

Sign Language Variations in *Kata Kolok*

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Abstract— The study focuses on sign language namely kata kolok, which is naturally used in Bengkala village, Buleleng, Bali, 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 by using new ethnography approach or cognitive anthropology. The data analysis is conducted by content analysis. 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 the natural sign language. There are sign and meaning variations found, such as sign variations for the 3rd person singular pronoun, modality ‘have to’, religious-signs ‘mabanten’ and ‘Pura’, the customs sign ‘ngaben’, culture sign ‘tajen’, survival sign ‘talking’, and emotional expression ‘sad’ and ‘surprised’. Furthermore, there are phenomena such as homonymy and polysemy for some meanings.

Keywords: *meaning and sign, variation, homosign, polysemy, sign language, Kata Kolok*

1. Introduction

This research is observing on how the sign language *Kata Kolok* is naturally used in Bengkala Village, especially by the *koloks* (read: deaf community) and also by the normal villagers. This is due to the urgent needs of communication among the whole. There are 1200 signers including 43 deaf native-signers. This has inspired the author to do research and to conduct language preserving on *Kata Kolok* as one of mother languages, which is in nonverbal form namely *natural sign language*. *Kata Kolok* is only found in Bali. The research problem is what are the variations of signs for some meanings have been developed in the course of time by using *Kata Kolok* as the means of communication?

The purposes of this research are to identify *Kata Kolok* signs and meanings and to find variations of signs and meanings in *Kata Kolok*. Some advantages expected in this research are academic and socio-cultural advantages. The academic advantage is to enrich the knowledge of



identifying sign language or natural sign language more intensively and also to conduct language maintenance. The socio-cultural advantage obtained is to feature the *Kolok* society of Bengkulu village that has some positive values, whereas the deaf community is more respected and empowered according to their potentials. The other advantage is alert the general society as to empathy and respect among human beings including the societies with special needs and to give appreciation and moral support to the *Kolok* society by documenting and identifying *Kata Kolok*.

So far there are eight recognized academic works on *Kata Kolok*. Six researches of them are on linguistics. The latest is a study on *Kata Kolok* as a natural sign language by Sutjaja (2013), research on colors and space in *Kata Kolok* by Connie de Vos (2011, 2012), study on *Desa Kolok* by Marsaja (2008), and *Kata Kolok* from the perspectives of possessive and existential meaning construction by Pamela Perniss and Ulrike Zeshan (2008). The other two are research on genetics by Winata, et. al (1995) and Liang, et. al. (1998).

2. Theoretical Background

There are some theories used as references to answer the problems. The first is the theory of three elements of signs (sign triangle) by Peirce via Martin and Ringham (2006) and Semiotics theory by Halliday. Both theories are used to discover the relationship between sign and meaning. Besides these two theories, there is a theory by Johnston and Schembri (2016) about sign language linguistics, which is used to discover the relationship between sign and meaning and also human behavior and the environment in *kolok* society in Bengkulu village. The two linguists wrote a book entitled *Australian Sign Language, An Introduction to Sign Language Linguistics*. In their book it is explained that sign language is a natural language that is not discovered by a single person. Sign language is created conventionally by community and it is inherited from one generation to the next user. Sign language does not form a universal language that is used by deaf people in the world. Sign language is not identic with gestures and mime which are used by hearing people. It has capacity of expression that is the same as spoken language and it is organized into some similar grammatical rules. Sign language has control new vocabulary and it could be changed according to time, and sign language is learned by children and it seemed like it has been processed by the brain through the same with spoken language.



3. Research Methods

Generally the research method is qualitative with an ethnographic approach. The first step in this research is executing field orientation and discovering the problems. The orientation was done while the author was observing the environment, nature and social conditions in Bengkulu village. The author introduced herself to the village government, local teachers especially those in charge of the inclusion school and also chose a local research assistant and some informants. Having gained a general overview about Bengkulu society, both *kolok* and *inget*, the problems were positioned. At the same time, literary study was also conducted by reading references which are related to the stated problems. The next step was to decide on the research methods and techniques to collect data that is an ethnographic approach as it has been proposed by Spradley (1997). Afterward, data collection was conducted. The fields of data were limited to some genres namely: religion, customs and culture, which were obtained from the *kolok* society (*kolok* and *inget*) as the main data source. The video-recordings, which show the language activities of the *kolok* societies, were taken, collected, and shortened.

Having collected the data, the next step was data analysis. The method used for data analysis is *content analysis*, which is utilized to shorten the appropriate data to answer the problems. There was a process of analysis and elicitation until the result, the *Kata Kolok* document which already categorized and identified the signs and the meaning was obtained. This document later on determined the conclusion which synchronized the data analysis and provided academic and socio-cultural advantages.

The research object is a series of video recordings containing monologs and dialogs. The object is obtained by direct observation and the author's involvement in the social life of the Bengkulu people. The video recordings were converted into thousands of pictures. Meanwhile, the video-recordings were watched and translated into spoken language by the research assistant, Ketut Kanta. The translating processes were also recorded. Then the translation-recordings were transcribed. The bundles of pictures were shorted until the only results were the pictures containing the right signs. Afterwards, the pictures were adjusted to the transcriptions so that the proper concordances were obtained. The data were ready to be analyzed by using content analysis. The data are beneficial for a long term research; that is they are not only useful for the dissertation but also for future research.



There were two challenges facing the author. The first challenge was how to communicate with the deaf people, the *koloks* in Bengkulu, since the research assistant was not always present during data collecting. Sometimes, the author had to conduct the data collecting by herself among the deaf people. The author had nice experiences while collecting data; the sign language communication conducted was simple and slightly looked like general gestures also used by the non-deaf signers. The other strategy used for communication difficulties was by asking for written explanation from the deaf persons who are studying or had graduated from SLB C (school for the deaf-mute). The helpers-signer ages ranged from 19 – 23 years old. The second challenge was to find out and to adjust pictures with the transcriptions so the concordances were finally obtained. For the data analysis, the author had been reading some references about other sign languages such as: Sistem Isyarat Bahasa Indonesia (SIBI), Australian Sign Language, American Sign Language, and British Sign Language. Indeed, there are differences among signs used in each sign language and *Kata Kolok* has its own uniqueness.

4. Result and Discussion











The results of analysis are presented in line with the specification of the problems and the steps of the analysis. The results of analysis can be elaborated as follows.









4.1 Sign Language Variation in *Kata Kolok*






Sign variations were found for some meanings such as: sign variations for third person singular, sign variations for modality ‘must/have to’, sign variations for religious meanings ‘*mabanten*’ and ‘*pura*’, sign variations for customs meaning ‘*ngaben*’, sign variations for cultural meaning ‘*tajen*’, sign variations for survival needs meaning ‘talking’, sign variations for emotional meaning ‘sad’ and ‘surprised’. Below is the table of signs.



Table 4.1.1 Findings of Sign Language Variations

No	Meaning	Sign in <i>Kata Kolok</i>		
		Option 1	Option 2	Option 3
1	must/have to			
2	<i>mabanten</i> conducting a worship or a ceremony			
3	<i>pura</i> temple			
4	<i>ngaben</i> cremation	01  02 		





No	Meaning	Sign in <i>Kata Kolok</i>		
		Options 1	Option 2	Option3
5	<i>tajen</i> cock fighting	01 	01 	
		02 	02 	
			03 	
6	talking	01 		
		02 		

No	Meaning	Sign in <i>Kata Kolok</i>		
		Options 1	Option 2	Option3
7	sad			
8	surprised		01  02 	

4.2 Homosign

There are also different meanings represented by one sign (homosign) such as the same sign for ‘must/have to’ and ‘should’ and ‘remember’. Furthermore, sign for ‘want’ is also the same as for ‘need’ ‘will/shall’ and ‘be willing to’. The other homosigns are the same sign for ‘healthy’ and ‘happy’, and one sign for ‘keep silent’, ‘stay at home’, ‘sit down’, and ‘jobless’.






Table 4.1.2 Findings of Homosign in *Kata Kolok*

No	Sign	Homosign in <i>Kata Kolok</i>				
		Meaning 1	Meaning 2	Meaning 3	Meaning 4	Meaning 5
1		must / have to	should	remember		
2		want	need	will / shall	be willing to	
3		happy	healthy			
4		keep silent	stay at home	jobless	stay still	sit down

4.3 Polysemy

There are some related meanings represented by one sign (polysemy), such as: the same sign for the meanings: 'buy', 'go shopping' and 'cash/money'. Moreover, there is a same sign for 'give up' and 'don't want' and 'quit'. The other polysemy is the same sign for 'not yet' and 'later', and the same sign for 'pray' and 'worship activity' or 'ceremony'.

Table 4.1.3 Findings of Polysemy in Kata Kolok

No	Sign	Polysemy in Kata Kolok				
		Meaning 1	Meaning 2	Meaning 3	Meaning 4	Meaning 5
1		buy	sell	money	pay	go shopping
2		give up	don't want	quit		
3	01  02 	not yet	later			
4		pray	worship activity	ceremony		

5. Novelties

The novelty from the theoretical point of view is that the sign and meaning acquisition for the deaf people exists because of the urgent needs of communication so that the information or the message can be transferred properly. The meaning to be conveyed is already recorded in one's mind, and then performed in a language behavior while the person creates body gestures and facial expressions according to what the person is thinking. The sign concept conveyed can be based on the following points:



01. By following movements of the defined meaning, for example: the meaning of hoeing; the sign is taken from the movement of the actual activity of hoeing the soil. For the meaning of water, the sign is taken from the water movement or the water wave. The other example is to follow the facial expression of an angry person for the sign of angry. Another example is making a shape like a circle of old coins, *kepengs*, which in Bali is known as *satakan* (*satak* means two hundreds); the sign means two hundreds.
02. Making signs by following a part of the whole meaning, for example: the sign of cat is taken from the movement indicating the cat's whiskers. The other sign is for the *Galungan* ceremony that is making a movement by pointing at the center part of the neck. This sign is actually the same as the sign for the meaning 'pig'. Since the *Galungan* ceremony is identified by slaughtering pigs for cooking traditional meals for offerings and feasts. The other example is the sign of following the movement of chicken beaks, for the meaning 'chicken'.
03. Making signs in an arbitrary way. For example, the meaning 'good', the sign is making a fist shape and then folding the elbow so that the fist is close to the shoulder, and then making a fast movement pulling the elbow to the right side until the height of the elbow level to the shoulder. The other sign is for the meaning 'want', by grouping all fingers into one and putting it below the lower lip of the mouth, and then the mouth is sucking air slowly.
04. There are variations such as homonymy and polysemy in *Kata Kolok* signs and meanings. The phenomena indicate that the *kolok* society is flexible and open to new information so that put some efforts are made to enrich their signs and meanings with the purpose of maintaining the communication among the social members.



From the methodological point of view, the new findings are the method and technique of data collection, method and technique of data analysis and also the method and technique of data presentation. The data collection was conducted by new ethnography or cognitive anthropology; whereas in the application, the developmental research sequence, which consists of five principles, namely: single technique, assignments identification, gradually moving forward, original research and problem-solving. This research added two more steps namely: introspective and picking-momentums. The data collections, all video recordings were conducted voluntarily since every *Kolok* member was gladly willing to give his/her recording. So, in order to ease them in the video taking, there were short briefings before the recording. They were told what was required for a monolog, or what was required for a dialog. The recordings were taken based on time and space availability, whenever an idea emerged during the observation time, the recording could be directly executed. Once all videos had been recorded, the field research assistant interpreted the videos and again the interpreting process was recorded. The recordings were then transcribed into written text. The method and technique of analyzing data, is a combination of *content analysis* and *domain and taxonomy analysis*, whereas all video recording data, with the help of technology, are converted into thousands of photos. All photos are sorted and lined based on the right shape and the chronology. The shortening process is done based on the most proper signing, and then the photos are arranged in rows consisting of two columns each. After structuring the photos, each column is paired with the transcription so the concordances are obtained. The next step is to analyze the data content; identifying the genre of particular texts, identifying the communicator and the communicant, and making paraphrases (*who are speaking to whom, about what, when and how*) and finding out the meaning of the text. Furthermore, there are categorizations of meaning and signs by using the domain and taxonomy method. Based on the result, the general typology of *Kata Kolok* is discovered; it normally begins with the verb. Besides, there are several polisemy and homonymy of *Kata Kolok* expressions instead of meaning variations. The method applied for presenting the data analysis is formal and informal. The technique used is verbal technique; by using text in written transcription and also visual; by using photos. The innovation in method and technique is creating the concordance photos and transcriptions up to be the big corpora and afterwards, it was again divided according to the genres of each content. The data presentation is supported by multimedia device.





From the empirical point of view, the novelties are:

01. Typology of *Kata Kolok* generally begins with a sign that indicates a verb meaning or a meaning of a process. In several cases, the process begins with an expression of time, mainly indicating the past. Here are examples:

	
<i>carry a back pack</i>	
<i>carry a back pack (I)</i>	
activity target (-Participant)	
‘I carried a back pack.’	

	
<i>park</i>	<i>a motorcycle,</i>
<i>park a motorcycle (I),</i>	
Activity target (-Participant)	
‘I parked a motorcycle.’	

	
<i>eat</i>	<i>take a plate</i>
<i>eat want (I)</i>	<i>take a plate (I)</i>
activity activity (- Participant)	activity target (- Participant)
‘I wanted to eat.’	‘I took a plate.’

02. In a particular discourse, the signers also wanted to maintain their emotions; either their own emotions or the emotions implied by others. Based on direct observation and interaction among the *Kolok* people, there are signed meanings unrealized by the signers themselves especially the meanings which are related to the customs and norms; moreover, some meanings are concerned with private lives. Some examples of such topics are: homosexuality, divorce, unfaithfulness in marriage and polygamy; normally those topics are gossiped about among the society and cause feelings of discomfort for the people involved. The assumption is that since the *kolok* persons are not able to hear what the gossip is about, it never touches or affects their emotions or sensibilities. The other reason is the *Koloks* are never taught about norms by their relatives since younger age so that they never know what is right and wrong in private relationships.
03. *Kolok* people have a good quality of self-confidence; this is because of the warm-welcoming attitude among the villagers towards the *koloks*, and they are well treated. The *koloks* are never excluded from the ‘normal’ society. The normal society always makes efforts to understand what is expressed by the *koloks*. If people are incapable of following a conversation, the *kolok* will try to explain either by descriptive signs or by references to or the real objects they meant.
04. *Kolok* people have a wonderful ethos of working; they are hard workers and they feel proud when they have jobs or occupations. This is a good example for the poverty eradication program.

6. Conclusion and Recommendation

The findings of the sign language variations and the analysis lead to conclusion and recommendation as mentioned below.

6.1 Conclusion

There are several variations of signs for some meanings that have been developed in the course of time by using *Kata Kolok* as the means of communication. It indicates that *Kata Kolok* is spoken actively by the native signers, which are the people of Bengkala village, both deaf and normal signers. Since *Kata Kolok* has been used for several years, there must be variations of signs to indicate several meanings or *vice versa* some signs are used to describe one meaning. In this study, there are types of variations based on semantic perspective found in the data collection of *Kata Kolok* i.e. *homosign* and *polysemy*.

6.2 Recommendation

The study of *Kata Kolok* is still open and rich as a future research object, especially for interdisciplinary studies. One suggestion for this research is that all studies conducted are beneficial for the *Kolok* Society of Bengkala village, which could improve the life of the deaf society in Bengkala and in Indonesia. This research is fully dedicated to the *Kolok* people in Bengkala. The results of this study are expected to be a contribution to the world mother languages which are noted by the UNESCO. The big hope is that one day Bengkala village is free from the congenital-deafness disease and any other kinds of disability. Nevertheless, there is a recording of this language in a form of dictionary or a text book as memorabilia, which contributes to the language science development.

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