journal BASIS*, 6(2), 209–214.
- Stibbe, A. (2010). *Eco-linguistic and Globalisation*. in *Nikolas Coupland (ed) The Blackwell Handbook of Language and Globalisation*. Blackwell Publisher.
- Yuniawan, T. et all. (2017). The Study of Critical Eco-Linguistic in Green Discourse: Prospective Eco-Linguistic Analysis. *HUMANIORA*, 29, 291–300.

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**Anak Agung Putu Putra** is a lecturer at Udayana University, Bali, Indonesia. He obtained his Master Degree in Linguistic Study Program, Postgraduate Program, Hasanuddin University with his final thesis about the construction of the oblique in Balinese language. He obtained his Doctoral in September 2007. He joined several researches, workshops, seminars, and community services.