

**SEMANTICS ANALYSIS WITHIN THE COLLABORATION
CULTURE ON WHITE CATTLE PRESERVATION AT
TARO VILLAGE**

I.G. AG. I. ARYANI*

D.A. WARMADEWI*

A.A.A. S. TRISNADEWI*

ABSTRACT

Language in semantics is one of the supporting elements of culture and used to be an important aspect of the society. Both language and culture is an intertwined that could not be separated within times, places and function. Stimulus and response (S-R) in this study is considerably used as the justification to convince its truthness in the meaning of language collaborated within the culture aspect. Stylistic language in treating white cattle as sacred animal with a polite language significantly affected to the response of the animals, particularly on the use of names. The treatment of naming white cattle for female and male was similar to human names found in the location of conservation. This symbolizes people respect to the white cattle as sacred animal. Moreover, verbal and nonverbal signs through stimulus and response showed that society at Taro village believes with the sacredness of white cattle as cultural phenomenon should be taken concern for ecosystem preservation. The people defense that genetic deviation called as *albino* mainly used for ritual occasion. The stimulus and response in science collaboration affecting the result in which white cattle felt comfortable since treated humanely by farmers as herdsman as being applied in the concept of animal welfare and *Tri Hita Karana*.

Keywords: culture, language, stimulus, response and white cattle

* Udayana University, Denpasar, Bali

Introduction

Linguistics as the study of language could not be separated within culture, both of them are intertwined. Language is one of the elements in culture. Its function as interaction media or communication among human livings, non human such as animals and environment surroundings. Suwandi (2008) conveyed that language is quite complex, not only considering on language as an element and culture support but also has an important role for the society. The relationship could not be separated within times, places, or function. According to Bloomfield (in *Semantics* by Leech translated in Partana, 2003), language as a remote control of human stimulus could effect response to other organism. In this study, the culture of white cattle raised at Taro village was analyzed in terms of linguistics, especially semantics as wide scope of the language study. The stimulus of farmers interacted on white cattle raised as the highest symbol of ritual occasion and analyzed in the concept of animal welfare and *Tri Hita Karana*. Those concepts were considered from treatment of raising the white cattle, response of the species, and cultural reflection. Semantics and culture is unique collaboration of knowledge which could give benefit to the development of study.

Previously, Taro village was a forest within the range of 1562.20 Ha and 650 meter height above sea level. White cattle were living as wild animals, unsheltered and majorly have bigger performance compared to the current cattle. They destructed the land of farmers so decision had to be considered to solve the problems. Recently, this location has been changed, redesigned, prepared in shelters to be a conservation area for the white cattle of Taro with welcoming statue of Siwa statue riding white cattle in the centre of the area. This location prepared by the government to be one of the object tourism in Bali because of the society belief of white cattle sacredness and holiness. It is one of the indigenous cattle in Bali, eventhough their differences of colour with the normal local cattle (reddish-brown) stated as genetics deviation or known as *albino*. In this case, this species are treated in care by the people in the village of Taro for preservation and conservation.

There were several problems encountered in this research, as of:

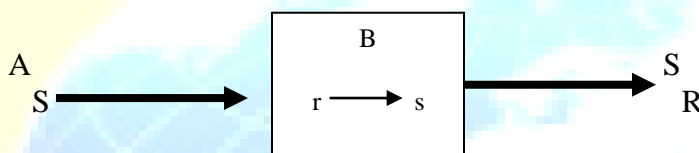
- a. What kind of lexical items used and their meanings for those white cattle?
- b. How societies treated the white cattle compared to the normal colour of Bali cattle at Taro village?

- c. How does those species response to the treatment given by the society?
 d. Did the concept of *animal welfare* and *Tri Hita Karana* conducted in raising the white cattle?
 How did they implement them?

The linguistics and culture were analyzed in order to obtain an interesting and unique collaboration of multidisciplinary study. Knowledge is not mainly focusing on a particular science but merging them in the process of development.

Literature Review

Stimulus-response of semantics defined in a scheme by Bloomfield (in Partana, 2003: 94) as below:



(*s* and *r* is stimulus or verbal response, *S* and *R* is external stimulus atau response).

If *A* is a practical event preceding a speech in a language, *B* is the conveyed speech or language meant by occurrence of response on the listener. In addition, Moris (in Partana, 2003: 95) mentioned that *A* is a pre-stimulus if none of the stimulus-object starting a response-order from a group of particular behaviour causes an organism to give response to the stimulus with the response order from this group of behaviour, so *A* is the symbol.

Semantics analysis on white cattle observed from stimulus findings in the field, for example: words use, treatment of herds and response or reaction of animals.

Bali cattle showed the similarity of colours with a minimum deviation which may occur among species. However, farmers did not like this genetic deviation caused a decrease of population. Currently, it was reported that farmers in some districts of NTB and Bali preserved the existence of albino, deviation of bali cattle at Taro village which is used for ritual ceremony and tourism including the white spotted caudal cattle at NTB (TALIB *et al.*, 2002). In accordance to Talib statement, culture and linguistics as part of the culture itself can be further discussed in the research findings.

Nitis (2006) conveyed that the use of livestock in culture related to the philosophy of *Tri Hita Karana* is a media to attain the equilibrium of happiness in soul or spiritual, harmonization

of human relation to God, human with human, and human within their surroundings. Yupardi (2009) mentioned that sometimes specific colours of Bali cattle is needed in most ritual ceremonies of Hindus as an offering in purpose of maintaining the parity role of macro and microcosmos. In this case, culture can be related in terms of the animals function to their surroundings and God.

Abrianto (2009) mentioned that WSPA (*World Society for Protection of Animals*) concept of *animal welfare* from is called as “**Five (5) Freedom**“ for domesticated animals, consists of:

1. Freedom from hunger and thirst
2. Freedom from discomfort
3. Freedom from pain, injury, and disease
4. Freedom from fear and distress
5. Freedom to express normal behavior

Those above theories are mostly connected in application to support their understandings of white cattle to Hindus, especially for Taro village located at Gianyar regency of Bali.

Material and Method

Qualitatively, questionnaires were distributed to the society with an observation, then being collected in order to obtain information required by an interview, taking notes and recording.

Variables observed in this study:

- a. Belief and treatment given to white cattle through stimulus and response.
- b. Population and characteristics of white cattle
- c. Concept of *animal welfare* and *Tri Hita Karana* executed by the society at Taro

The data was analyzed by explanation based on Leech theory of stimulus ad response of linguistics study (2002) and Nitis (2006) of livestock use in culture through research findings and direct investigation in the field. These results were further discussed in the following discussion.

Result and Discussion

This research was conducted in 2013 at Taro village through an interview and questionnaire distribution to humanist local figure in the society who is responsible in raising the white cattle. The data was sorted and selected in order to obtain valuable information. We have found that they were raised placed in two permanent shelters, *albino* or genetics deviation of Bali cattle was used related to their symbol as supplement of ritual by observing characteristics of performance colours and horns, ceremonies and belief by using this species, special treatment or *stimulus* given by the herds and also *response* felt by the domesticated animals.

Belief and Treatment

Taro village is located in Munduk Lebah Mountain, highland with North to South wedged by two rivers as of: Oos Ulu Luh on the North and Oos Ulu Muani on the West. These streams then unified to the West shore of Ubud village called as Campuhan Ubud. On the North of Taro village contiguous with Apuan village, Kintamani, on the East with Sebatu village, Tegallalang, South borders on Kelusa village, Tegallalang, and on the West with Puhu village, Payangan. Taro village consists of: 14 village customs i.e. Sengkaduan, Alas Pujung, Tebuana, Let, Pisang Kaja, Pisang Kelod, Patas, Belong, Puakan, Pakuseba, Taro Kaja, Taro Kelod, Tatag, and Ked.

Historically, the belief commenced on the arrival of Rsi Markandya from Java to this village and saw a gleam in his asceticism. This caused Rsi Markandya to come and stay there which is known as *Sarwada*, abbreviation of *Sarwa Ada* which meant as completely available. Furthermore, this village change name into *Desa Taro* or Taro village. The uniqueness of Taro village is white cattle being sacrificed from the past up to nowadays. Society belief seemed deeply ingrained in their heart and feelings, especially for those who lived at Banjar Taro Kaja. Response was received from the information given by Mr. Wayan Sugawa. He said that his ancestor told him that the existence of white cattle derived from the arrival of a mysterious man who brought a bar of bamboo. Then he asked the mysterious man “Why are you bringing a bamboo?” and he answered “I’m bringing cattle”. His ancestor did not believe that a bar of bamboo could be filled in with cattle. After that the mysterious man poured the bamboo and a few minutes later no water comes out from it but big amount of white cattle. In addition, Taro is

located in the middle of Bali and Agung Temple existence is at four place of access of Taro village or *pemedal* as follows:

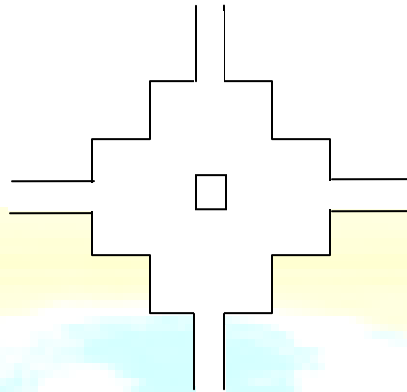


Fig. 1

The above figure showed the seat or *linggih* of *Dewata Nawasanga* or Nine deities as the manifestation of God, and in the middle is Siwa place. The existence of white cattle and Agung Taro temple can not be separated because white cattle are Siwa vehicle located in the middle part and then the society belief on its sacredness.

Since 2012 white cattle isolated by the people and organized in a foundation name as Yayasan Lembu Putih Taro placed near to Gunung Raung temple. The society at Pekraman custom of Taro Kaja sanctified this species which is considered as a holy animal and nobody is brave enough to raise them or dare to sacrifice them. If a white calf born and is in the age of 6 months, directly it will be given to the organizer to the foundation but previously prayed with an offering of *pejatian* by the priest at Banjar Taro Kaja. The white cattle is assumed to be deity of *Sekala* and Siwa transportation. It is used as a witness for *ngasti*, *Eka Dasa Ludra*, *Panca Wali Krama* ceremonies at Gunung Agung Raung Taro and Besakih temples. The animal will be directed by the one who will be conducting the ceremony circling the place for 3 times from East to South, and end up on the East. The purpose is to save the nature in peace and welfare (*dedeg, ajeg, maurip*). Wiana (2013) said that Hindus used an offering consists of 5 elements:

- Mantra: the utterance of God that aims to increase thought,
- Tantra: a holy desire
- Yantra: symbol as sacred medium called as *banten* or offerings,
- Yadnya: sincerity in sacrificing for a holy purpose,
- Yoga: harmony of human, nature and God.

If the ceremony did not use white cattle so people feel that it was incomplete since the cattle itself or *duwe lembu* believed to be the completion of the ceremony or *pemuput*.

Specific names for White Cattle at Taro

Taro village has foundation for these animals called as *Yayasan Lembu Putih Taro* since 2012 with the organization structure: Made Madriana as chief of foundation and Ir. Wayan Suarta, M.Si. as supervisor.

The main purpose of this organization, as of:

1. to conserve white cattle population;
2. environment planning for population preservation.

The organizer and employees have duties to raise these animals with care and polite language, such as: feeding, bathing, sanitation of shelters, etc.

Naming for species were listed in each shelters according to their sex, “*Ida Bagus*” for 15 male cattle and 1 male calf; whereas “*Si Luh*” for 10 female dan 3 female calves as the pre-stimulus (A) which preceding the speech. Based on the society in the district, these names derived from their ancestors to give respect to the animal as a symbol of the vehicle of Siwa deity. Semantically, they have meaning similar to human beings or people in Bali names as a stimulus of language within those differences of names. It showed that they have a special position in the society from the designation. Taboo or impolite language is prohibited to be used for these animals since the people belief of its sacredness. If they disobey it could caused bad things happen in their life, i.e.: accident, illness, etc. The response (B) from the species as an object receiving a stimulus from their herds can be observed since they were not rampaged in the shelters but stay calmly. Generally, they are happy to maintain the inheritance of ancestors without differentiating the colour of the cattle white, black or red which birth from white cattle as proven from the place they are kept by the foundation. The differences is equalize according to God or *penunggilan* Tri Sakti.

Population and Characteristics of White Cattle

Based on Dharmawan, *et. al* (2010) that previously the population were 39 in which 30 at Taro Kaja village and 9 at Taro Kelod. The population of white cattle has decreased 30 in 2012 and remain only 29 cattle in 2013. Certainly, these are problems and should be taken concern by government of Bali to prevent extinction.

Oka (1995: 12) mentioned that white colour of Bali cattle caused by the lose of melanin pigmen which function to appear on the black or red colour as the normal colour of Bali cattle (black for male and red for female). Below is the picture of male white cattle at Taro:



Fig.2 Male

The result of observation can be seen as follows:

- a. Variation of body dimension, 3 males have big size as buffalo, remain 12 and 10 female have similar size as normal Bali cattle. According to the society, previously most of them were lived freely in the forest so they have bigger size of body but currently they nearly have similar body as the normal bali cattle.
- b. Red close to white colour, without stripes, white tails, white legs and nails, some of their horns are red but the others are light brown. Meanwhile, eyes are blue chornea and pink at the external.

Instinct of the animals

In general, animal has an instinct to find their feed. Stimulus or “S” by the employee of the foundation who fed the white cattle and respond or “R” was executed by the white cattle by searching the feed. The process of feeding is scheduled by the foundation, the society conducted in a shift prepared approximately 25 – 30 kg in each family such as: cutting king grass, *blalu*, etc. Concentrate or polard was given once if donation delivered to the foundation.

Animal Welfare and Tri Hita Karana

The concept of *animal welfare* is an effort to give an adjustment of environment for the animals which effected to the psychology dan physiology. This activity is a kind of special attention in order to increase the quality of animal's life with no stress.

The equilibrium and harmonization can be seen in the relationship as *Tri Hita Karana*:

1. human and God
2. human and human
3. human and environment

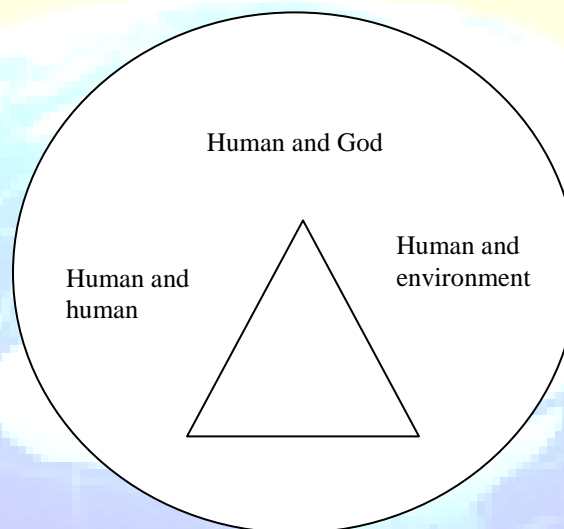


Fig. 3

The synergy showed in the triangle and circle that tightened them up so animal welfare ataupun *Tri Hita Karana* have an internal relationship since they have similar mission to make a harmony of livings and supernatural.

Conclusion and suggestion

The meaning in semantics can be concluded to have a connection with the culture as language also involved in it. Sinergy from *stimulus* and *response* obtained from the society as the informant and white cattle as the object are unified to be analyzed. The power of language from the words or name of the species effected to the belief.

The government of Bali should maintain their culture and considered a policy for conservation of these special species as a prospect to be one of the tourism objects that could also support the economy of Indonesia.

Acknowledgement

We would like to express our sincere gratitude to the Rector of Udayana University and Research centre of Udayana University for the financial support of DIPA 2013. Moreover, thank you for the members of the group and Prof. Ir. I Gusti Lanang Oka, M. Agr.Sc, PhD. who had supported our team with supervision and guidance to complete this research.

References

- Abrianto, (2009) *Kesejahteraan Hewan*. <http://duniasapi.com/kesejahteraan-hewan>. Accessed on 16 February 2013
- Dharmawan, *et. al.* 2010. Udayana Mengabdi, vol. 2.
- Nitis, Made I. (2006). *Peternakan Berwawasan Kebudayaan*. Arti Foundation.
- Oka L. 2003. *Performance of Bali Cattle Heifers and Calves Prior to Weaning in a Feedlot System*. ACIAR Proceedings No. 110, 14-16
- Partana, P. (2003). *Semantik* (terjemahan dari *Semantics* karangan: Leech, G., 1974). Pustaka Pelajar Offset. Yogyakarta.
- Parera, J.D. (2004). *Teori Semantik*. Erlangga. Jakarta.
- Suwandi, S. (2008). *Semantik Pengantar Kajian Makna*. ISBN 978-979-153345-8. KLEIN Press.
- Yupardhi, Sayang. (2009). *Sapi Bali "Mutiar"* dari Bali. Udayana University Press.
- Talib, C., Chalijah, dan A.R. Siregar, (2002). *Progesterone Pattern of Bali Cattle At Gowa, South Sulawesi*. Inpress.
- Wiana, I.K. (2013). *Makna Tattwa Penggunaan Hewan dalam Upacara Yadnya*. Kumpulan Makalah Seminar Fakultas Peternakan Universitas Udayana.