

Study of *Kata Kolok*

(Signs and their meanings)

Dian Rahmani Putri

Department of Information System
STMIK STIKOM Bali
Denpasar, Bali

dira.putri78@gmail.com, rahmani@stikom-bali.ac.id

I G M Sutjaja

Department of Linguistics
Universitas Warmadewa
Denpasar, Bali
sutjaja444@gmail.com

Abstract—This research focuses on Bali sign language namely, *kata kolok*, a natural sign language in Bengkala village, Buleleng, Bali. *Kata Kolok* is conventionally created by the local deaf community, specifically on their idea and thought to describe their religious living, customs and culture. The aim of this research is to enrich references of a sign language system contributed by sign language owned by the Kolok community in Bengkala. The data obtained is primary, qualitative; those are lexicon, expression, sentences, text in the form of sign language. The data were collected by observation, video recording and direct interviewing. The data analysis is conducted by cognitive anthropology method or new ethnography. In the future, this research is expected to generate a *Kata Kolok* Dictionary, a comprehensive documentation and effective information dedicated to the signer or the sign language user, and also as the preservation of *Kata Kolok* as natural sign language. The main findings this research is a series of signs and their meaning which are categorized into three clusters of sign and meaning namely: meaning related to religion, meaning related to customs and meaning related to culture.

Keywords—*language preservation/maintenance; sign language; text; kata kolok*

I. INTRODUCTION

This research is centered on a deaf community in the village of Bengkala, Buleleng. The community has its own sign language system, which is developing naturally and uniquely in this village. The sign language system, *Kata Kolok*, has developed from a natural way of thinking, where a sign is agreed upon based on the needs of communicating with one another. Every member of the community has contributed to the *Kata Kolok* signing system and meaning development; thus, a number of signs already exist in Bengkala.

This research observes how *Kata Kolok* is used naturally in Bengkala, especially by the *koloks* (i.e., deaf community) but also by the hearing villagers. This is due to the urgent need to communicate among the group. There are 1200 signers, including 43 deaf native signers. This has inspired the author to conduct research and to preserve *Kata Kolok* as a mother language in nonverbal form, namely, *natural sign language*. *Kata Kolok* is found only in Bali.

Based on the above explanation, the author would like to find the relationship between language as a means of

communication and language acquisition, in this case how the *kolok* society in Bengkala creates meaning regarding several aspects of their daily lives. A question to be answered in is what are the signs and meanings that describe living conditions, especially those related to the religion, customs and culture of the *kolok* society in Bengkala village?

The main purpose of this research is to identify *Kata Kolok* signs and meanings, especially those related to religion, customs and culture. The advantage of this research is to alert the general public to empathy and respect among human beings, including communities with special needs, and to give appreciation and moral support to the *Kolok* community by documenting and identifying *Kata Kolok*. Bengkala village is located in Bali, so this linguistics research is expected to give contribution to the own society starting from the small village like Bengkala, which is inspired by Mantra [1] who mention that discovering self is the source of creativity and prosperity.

So far there are several recognized academic works on *Kata Kolok*. Some researches of them are on linguistics. The latest are conducted by Putri [2] that focuses on obtaining signs and meanings based on texts or analysing discourses, with new ethnographic approach, another is about modality meanings in *Kata Kolok* [3] by using semantic approach, and there is also an experience on applying NSM (Natural Semantic Metalanguage) approach on signs meaning ‘to cut’ [4], another study on *Kata Kolok* as a natural sign language by Sutjaja [5,6], research on colors and space in *Kata Kolok* by Connie de Vos [7-13], study on *Desa Kolok* by Marsaja [14], and *Kata Kolok* from the perspectives of possessive and existential meaning construction by Pamela Perniss and Ulrike Zeshan [15]. The other two are research on genetics by Winata, et al. [16] and Liang, et al. [17].

II. CONCEPT AND METHOD

It is first necessary to explain three concepts, namely, *Kolok*, *Kata Kolok* and *Inget*. *Kolok* is a Balinese term for deaf people: it can mean ‘deaf’ or ‘deaf people’ or ‘mute’, ‘without sounds’, or ‘unhearable’. In Bengkala, the deaf person’s name is called by beginning with the word ‘*kolok*’, for instance *Kolok Sudarma*, *Kolok Pindu*, *Kolok Santia*, and so on. *Kata Kolok* derives from Balinese roots, ‘*kata*’ (/katè/), meaning to speak or utter, and ‘*kolok*’ (/kolok/), meaning ‘deaf people’. Thus, *Kata Kolok* means the expressions by deaf people, which

are sign language. *Inget* is the Bengkala term for hearing people. *Inget* derives from the Balinese word meaning 'remember' or 'aware'.

This study uses some theories as references to answer the research questions. The first is Peirce's theory of the three elements of signs (sign triangle), described by Martin and Ringham [18], and the second is the semiotics theory of Halliday [19,20]. Both are used to discover the relationship between a sign and its meaning. Johnston and Schembri's [21] theory about sign language linguistics is used to discover the relationship between sign and meaning and human behavior and the environment in kolok society in Bengkala village. The two linguists wrote a book entitled *Australian Sign Language, An Introduction to Sign Language Linguistics*. Their book explains that sign language is a natural language that is not invented by individuals. Sign language is created conventionally by a community and is passed from one generation to the next. Sign language is not used universally by deaf people around the world, nor is it the same as gestures and mime, which are used by hearing people. It is capable of the same expression as spoken language and is organized by similar grammatical rules. Sign language acquires new vocabulary and can change over time. It is learned by children and appears to be processed by the brain the same as spoken language.

The research method of this study is qualitative with a new ethnographic approach. The first step is to conduct field orientation and discover the research questions. The orientation was done while the author was observing the environment, nature and social conditions in Bengkala village. The author introduced herself to the village government and local teachers—in particular those in charge of the inclusion school—and chose a local research assistant and some interview subjects. Having gained a general overview of Bengkala society, *kolok* and *inget*, the research questions were positioned. At the same time, a literary study was conducted by reading references related to the stated questions. The next step was to decide on the research methods and techniques to collect data following the new ethnographic approach proposed by Spradley [22]. Data were limited to the genres of religion, customs and culture and were obtained from the *kolok* community (*kolok* and *inget*). The video recordings, which show the language activities of the *kolok*, were taken, collected, and edited.

Having collected the data, the next step was data analysis. The *content analysis* method was used to condense the appropriate data to answer the research questions. There was a process of analysis and elicitation until the result was obtained, which was the *Kata Kolok* document that categorized and identified the signs and their meanings. This document provided a conclusion that synchronized the data analysis and the academic and socio-cultural benefits.

The research objective is a series of video recordings containing monologs and dialogues. The objective is achieved by direct observation and the author's involvement in the social life of the Bengkala people. The video recordings were converted into thousands of pictures. Meanwhile, the video recordings were watched and translated into spoken language by a research assistant. The translating processes were also

recorded and then transcribed. The bundles of pictures were edited until the only results were the pictures containing the correct signs. Afterwards, the pictures were adjusted to the transcriptions so that the proper concordances were obtained. The data were ready to be analysed using content analysis; which explains who is talking to whom, when and where, about what, and how is the effect caused by the discourse. The data are beneficial for long-term research.

III. A GLIMPSE ABOUT KOLOK VILLAGE BENGKALA

Bengkala village is located in the District of Kubutambahan, Buleleng Regency, Bali. Bengkala distances 15,6 km from Singaraja city and is about 93 km from Denpasar capital city. Bengkala village is surrounded by some villages namely: **Kubutambahan** in the North, **Bila** in the South, **Jagaraga** in the West, and **Bulian** in the East.

The latest demography data has been written in 2014, which informed the total populations of Bengkala are 2819 persons consisting of 1265 men (44,87%) and 1554 women (55,13%) (Source: Data Dinas Komunikasi dan Informatika, Pemerintah Kabupaten Buleleng, web: <http://bulelengkab.go.id>).

At present, there are 43 deaf people (*kolok*) in Bengkala including 37 persons domiciled in Bengkala, and the rests are spread in Denpasar, Tabanan, Borneo and Australia. Most *Koloks* live as farming-workers and rough labor (*kuli, soil-ploughing workers, grave-diggers, and traditional security, pecalang*). Some *Koloks* have good capacity as irrigation technician.

The first *Kolok* was recorded in 1940s, a man name *Kolok Sinur*. Bengkala people believe he is the origin of *Koloks* in Bengkala. The *Koloks* in Bengkala have an arts community *Sekeha Janger Kolok*, in which they create unique arts performance.

More than the latest five years is the period of sign language development and inclusive education system for both hearing and deaf children, which is the most important issue to Bengkala people. At the inclusive school sign language is compulsory learned.

IV. FINDINGS AND DISCUSSION

New theoretical findings are that sign and meaning acquisition for deaf people exists because of the urgent need for communication so that the information or message can be transferred properly. The meaning to be conveyed is already on one's mind and then performed in language, while the person creates body gestures and facial expressions according to what he/she is thinking. The sign concept conveyed can be based on the following:

01. Following movements similar to the defined meaning. For example, the sign for the meaning of hoeing is taken from the movement of the activity of hoeing the soil. For the meaning of water, the sign is taken from the movement of water or waves. Another example is the sign for angry, which follows the facial expression of an angry person.

02. Making signs by following a part of the whole meaning. For example, the sign for cat is taken from a movement indicating the cat's whiskers. Another example is making the sign for the *Galungan* ceremony by pointing at the centre of the neck. This sign is actually the same as the sign for the meaning 'pig' because the *Galungan* ceremony is associated with slaughtering pigs for cooking traditional meals for offerings and feasts. One more example is the sign following the movement of chicken beaks for the meaning 'chicken'.
03. Making signs in an arbitrary way. For example, for the meaning 'good', the sign is to make a fist, fold the elbow so that the fist is close to the shoulder, and then quickly pull the elbow to the right until it is at the same height as and level to the shoulder. For the meaning 'want', all fingers are grouped together and put below the lower lip of the mouth, and then the mouth slowly sucks in air.

The following subchapters explain the application of meanings and signs related to religion, customs and culture.

A. Meanings and Signs Related to Religion

- *Canang Sari* – a kind of offering

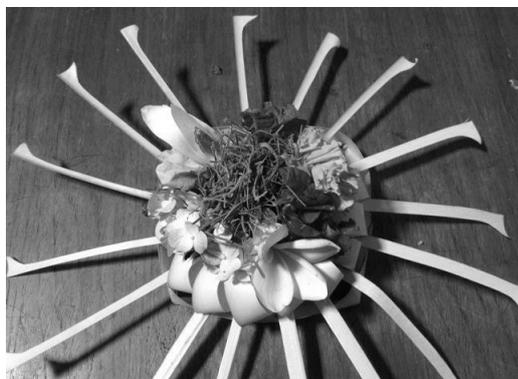


Fig. 1. Canang sari – photograph by Dian.

Canang sari (see Fig. 1 and Fig. 2) is a kind of offering that is used in the daily worship of Balinese Hindus. The meaning is signed with two movements, the first by making the shape of a cross with both pointing fingers and the second by putting the open right hand on the left palm. See the following sketches.

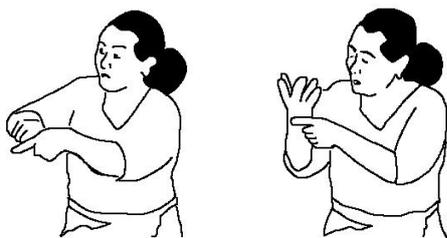


Fig. 2. Signs for 'canang sari'.

Example of expression:

TABLE I. EXAMPLE OF EXPRESSION (CANANG SARI)

	
a <i>balian</i> (medicine man)	To treat
	
to play cock fighting	
	
chicken	
	
<i>canang sari</i>	

Interpretation: 'There was a *balian*, a medicine man who is able to treat people. He likes playing cock fighting. The *balian* treated me by using *canang sari* as one of the remedies.'

- *Masakapan* – Wedding Blessing



Fig. 3. Masakapan – photograph by Dian.

Masakapan (see Fig. 3 and Fig. 4) is a wedding blessing ceremony for Balinese Hindus. The meaning is expressed in two movements. The two palms make the shape of praying and are placed in front of the forehead. For the next movement, all fingers in both hands are curved wide, and then each of the five fingers is closed until the right fingers nearly meet the left fingers.

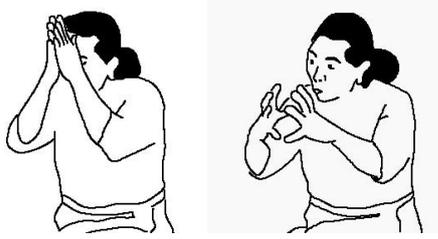


Fig. 4. Signs for 'masakapan'.

Example of expression:

TABLE II. EXAMPLE OF EXPRESSION (MASAKAPAN)

	
Hey	you
	
<i>masakapan – wedding blessing</i>	
	
no	you
	
both	get married
	
get married	you
	
I was surprised.	They said, "We would like to propose you."
	
I followed them.	

Interpretation: "Hey, you have not get the wedding blessing. Both of you have to get married." I was surprised. And they said, "We would like to propose you." And then, I followed them.

B. Meaning and Signs Related to Customs

- *Masenteng* (wearing a shahs, putting on traditional clothes)

Masenteng (see Fig. 5) is a piece of Balinese clothing, specifically a sash, but it represents the whole activity of wearing Balinese traditional clothes. This meaning is signed with a movement similar to putting a sash around the waist, from the back to the centre of the stomach.

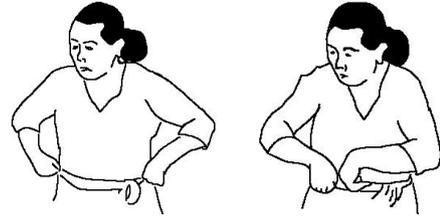


Fig. 5. Masenteng.

Example of expression:

TABLE III. EXAMPLE OF EXPRESSION (MASENTENG)

	
you	want
	
to depart	
	
ask	<i>masenteng</i> , put on traditional clothes
	
<i>masenteng</i> ,	Dad

Interpretation: 'You asked your dad to put on traditional clothes and depart to my house.'

- *Ngidih* (proposing to a bride)

Ngidih (see Fig. 6) is a series of signs for proposing to a bride. This meaning is signed with two open hands; the right hand is placed above the left hand, and the facial expression is similar to asking for a favour.



Fig. 6. *Ngidih*.

Example of expression:

TABLE IV. EXAMPLE OF EXPRESSION (NGIDIH)

	
I was surprised.	They said, "We would like <i>ngidih</i> , to propose you."
	
I followed them.	

Interpretation: I was surprised. And they said, "We would like *ngidih*, to propose you." And then, I followed them.

C. Meaning and Signs Related to Culture

- Balian

Balian (see Fig. 7) is a Balinese term for traditional medicine man/woman or a paranormal. This meaning is signed with one movement in which the right fingers are together and pointing to the mouth, while the mouth blows air softly on the fingers.



Fig. 7. Balian.

Example of expression:

TABLE V. EXAMPLE OF EXPRESSION (BALIAN)

	
<i>balian</i> , a medicine man	to treat
	
to play cock-fighting	
	
chicken	
	
<i>canang sari</i>	

Interpretation: 'There was a *balian*, a medicine man who is able to treat people. He likes playing cock fighting. The *balian* treated me by using *canang sari* as one of the remedies.'

- *Manyi* (rice paddies harvesting)

Manyi (see Fig. 8) is the activity of cutting rice paddies by using a traditional knife known as *ani-ani*. This meaning is signed with repeated movements similar to cutting blades of grass.

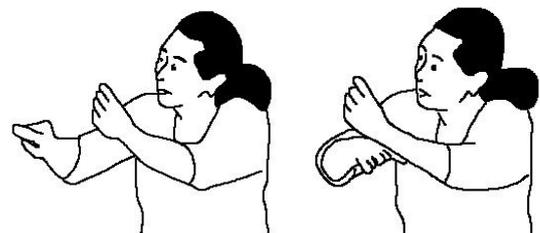


Fig. 8. *Manyi*.

Example of expression:

TABLE VI. EXAMPLE OF EXPRESSION (MANYI)

	
do <i>manyi</i> , rice paddies harvesting	
	
and <i>nitigang</i> , grain pounding,	
	
and cutting the grasses,	you
	
me	take care
	
and breast feed the baby.	

Interpretation: You did rice paddies harvesting, grain pounding and cutting the grasses (to feed the cows). I took care and breast fed the child.

V. CONCLUSION

The analysis of this research leads to some conclusions. First, the meaning and signs in *Kata Kolok* are obtained with simple descriptions and established conventionally among the Bengkala villagers. The signs are created by deaf people, the *Koloks*, and then those signs are understood and agreed upon by the non-deaf villagers. In this article, the meanings and signs described are related to religion, customs and culture. *Kata Kolok* is a special sign language; this research found several cases of a single meaning explained with a single sign, cases of expressions explained with a single sign, and even some cases of one meaning explained with multiple signs. The signs are very natural, mostly following the movements of daily activities. Ecolinguistic aspects also enriched the collection of signs and meaning. For example, the agricultural environment contributed to the richness of signs and meaning related to fields, cattle, and poultry as well as several related aspects of the social life in Bengkala village, such as the religious system, customs and culture, norms, education, architecture and sustainable livelihood system.

ACKNOWLEDGMENT

In this occasion, firstly I would like to gratitude to Prof. Dr. IGM Sutjaja, M.A., who keeps motivating me for this research and willing to contribute his idea in this article as the Second Author. Also my sincere thanks to Universitas Pendidikan Indonesia, especially the Committee of ICOLLITE 2018 and the reviewers team for providing the chance to participate on the conference as author and presenter as well. Another thanks goes to my homebase, STMIK STIKOM Bali, for the time so that I could enhance my research.

REFERENCES

- [1] I. B. G. Agastia, Menemui Diri Sendiri; Percikan Pemikiran Prof. Ida Bagus Mantra; Catatan IBG Agastia. Denpasar: Yayasan Dharma Sastra. 2006.
- [2] D. R. Putri, Kata Kolok di Desa Bengkala. Disertasi. Denpasar: Universitas Udayana. Unpublished.
- [3] D. R. Putri, Makna Modalitas Dalam Kata Kolok Bengkala. Proceeding. Seminar Nasional Bahasa Ibu X 24 February 2017.
- [4] D. R. Putri, The Study of Natural Semantic Metalanguage on the Process-Meaning "to cut" in Balinese Sign Language Kata Kolok Bengkala Village, Buleleng, Bali. Proceeding. The International Conference on Local Languages. Universitas Nusa Cendana Kupang, 29 Juni 2018.
- [5] I. G. M. Sutjaja, Hari Bahasa Ibu, Pengakuan Internasional, artikel Bali Post 21 Februari 2013 OPINI 6 POJOK, 2013.
- [6] I. G. M. Sutjaja, Kata Kolok, Denpasar: Lotus, 2013.
- [7] C. De Vos, Sign-Spatiality in Kata Kolok: how a village sign language inscribes its signing space. PhD dissertation. Max Planck Institute for Psycholinguistics, Nijmegen. <http://hdl.handle.net/2066/99153>, 2012a.
- [8] C. De Vos, The Kata Kolok perfective in child signing: Coordination of manual and non-manual components. In Zeshan & de Vos (eds.) Sign languages in village communities: anthropological and linguistic insights, 127-152. Berlin: De Gruyter Mouton, 2012b.
- [9] C. De Vos and A. Nonaka, 'Cross-modal contact in shared signing communities: kinship.' Talk presented at the EuroBabel workshop on Rural signing varieties: social dynamics and linguistic structure. 7 November 2012, Leiden.
- [10] De Vos, C. & N. Palfreyman, "Review of the book Deaf Around the World: the impact of Language, edited by Mathur & Napoli (eds.)." Journal of Linguistics, vol. 48, pp. 5-10, 2012.
- [11] C. De Vos and U. Zeshan, Introduction: Demographic, sociocultural, and linguistic variation across rural signing communities. In Zeshan & de Vos (eds.) Sign languages in village communities: anthropological and linguistic insights, 2-23. Berlin: De Gruyter Mouton, 2012.
- [12] C. De Vos, Absolute spatial deixis and proto-toponyms in Kata Kolok. Academia.com, 2014.
- [13] C. De Vos, Kata Kolok color terms and the emergence of lexical signs in rural signing communities. The Senses & Society, vol. 6(1), pp. 68-76. NUSA 56, 2014 24, 2011.
- [14] U. Zeshan and P. M. Perniss, Possessive and existential constructions in sign languages. Nijmegen: Ishara Press. 2008
- [15] I. G. Marsaja, Desa Kolok - A deaf village and its sign language in Bali, Indonesia, Nijmegen: Ishara Press. 2008
- [16] S. Winata, I. N. Arhya, S. Moeljopawiro, J. T. Hinnant, Y. Liang, T. B. Friedman, J. H. Asher, "Congenital non-syndromal autosomal recessive deafness in Bengkala, an isolated Balinese village". Journal of Medical Genetics, vol. 32(5), 1995 May, pp. 336-343.
- [17] Y. Liang, A. Wang, F. J. Probst, I. N. Arhya, T. D. Barber, K. S. Chen, D. Deshmukh, D. F. Dolan, J. T. Hinnant, L. E. Carter, P. K. Jain, "Genetic mapping refines DFNB3 to 17p11.2, suggests multiple alleles of DFNB3, and supports homology to the mouse model shaker-2". Journal of Medical Genetics, vol. 62(4), 1998 Apr. pp. 904-915.

- [18] B. Martin and F. Ringham, *Key Terms in Semiotics*. London: Continuum. 2006.
- [19] M. A. K. Halliday, *Language as Social Semiotic, The Social Interpretation of Language and meaning*, London: Edward Arnold (Publishers), Ltd. 1978.
- [20] M. A. K. Halliday, *An Introduction to Functional Grammar*. London: Edward Arnold (Publishers), Ltd. 1985.
- [21] T. Johnston and A. Schembri, *Australian Sign Language (Auslan): An introduction to sign language linguistics*, United Kingdom: Cambridge University Press. 2016.
- [22] J. P. Spradley, *Metode Etnografi*. Terj. Misbah Zulfa Elizabeth, Yogya: Tiara Wacana. 1997.