

The subak lexicon based on local wisdom as the development of educational tourism promotion in the subak teba majalangu, Kesiman Kertalangu village, Bali

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Abstract - The Subak Teba Majalangu Kesiman Kertalangu Village is intended for the community and introduces nature-based education. The concept of educational tourism itself is focused on nature tourism, namely agriculture where the activities will be more emphasized how to plow, hoe, make seeds, plant rice, fertilize, harvest, and other agricultural activities. The purpose of this study was to create a mapping of the lexicon containing local wisdom in the Subak Teba Majalangu. This research has an urgency to support the preservation of regional culture, as well as preserve regional languages as the cultural wealth of the archipelago. The qualitative method with an anthropological approach was used in this research. The data will be collected through interviews with selected informants, do the observation, then make an analysis based on domains, and present using tables and images. The result of this research is there are five groups of Subak, which are the group of tillage tools, weed controller, various kinds of sickles, treating and monitoring tools, and harvest tools. Those tools have their functions and purposes to help farmers starting from tilling the land, planting, and tending until harvesting. Although some of the tools are no longer used by the farmer, this research can be used to preserve the Balinese culture especially the lexicon of Subak, the Balinese traditional irrigation system.

Keywords: educational tourism, lexicon, local wisdom, subak

1. Introduction

The values of the local wisdom of a culture are reflected in the language lexicon used by the community (Fasya & Prahikmahtin, 2018). To maintain the cultural heritage of the archipelago, several studies on the lexicon containing local wisdom have been carried out. One of them is about the Urug Traditional Village community system in West Java which produces inventories in the form of a naming lexicon in the community organization system, a lexicon for community events, and a lexicon related to community rules (Fasya & Prahikmahtin, 2018). The application of local wisdom in the *Ogoh-Ogoh* parade ahead of *Nyepi* in Pengalangan village, East Java, examines the function and metaphor of the lexicon in art and religious rituals where there are values of solidarity, values of respect, and norms of politeness in them (Rachmawati, 2017). Karo Batak's local wisdom in North Sumatra is associated with traditional games, while in Tanjungrejo village in Central Java it is even reflected through its traditional food lexicon (Tarigan & Sofyan, 2018). The lexicon is also used to describe the values of character education contained in the culture of the Sumbawa people (Hermansyah & Gunawan, 2021). The role of the media in conveying information is responded to by the audience with changes in perceptions, attitudes, and behavior (Semara & Lestari, 2021).

Environment-based tourism is currently being developed as an educational tool to raise awareness of environmental and cultural preservation, to minimize environmental pollution. The development of educational tourism has also received attention from stakeholders on the island of Bali, especially in designing tourism development and recovery after the Covid-19 pandemic. One of the pioneers of educational tourism in the city of Denpasar is the village of Kesiman Kertalangu which manages the Subak Teba Majalangu Educational Tour.

The idea stems from the community's desire to bring children closer to nature, animals, plants, and Balinese culture, and to prevent them from becoming addicted to gadgets during this pandemic. The naming of Teba Majalangu is an acronym for Places of Learning Nature, while Majalangu is the name of a kingdom in the Kesiman Kertalangu village area in ancient times. Teba Majalangu is the result of the implementation of Village Government Apparatus Guidance and Supervision, Village Development Planning and Evaluation, and Village Asset Development and Management which have been carried out by Kesiman Kertalangu village officials since 2020. The local community wants to maintain urban green open spaces and avoid the conversion of active rice fields area of 80 hectares and introduces Subak as local wisdom.

This research is in line with the program of the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration of the Republic of Indonesia, namely the Tourism Village Promotion Competition in 2022 (news can be seen at <https://kemendes.go.id/>) which aims to develop Bumdes as a tourist village manager. Seeing the potential for Edu-ecotourism development in Bali, it is necessary to design a promotional strategy to attract more tourists. Meanwhile, the promotions carried out are still limited to word of mouth, while the <https://tebamajalangu.com/> site has only just begun to be developed as a digital promotional media. Therefore, it is necessary to prepare informative and attractive content to attract tourists, promotional content in the form of narratives, reviews, photos, and videos that describe the potential of the village.

Educational tourism belongs to the category of special interest tourism in tourism (Rizaly et al., 2021). This educational tour is categorized according to the presence of certain motivations which are generally associated with hobbies, time, and the pursuit of leisure, in which there is an element of merging between travel and education (Fitriana, 2018). Educational tourism allows it to be used as a multifunctional alternative learning activity. The purpose of this educational tourism activity is more to activities carried out directly from the source, as a means of recreation and for children's games (Purwana Is & Yanurtuti, 2020). From this explanation, educational tourism in question is all activities carried out by tourists by combining the concepts of travel and education.

The concept of educational tourism has been carried out by many tourist destinations in Indonesia, including Yogyakarta with Sindu Kusuma Edupark, which provides tourism

products in the form of rides for children to adults (Dewi & Hermawan, 2019); Blitar with Kampung Chocolate Tour which offers field trip activities about chocolate (Purwana Is & Yanurtuti, 2020). In Bali itself, tourism objects that carry the concept of educational tourism, include Tukad Bindu Denpasar which prioritizes education to the community on how to protect the river environment as one of the goals of maintaining sustainable tourism (Agung et al., 2021). In addition, there is also an educational tour of Subak Teba Majalagu which also provides recreation and knowledge to children to adults about agriculture.

This study aims to preserve a lexicon containing local wisdom, as well as design content for the digital promotion of educational tourism in Bali. Meanwhile, the specific objective of this study is to create an inventory of the Balinese language lexicon related to the description of Subak. The urgency of this research lies in the application of local wisdom-based lexicon content in digitizing the promotion of educational tourism as a solution to the problems experienced by Bali tourism during the Covid-19 pandemic

2. Method

Research activities are centered on the Subak Teba Majalangu located in the village of Kesiman Kertalangu, East Denpasar. This research is qualitative research with a phenomenological approach, describing and analyzing phenomena that exist in the form of words and language. After analyzing the situation and collecting literature related to educational tourism developed, the research will be carried out through three stages, namely data collection, data analysis, and presentation of data analysis results. In the first stage, lexicon data was collected through in-depth interviews with purposively selected informants. In addition, participant observation was also carried out to directly observe the process of interaction between tour guides when carrying out guiding activities in Teba Majalangu educational tours. In the second stage, lingual data were analyzed using anthropological linguistic methods to take an inventory of the Balinese language Subak lexicon, and classify it based on domains, to find the symbolization of Balinese local wisdom related to the environment (agriculture). In the third stage, the results of data analysis will be presented using tables and lexicon lists, as well as images for visualization.

3. Results and Discussion

The subak lexicon in this study based on the tools used by the traditional farmers and is grouped into 5 based on its function. The following is a description of them.

3.1 The group of tillage tools which is divided into light and heavy tillage tools

Table 1 The group of tillage tools

Tillage group	Name	Function
Light tillage	1. <i>Tulud</i>	to improve mud flatness.
	2. <i>Tambah Kejeng</i>	to cultivate dry land and clear the edges of bunds in wetlands
	3. <i>Tambah Gigi 4</i>	to cultivate wetlands
	4. <i>Gau</i>	for refining silt on wetland and on dry land for constructing beds.
Heavy tillage	1. <i>Tenggala</i>	to cultivate dry and wet soil
	2. <i>Lampit</i>	as sludge in wet soil

Agriculture is divided into two (2), wet farming and dry farming. Wet farming, such as rice and some vegetables, like water spinach, *gonda*, and dry farming, such as corn, beans, spinach, eggplant, chilies, and tomatoes. Before the existence of tractor machines, farmers used tools that were driven manually by human power for both wet and dry land. The tool used is in the form of a hoe, which is divided into several types, among others, in the form of bamboo for leveling the ground called *tulud*, a hoe that looks like a sheet is called *tambah kejeng*, while the hoe used for wetlands that has four (4) teeth is called *tambah gigi 4*, and whose teeth are more

than 4, can be 6, 8, 10, 12 at most called *Gau*. While heavy tillage tool is driven by animal power, namely cows or buffalo. The tool named is a *tenggala* or plows to help hoe, while for leveling it is called a *lampit*.

3.2 The weed controllers at the beginning of growing (before the age of 25 days)

Table 2 Weed controller

Num	Name	Function
1	<i>Pengelunduan</i>	to weed the land where the weeds have not grown (prevent weeds)
2	<i>Cakar</i>	to weed the land that has already hardened, and the weeds have grown
3	<i>Kiskis</i>	to eradicate weeds (rice pests) that are stubborn.

In the second group, the maintenance tools for rice plants from new planting to a maximum of 25 days, if more than 25 days the tools can no longer be used. At the age of 5 days, the rice plant has grown into a nuisance plant that must be eradicated so that it does not interfere with the growth of the rice plant. There are 3 types of tools used in eradicating nuisance plants that grow around rice plants, namely *pengelunduan*, *cakar*, and *kiskis*. When the nuisance plants have not yet grown, the soil has been loosened using 2 tools, namely *pengelunduan* and *cakar*. *Pengelunduan* is used on land that is still soft, while land that has hardened uses *cakar*. If there are still stubborn ones when the rice plants are old, cut them using a *kiskis* that has a knife.

3.3 The various kinds of sickles (used continuously from tillage to harvest)

Table 3 Sickles

Num	Name	Function
1	<i>Arit Baong Cangak</i>	for cutting hard grass and not for slashing. For example, elephant grass, reeds, <i>belu</i>
2	<i>Caluk</i>	to cut woody nuisance plants on the upright side (woody plants growing sideways).
3	<i>Arit gobet</i>	to cut the grass from which the grass will be taken. For example: for cattle feed.
4	<i>Arit gobet Luk Tabia</i>	to mow the grass between the old rice plants
5	<i>Arit Merai</i>	to get rid of
6	<i>Taah Pendek</i>	to cut woody nuisance plants on flat ground (woody plants that grow upwards).
7	<i>Taah Panjang</i>	to clear weeds on upright soil.

The third group used by the traditional farmers is the sickle group, which is divided into 2 forms, namely curved and straight. In general, a sickle is curved for clearing grass on a flat surface. The straight sickle is used to clear the grass that is perpendicular, which is on the edge. These tools are used throughout the time of farming, starting from tilling the land, planting, and tending until the rice is harvested.

3.4 The tools for treating and monitoring rice from the birds and other pests

Table 4 Treating and Monitoring tools

Num	Name	Function
1	<i>Teluktak</i>	to repel birds
2	<i>Kepuakan</i>	to make a sound to repel birds
3	<i>Kancuh</i>	to apply pesticides

There are 3 tools that are grouped into tools for treating and monitoring rice from the threat of birds and other pests. The first tool is *Teluktak*. This tool is in the form of a propeller that is mounted at a height and if blown by the wind it will spin and hit the *kentongan* below, causing a sound that is not liked by birds.

The next tool that is made of bamboo is a tool to repel birds that are called *kepuakan*. The way the *kepuakan* works is to shake it around so that it makes a sound that birds don't like. The last tool is in the form of a broom made of reeds or palm fiber called *Kancuh*, whose function is to spread pest exterminator toxins from small plants to fruiting, especially fruitful plants. Usually the bullies such as insects, pests, and birds. In ancient times, farmers made a pesticide solution that was placed in a bucket, then spread it using a *kancuh*. It is dipped in a solution and then shaken over the rice plants to repel insects that attack the rice. Currently, it is no longer used because there are more modern tools in the form of a spray, both manual and machine.

3.5 The harvesting tools for ancient rice that cannot be threshed (still in the form of *malai*) which are tied up and brought home

Table 5 Harvest tools

Num	Name	Function
1	<i>Anggapan</i>	to cut rice bali
2	<i>Depuk/Penatapan Besar</i>	to beat the rice stalks so that they are flat and bloom in order to avoid scattering the rice for 1 stem (1 large bunch of rice)
3	<i>Depuk/Penatapan Kecil</i>	to divide 1 large bunch of rice (1 <i>Gedeng</i>) into 2 parts.
4	<i>Sanan</i>	to carry rice plant

A fifth group is a tool for harvesting rice used by farmers in ancient times. Rice plants generally do not fall out easily and are firmly attached to the stems, so they must be picked one by one. The plucking tool is a knife, which is called an *anggapan*. After picking, they are collected and tied so they can be shouldered or carried and brought home. Need special skills in tightening the bond. Tied in such a way and then beaten with a tool called *depuk* or *penatapan*. *Depuk* is divided into 2 which have different sizes. One of the *depuk* has a flat surface and the other has a wide and convex surface. The rice plant is hit in such a way that the bonds will be even tighter. Furthermore, it will be pierced with a tool called *sanan* so that it is not scattered. Currently, these tools are no longer used because they have used machines to cut rice so that what is produced is already in the form of grain and put into bags carried by vehicle so that it does not need to be shouldered anymore.

4. Conclusion

From the discussion above, it can be concluded that the Subak lexicon tools containing local wisdom in Subak Teba Majalangu is divided into five groups, including 1) the group of tillage tools; 2) the weeds controller; 3) the sickles; 4) treating and monitoring tools; and 5) the harvest tools. The diversity of the agricultural lexicon, in this case the subak system which is a traditional farming system in Bali, has its own function, starting from the beginning of planting until the rice is harvested. Each group has a function, namely 1) as a tool for cultivating the soil, 2) for controlling weeds, 3) functioning as a cutting tool, 4) as a treatment and supervision of rice from the threat of birds and pests, and 5) as a tool at harvest. At the present time these tools are not widely used by farmers because they have been replaced with more practical machines. That is why this study will be useful for the young generation for developing the local wisdom of Subak as one of the Balinese traditional irrigation systems.

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