Ni Putu Luhur Wedayanti¹ Udayana University, Bali, Indonesia Alies Poetri Lintangsari Brawijaya University, East Java, Indonesia

THE CULTURAL FACTORS IN SHAPING IMAGE FOR SIGN LEXICALISATION

Abstract: Food as part of a society's culture constitutes a cultural aspect that is quite capable of representing the customs of society as well as the dynamics of social and economic changes that occur in society. With this general background, this paper aims to examine the basis of image selection of food signs in Kata Kolok sign language. The qualitative method of analysis is used with a focus on the linguistic phenomenon that exist in the deaf community of Bengkala village, northern part of Bali Island. The data used in this study were collected from Kata Kolok corpus data available at www. signbank.ru.nl. From the available sign data, this study focuses on food signs data, which is then classified into traditional food and non-traditional food. From the results, it can be claimed that the deaf community of Bengkala village chose how to make food as an image that was selected to be a sign for traditional food because people in the village have good traditional knowledge about processing those foods. Meanwhile, the image chosen as a representation of non-traditional food is the appearance of the food. Keywords: cultural factors, food sign, kata kolok, lexicalisation.

1.1. Introduction

Kata Kolok is a natural sign language that grew and developed in Bengkala, a village in the north of Bali. Bengkala has quite a high number of deaf people compared to other areas in Bali. (Marsaja, 2008, 2015; Putri and Sutjaja, 2019; Putri, 2021). According to WHO, the average number of babies born who are deaf compared to hearing ones is 0.1 percent or 1:1000 in one society. Meanwhile, it reaches 1.4 percent in Bengkala as there are 42 individuals out of 3,064 inhabitants

who are born deaf (Win*ata et al.*, 1995; Michi, 2017).² It is stated that the number is due to the fact that 17.2 percent of both deaf and hearing people in Bengkala have the DFNB3 gene, a gene that is potentially passed on to ones deaf-mute offspring. It is believed that the existence of the DFNB3 gene in the chromosomes of Bengkala people appeared 150-300 years ago as a gene pool of the residents in Bengkala (Win*ata et al.*, 1995; De Vos and Zeshan, 2012; Marsaja, 2015; De Vos, 2016; Michi, 2017; De Vos and Nyst, 2018). Geographical and cultural isolation are the main factors for traditional endogamy in Bengkala, thus the DFNB3 gene pool mutation does not change significantly in the earlier generation and produces deaf offspring in an almost constant number for several generations. The emergence and development of the deaf community since the previous generation made the Kata Kolok sign language develop naturally in Bengkala.

Socioculturally, community harmonisation in Bengkala village between those who are *kolok* (deaf) and those who can hear, was established and is maintained to this day. Each community is involved according to its capacity in activities organised in the village. The deaf population group is involved in many lines of everyday life both in terms of religion, customs, and other village activities. Most importantly, sign language is used freely by both the hearing with different proficiency and the deaf members of the community. The sociolinguistic category of sign language being used by both deaf and hearing community members is known as a shared sign language (De Vos, 2016; De Vos and Nyst, 2018), or Integrated Deaf Community (Marsaja, 2015), while Zeshan calls it "village sign language" (Zeshan, 2007).

The current development and modernisation that reached the Bengkala people, made the population mobilisation more dynamic compared to the previous decades. Modern communication devices have become a very close part of the daily lives of deaf people regardless of their age. Deaf residents in Bengkala communicate with other deaf people either outside Bengkala or even deaf foreigners from other countries via social media. Recently the accessible modern communication devices and motorisation have brought very dynamic changes to the people of Bengkala, including the deaf group. Neither foreign places nor differences in communication modalities worried these deaf residents because they already owned smart devices that enabled them to be more exploratory to the developments outside Bengkala. Communication with people outside of Bengkala led to language contact, which affected *Kata Kolok*. The deaf residents become familiar with new things both

² The current population (results of the interview with the head of Bengkala village on September 23, 2023) is 2980, and 42 of them are deaf people.

from a social and cultural perspective, including food which is the representation of the culture in a society.

Pictures as well as cooking tutorials on social media make foreign food that is commonly savoured by people outside Bengkala and Indonesia easily recognisable. In addition, modification of foreign or non-local food to suit the traditional taste of Indonesians and the adjustment of basic ingredients to reduce production costs. That adjustment also makes the food more affordable and makes it a more presentable and adaptive medium of cultural exchange. Unwittingly, these foreign foods have become part of the vocabulary in *Kata Kolok*. Therefore, this study attempts to analyse the extent to which social and cultural conditions influence image selection in the sign lexicalisation process. In addition, this study also tries to determine whether there are any broad differences in food signs based on the type of food in the process of sign lexicalisation. Also, this study tries to reveal what iconisation strategies are the most used in the process of food signs iconisation by the deaf group of Bengkala village. To answer these three questions, the analyses were conducted using the concepts described in the next presentation.

1.2. Traditional Food in traditional community

Scientific studies on food are increasingly being discussed from a formal scientific perspective. Food is no longer seen as just a stomach filler to sustain life, but the values of local wisdom contained therein are increasingly recognised and appreciated. Balinese people who are predominantly Hindu have religious rituals with food being an important part of the process. Through food, Balinese people show respect and gratitude to God and their fellow humans. The food and the harvest from the farm are arranged as attractively as possible by the mothers into offerings to God. After the ceremony, the food that is offered is enjoyed together with family members, and the rest is given to pets around the house such as dogs or pigs. This cycle makes food an important part of showing the value of relationships between living things, especially in Balinese social and religious life. Kruger also added that the Balinese cook to eat as well as to honour and save their God. They incorporate their traditional values into their Gods. (Kruger, 2014)

Given the dynamics of community mobilisation today, it is very difficult to draw a line between food that can be categorised as indigenous to a region and food that is not. The USDA as an agent that bases its census of agriculture data collection related to local food on market channels defined local food as "the direct or intermediated marketing of food to consumers that is produced and distributed

ФИЛОЛОГ XV 2024 29

in a limited geographic area" (Mckeag & Kruszewski, 2021). Meanwhile, Guerrero added that food can be said to be traditional food not only because the ingredients must be local to the area, but also because they must be cooked traditionally according to traditional recipes. Traditional food products tend to be basic, natural, and pure, often in the sense that little or no processing or manipulation occurs after the primary production (Guerrero et al., 2009; Rocillo-Aquino et al., 2021). From those explanations, traditional terminology is consistently used in this work to refer to food that is analysed in this article. Regarding the traditional food mentioned, this paper also classifies the food signs found as data, into traditional food and non-traditional food according to the following more detailed explanation. The parameters described by Amilien and Hegnes distinguish types of food and identify food into the traditional food category (Rocillo-Aquino et al., 2021). Thus, food that does not fall into the traditional category is classified as non-traditional food.

Table 1. The four dimensions of food

Parameter	Dimension
Place	The food is called traditional food if it has a name element
	of a place to display its traditionality. A region or place name
	in the food identity helps to clarify the authenticity of the
	traditional side of the food.
Time	Time is also a pre-eminent aspect because tradition implies
	cultural transmission that is passed down from generation to
	generation. Thus, the length of time the food is produced and
	consumed in a certain area within one generation identifies it
	with the eating culture in that area.
The know how	The preparation process becomes a significant element because
	it includes the provision of raw ingredients, how to process
	them and who processes them. These are necessary to show
	the cultural identity of the region. It makes traditional food as
	an artisanal food or food that is produced manually or rarely
	uses machines and other modern equipment.
cultural value	The cultural value which means a food is made not only to
	meet the body's nutritional needs, but also related to life habits
	or rituals attributed to the region. For example, the need to
	gather and socialise as social beings which usually provide food
	as an accompaniment in the meeting or gathering occasionally.

By employing the boundaries of traditional and non-traditional food described by Amilien and Hegnes, nine foods are categorised as traditional and non-traditional food on finding and discussion explanation.

1.3. From Gesture in to Image Selection

Another concept to comprehend about iconisation and image selection of those food sign are the works about the significance of iconicity on sign language. However, this article found it important to describe also about gesture and its relation with the emergence of sign language, especially in Bengkala. Research on gestures as a concept that initiates the formation of sign language has been extensively carried out, including Coppola (Coppola, 2020) who stated that lexical conventionalisation diverges from the social and cultural factors of the community. Studies on the emergence of spoken language and sign language differ in the natural situations of its formation in language development, gesture is a part that provides very significant input in its development. Gesture can be a medium in language development, as well as a reflection and even as a developing language itself. The development of language is proven to affect perception, interpretation of things and memory of certain utterances (Bull, 2012; Kendon, 2015; Marshall and Morgan, 2015; Cooperrider and Mesh, 2021).

The gestures produced to refer to an object or as a replacement of one or two words which were conventionally used or understood in the society. The gesture functions to replace words in direct verbal communication as well as to amplify the meaning of the word and to substitute spoken speech in communication with different modalities. Thus, the gesture can be categorised as an emblem referring to the definition of deliberate, communicative non-verbal acts that have a direct verbal translation (a word or two, or a phrase), whose meaning is known by all or most members of the group. McNeil added an emblem like thumbs up to refer to 'fine' or 'OK', which seems to be widely known within the community (McNeill, 2012). Further, a touchstone of an emblem is whether it can be replaced by a word or two and its message is verbalised without substantially modifying the conversation. When people produce emblems, the interlocutor will immediately understand the emblems used in the communication. Coppola emphasised that conventionalised emblems and gestures become raw materials in the process of establishing language based on the perspective of language emergence (Coppola, 2020).

Gesture researchers and linguists have been holding hands to explore more about gesture and the nature of language. The fade of boundaries between gestures scholars and sign linguists, and other fields of communications researchers, encouraged a

broader exploration on the nature of human language. In spoken language, the emergence of a new language is due to contact between languages, such as pidgin and creole situations, in which they have information about the native language system. Unlike sign language which is still quite young, generally language contact occurs in different contexts. Most deaf people usually live among hearing people who commonly do not understand sign language (Zeshan, 2007; Hiddinga and Crasborn, 2011; Fisher, 2014; De Vos and Pfau, 2015; Coppola, 2020). Therefore, when they want to communicate, they will start producing gestures to express their ideas. Later, those visual-gestural expression will develop in to sign language (Akach, 1997).

Furthermore, Hoiting and Slobin stated that there is a continuum from gesture to sign in the development of signed languages, in both historical and ontogenetics times frames (Hoiting and Slobin, 2007; Slobin, 2008). Wilcox suggested there were two ways before gesture became part of the grammaticalisation of sign language. The first route stated that manual sign language becomes a source of lexical or grammatical morphemes in sign language, for example a sign in French society which means 'go' is lexicalised to become a marker of the future in ASL. The second route was a non-manual sign elements' route for example head movements, facial expressions, which are integrated in the elements of grammatical language signs (Wilcox, 2008). Iconicity is defined as the resemblance between the object's form and meaning (Taub, 2001). Many signs do resemble the concept, especially a concrete object. This differs sign language and spoken language, where sign language, which is, a visual-gestural language modality, has a greater access to iconicity. Many signs exhibit iconicity as a visual relationship of the real world.

In the process of grammaticalisation, the iconicity of the main object is a concrete object. It is eminent to be considered as an input in selecting icons. Iconicity is defined as the resemblance between the object's form and meaning (Taub, 2001). Many signs do resemble the concept they represent but each sign language uses different icons. Iconicity may be salient in sign language (Caselli and Pyers, 2017). Woll then explained how modality has influenced spoken language and sign language differently, one of them is the potentiality for iconic representation. Visual representations have greater access to iconicity. Many signs exhibit iconicity. A visual relationship to the real world (Woll, 2009). Later Genter and Marthman asserted that humans have the ability to determine the similarity of the objects being compared. The details are exemplified by linguistic iconicity. There is a structure preserving mapping between the phonetic form (sound sequence, handshake or movement, temporal pattern) and some mental image associated with the referent. Basically, humans have the ability to notice any resemblances between the object

and the referent. That ability were greatly influenced by experiences of individuals with a concept likely shaped lexical variations (K Mudd et al., 2020). Mudd et al., also studied further using two methodologies to identify signs by underlying iconic motivation and mapping; and, a method to compare individual repertoires of signs by calculating the lexical distances between participants (Katie Mudd et al., 2020). Besides that, another thing that becomes a paramount consideration is the availability of speech-producing linguistic tools. In addition to human cognitive abilities in finding similarities between two objects before they are generated into language, the availability of language production tools is also very important because it is impossible for these words to be produced with either speech tools in spoken language, or manual and non-manual features in sign language.

Taub showed a process, known as the Analogue Building Process (Taub, 2001). This process explains how an object, especially a concrete object, is made and selected to become a conventionalised material or sign. An object must have several characteristics or characters and from all the characteristics, the one that has the closest or salient reference to the object is chosen. Selection of the object necessarily takes into account the linguistic devices owned by the speaker. A word or gesture may be created only if it can be represented in the linguistic device. For example, for deaf people, it is only possible to choose images that can also be actualised with hands, bodies, expressions and other linguistic devices owned by deaf people.

Besides the process of the image selection of the food sign, this article also attempts to analyse the strategies of iconisation of those signs. The strategies used by the deaf group in the iconisation process are divided into four categories (Mudd, de Vos and de Boer, 2020). They are manipulation, personification, object and the other category which is based on how the hands and body are used together in conveying meaning. The four categories are used to identify the tendencies of the strategies in producing signs. The iconicity formation refers to the tendency of a particular strategy used while including the meaning of the object. Mudd et al., (Mudd, de Vos and de Boer, 2020) took the data from 46 *Kata Kolok* signers, using 36 stimuli in various meaning relations that focused on eliciting mammalian and non-mammal animal signs. The results showed that 90% of the strategies applied to sign mammals were personification, except pigs and horses which were signed by manipulation, which might have been influenced by the cultural situation in Bengkala. For non-mammals, most of the signs produced amounted to 74% using personification and 13% using object strategies.

2. Material and Methods

This research uses qualitative research methods that aim to understand certain social interaction patterns, (Creswell, 2014) which are highly correlated with this article because it aims to analyse the cultural influence and lexicalisation of signs in Kata Kolok. The data used in sign language research requires video recordings of good quality so they are clear and valid for use in research analysis. Therefore, determining the type of data and data collection techniques must be prepared well and carefully. Perniss differentiates the types of data collected into naturalistic data and elicited data (Perniss, 2015). This article uses two types of data, namely data available in the corpus and data elicited using several control stimuli in the recording process.

The data of the study originates from signs collected as a corpus in www. signbank.ru.nl (Lutzenberger, 2023). In the corpus, 1312 signs about things in everyday life were collected. These include family signs, farming activities, religious activities, the work of the Bengkala people in general, and food signs. From the collection of signs contained in the corpus, there are more than 30 food signs, some of which are also variations of the same food signs or food object. To be more precise, elicited data using three kinds of stimuli with deaf participants that were taken in Bengkala village. From these food signs, extractions were made and were selected and analysed further in this paper. Selection of the foods is because they are able to represent the signs that do exist in Bengkala. In addition, the selection of traditional foods and non-traditional foods is because there are more traditional foods in the corpus. There are also food signs categorised as non-native food of Indonesia. In the analysis process, the researcher conducted discussions with one deaf person and one kata kolok researcher. Even so, until now, Bengkala people still predominantly consume their traditional or native foods, so the addition of sign vocabulary for non-traditional foods has not been significant.

In *Kata Kolok* corpus, there are video snippets of the signs including phonological annotations of the signs. Then, the Analogue Building Process Scheme is also used to determine the character or features of the deteriorated and used objects until lexical conventionalisation is attained. That scheme is a primer parameter to recognise or to decide any image which consists of iconicity. Furthermore, the signs' formation strategies categorised by Mudd et al., were applied to discover which strategies are commonly used to produce lexical food signs in Kata Kolok.

3. Results and Discussion

3.1. Results

Food is a part of human life which is primary and must be fulfilled so that humans are able to survive. Therefore, food is an inseparable part of human life. It becomes evidence of the evolution in human civilisation in which humans were only capable of processing raw ingredients in nature from very simple ways to various ones in order to get the optimum potential of the food for humans' benefits. Thus, food represents the mindset and habits of humans in a certain community. Before further analysis, the data related to the food is differentiated into traditional or traditional food and non-traditional food. The classifications used to differentiate food into the four dimensions are place, time, method of preparation and cultural value. Distinguishing food into traditional and non-traditional food based on the dimensions of the place is quite difficult to give a vivid distinction in as much as the current situation of society is very dynamic. Even people who live in isolated places, most likely know ice cream or have eaten ice cream. It happens especially if the food is not clearly attributed to a certain place's name that later there will be a claim to the origin of the food.

The dimensions of time and how to make them become quite accurate parameters to assess food as traditional and non-traditional food. The length of time the food lasts in a place, starting from when it was created to when it is continually consumed and processed according to the preferences of the people in that place, also helps to examine the food. The know-how dimension or how to make a food helps to identify the food in more detail. It is because the way of cooking is usually very unique and displays the way of life of the society as well as the ingredients available around the place. The food is defined as traditional food for the reason that it consists of ingredients that can be easily found around the dwelling. It indicates that the food is not native to the area or not traditional because the raw ingredients do not come from that place.

The table below displays the food signs of Kata Kolok that present both traditional and nontraditional food. The food is differentiated based on traditional and non-traditional food from the aforementioned parameters. Food marked with a tick in the table indicates traditional food. Meanwhile, foods marked with an X mark are foods that are classified into newcomers with a modern feel. Generally these foods are bought once cooked, so that traditional people do not understand how to prepare them and what makes these foods impressive is the shape or presentation of the food.

								_	
Food	Lawar	Dodol	Таре	Lilit Satay	Urutan	Ice Cream	Birthday cake	Noodle	
Place	√	✓	✓	✓	✓	Χ	Χ	Χ	
Time	✓	✓	✓	✓	✓	Χ	Χ	Χ	
Know-how	✓	✓	✓	✓	✓	Χ	Χ	Χ	
Cultural Value	✓	✓	✓	✓	✓	Χ	Χ	X	
Traditional Food	√	√	√	√	√	X	Χ	Χ	

Table 2. The classification of traditional and non-traditional food in Bengkala village

3.2. Discussions

Before an object is concluded to become a word in a language system, it undergoes several iconisation processes which determine the characters or features of the object which best represent the object in its domain of meaning. An object when viewed widely will have a broad character as well. To become a lexeme; however, the lexicalisation process needs to consider the linguistic tools to produce the language that humans possess. For instance, speech tools are employed in spoken language, whereas hands and body parts included in sign are employed in sign language. Thus, humans have to determine the part that best represents an object and can be agreed upon by the community because it is understood by most members of the community.

Next, nine sign objects that had been classified (Table 2) were found to seek the tendency of the selected image as the basis for schematisation. Table 2 explicitly shows the reasons for the food objects classified into traditional and non-traditional food. Among them are traditional food as in the table. for example, Lawar - a chopped meat dish, is made by chopping all the ingredients, not only the basic ingredients, which are usually in big amounts and varied, but also the vegetables. During the series of Hindu holidays in Bali, it is very common for groups of relatives to gather at the main house or at one of the houses of the family group to cook food that either will be offered during the holiday or enjoyed with the family. Basically, the main meat ingredient is pork, which is processed into various processed meats, such as chopped pork sausage, *lilit* satay (ground meat wrapped around a skewer

and grilled), *lawar* (pork, long beans and spices coarsely chopped), *tum* (chopped pork wrapped in pyramid-shaped leaves and steamed).

Many traditional foods are indeed served chopped first; however, the sign of chopping used here specifically refers to *Lawar*. It is because *Lawar* is a type of food whose parts consist of chopped ingredients that are mixed evenly to produce an exquisite taste. The other components of the *lawar* characters which are the basic ingredients, the tools used, or other verbs used other than chopping, such as mixing and tasting at the end of cooking disappear; because the chopping movement is better understood by most Balinese as the movement for making *Lawar*.

Some foods that are usually served as offerings to God on Hindu holidays are dodol (sticky rice usually wrapped in corn leaves), tape (fermented rice), jaje matahari (sun-shaped traditional snacks). The foods mentioned are included in the types of cakes or snacks that have been prepared for generations and the basic ingredients are easily found around the Balinese. Each basic component can be obtained easily and how to prepare it requires specific cooking knowledge. Preparing these snacks usually does not use modern cooking utensils, but simple ones that are available in each resident's house. The signs for dodol, tape and jaje matahari are expressed by how they are made instead of the ingredients they are made of. The earlier generations really understood how to make these snacks because they witnessed their parents or their mothers preparing these foods on special days such as holidays. Thus, the skill was passed on to them.

For *Dodol* (sticky rice cake wrapped in con leaves), the food is signed with the dominant hand clenched into an A-shape and moving in a circle above the non-dominant spreading hand that is orientated upwards. This sign represents the way the food is made, that is to say, continuously stirring it in a large container or wok until it becomes smooth. For the Balinese, especially the Bengkala people who use this sign as a *dodol* sign, other components that could represent this cake are compared. The process of making *dodol*, which is to stir it continuously for a long time, is the image that is considered the most suitable to describe the cake.

The next analysis was on non-traditional food signs, which were ice cream and birthday cake. As previously stated, the dynamic mobility of the residents in Bengkala has made new types of food quickly enter the Bengkala environment. For example, ice cream, birthday cake, and noodles. These three types of food are considered not traditional food because in terms of time, they only came later to the life of the people of Bengkala. Besides, these foods are prepared using cooking utensils that employ modern technology. For the ice cream sign, it is expressed by sticking out the tongue as if licking something in the spatial area. This gesture uses

an oval-shaped ice cone as an icon of ice cream. The way the ice cream is eaten by licking is eventually used as an ice cream sign. Noodles are signed by looking at the specific shape of a spiral. So, it is indicated by the hand forming a spiral sign vertically. Birthday cake is implied by showing the shape or presentation of the cake, neither from how it was made nor the basic ingredients used to make it.

Below is a table that shows some images related to the object that are potential enough to represent the object itself. However, out of the many potential characters or images, the most salient ones are selected. The selected images are then schematised before finally entering a process to make them into sign lexemes.

Table 3. The process object into sign

Object	Potential	Selected	Schematisation	Encoding	
	Image	Image			
Urutan	- raw materials/	How to	A cooking	Manual	
(pork	ingredients	cook	method by	hand	
sausage	- tiny and long		stuffing meat	squeezing	
coarsely	textures		into the	repeteadly	
chopped and	-the way it prepared		intestines, then		
stuffed into	-the way it cooked		compressing it		
the pork	and eat		so there are no		
intestines)			air gaps.		
Lilit Satay	- the ingredients	How to	wrapping the	The hand	
	- chewy textures and	prepare	minced meat	shapes like	
	spicy but slightly		to the skewer	conical	
	sweet taste			beak and	
	- an oval/ball-like			recurring	
	shape at the end of			(stick	
	the skewer			mixture	
	- It is prepared by			on satay	
	wrapping ground and			skewer)	
	seasoned meat to the				
	end of a skewer to				
	form an oval or ball,				
	then grilling it				
Dodol	- the ingredients are	How to	stirring the	Weak	
	glutinous rice which	prepare	ingredient in	hand: palm	
	is mashed into flour		a large skillet.	facing	
	- made by stirring the		Keep stirring	upward	
	ingredients in a large		until smooth	Strong	
	frying pan. Keep			hand:	

Table 3 clearly presents the reasons as to why the deaf community in Bengkala Village choose images that best represent food objects in two general categories – traditional and non-traditional foods. Traditional foods such as *urutan*, *lawar*, *sate lilit*, *kue dodol* are signalled by 'how the food is made'. Whereas food that falls into the non-traditional category is signalled more by how the food looks.

The people of Bengkala generally know how to make these foods and process them correctly as this is passed down from generation to generation. In addition, these foods are classified as foods that have value in the social and religious life of Bengkala residents. The iconisation strategy used by all the signs found, shows the object strategy indicating the part of the object as a reference of the sign. The iconisation strategy used in this sign is the referent strategy in which almost all food signs take one of the food characters as a parameter in the signs.

4. Conclusion

Food is one indicator that is transparent enough to show lifestyle shifts in a society. Food enables foreign cultures to be well assimilated, especially in a dynamic and adaptive society. Based on the results of the discussion, there are traditional and non-traditional foods in Bengkala. These foods are classified into traditional foods because they existed and lasted long enough in the area, as well as having become traditional wisdom that is passed down through generations. The most significant thing is that the traditional people know how to prepare the food in the right way exactly the way the earlier generations prepared it. Whereas for non-traditional food, the traditional people usually get the food for the first time by buying it cooked, so what is known or memorable for the traditional community is how it looks, tastes or how to consume the food. It gives a high impact on the process of conventionalising objects into gestures.

Food signs that are classified into traditional food generally contain icons on how to make food. Whereas, non-traditional food is gestured by signs that indicate the presentation or how to consume the food. According to the differences in the final results, it can be concluded that food signs lexicalisation are related to the insights of the traditional people who really understand and are familiar with traditional food preparation processes. Whereas signs for modern food, the majority of Bengkala villagers are probably less accustomed to the process of preparing the food than in how to consume it. The category of the food taken as iconic strategies for sign lexicalisation. Object category form iconisation strategy describes a strategy in which the hands (not the body) represent a feature of the referent. A feature that

correctly represents was chosen by the community, as in the most salient pattern to conventionalise the sign.

5. Acknowledgment

This research was supported by The Sumitomo Foundation under Reg. no. 22802020.

I am very grateful for Mr. I Gde Marsaja and Connie de Vos who generously let me access the data bank sign for this work. I also gratefully acknowledge my research participants and Mr. Ketut Kanta for help and great assistance while I was in Bengkala village.

Bibliography

- 1. Akach, P. (1997) 'The grammar of sign language', *Language Matters*, 28(1), pp. 7–35. doi: 10.1080/10228199708566118.
- Bull, P. (2012) 'Gestures', Encyclopedia of Human Behavior: Second Edition, pp. 248– 254. doi: 10.1016/B978-0-12-375000-6.00180-4.
- 3. Caselli, N. K. and Pyers, J. E. (2017) 'The Road to Language Learning Is Not Entirely Iconic: Iconicity, Neighborhood Density, and Frequency Facilitate Acquisition of Sign Language', *Psychological Science*, 28(7), pp. 979–987. doi: 10.1177/0956797617700498.
- 4. Cooperrider, K. and Mesh, K. (2021) 'Pointing in gesture and sign', *Gesture in Language: Development Across the Lifespan*, pp. 21–46. doi: 10.1037/0000269-002.
- Coppola, M. (2020) 'Gestures, Homesign, Sign Language: Cultural and Social Factors
 Driving Lexical Conventionalization.', in *Emerging Sign Languages of The America*.
 De Gruyter and Ishara Press, pp. 349–390. doi: 10.3390/languages7040284.
- 6. Creswell, J. W. (2014) Research Design Qualitative, Quantitative, and Mixed Method Approaches. 4th edn. United State of America: SAGE Publication Ltd.
- 7. Fisher, S. D. (2014) 'Sign languages in their historical context', *The Routledge Handbook of Historical Linguistics*, (January), pp. 442–465. doi: 10.4324/9781315794013.ch20.
- 8. Guerrero, L. *et al.* (2009) 'Consumer-driven definition of traditional food products and innovation in traditional foods. A qualitative cross-cultural study', *Appetite*, 52(2), pp. 345–354. doi: 10.1016/j.appet.2008.11.008.
- 9. Hiddinga, A. and Crasborn, O. (2011) 'Signed languages and globalization', *Language in Society*, 40(4), pp. 483–505. doi: 10.1017/S0047404511000480.
- 10. Hoiting, N. and Slobin, D. (2007) From Gestures to Signs in the Acquisition of Sign Language 1.

- 11. Kendon, A. (2015) 'Gesture and Sign', in Keith, A. (ed.) *The Routledge Handbook of Linguistics*. Routledge, pp. 33–46. doi: 10.4324/9781315718453.ch3.
- 12. Kruger, V. (2014) *Balinese Food: The Traditional Cuisine and Food Culture of Bali*. Singapore: Tuttle Publishing.
- 13. Lutzenberger, H. (2023) Kata Kolok Dataset in Global Signbank. Radboud University Nijmegen.
- 14. Marsaja, I. G. (2008) *Desa Kolok: A deaf village and its sign language in Bali, Indonesia.* Nijmegen, the Netherlands,: Ishara Press.
- 15. Marsaja, I. G. (2015) 'Desa Kolok and its Deaf people', *Learning Communities: International Journal of Learning in Social Contexts*, 15(Indigenous Sign Language), pp. 56–65. doi: 10.18793/lcj2015.16.05.
- 16. Marshall, C. R. and Morgan, G. (2015) 'From gesture to sign language: Conventionalization of classifier constructions by adult hearing learners of british sign language', *Topics in Cognitive Science*, 7(1), pp. 61–80. doi: 10.1111/tops.12118.
- 17. Mckeag, L. and Kruszewski, S. (2021) *Defining Local Food: An Analysis of State Approaches and Challenges*. Vermont.
- 18. McNeill, D. (2012) *How Language Began : Gesture and Speech in Human Evolution*. Cambridge: Cambridge University Press. doi: 10.1017/cbo9781139108669.
- 19. Michi, S. A. (2017) 'Analisis genealogi & mean matrimonial radius populasi tuli-bisu di desa', *Libri-Net*, 6(2), pp. 213–222. Available at: http://repository.unair.ac.id/id/eprint/67389.
- 20. Mudd, K *et al.* (2020) 'How does social structure shape language variation? A case study of the Kata Kolok lexicon', pp. 302–304. Available at: https://pure.mpg.de/rest/items/item 3219732/component/file 3219871/content.
- 21. Mudd, Katie *et al.* (2020) 'The effect of sociolinguistic factors on variation in the Kata Kolok lexicon', *Asia-Pacific Language Variation*, 6(1), pp. 53–88. doi: 10.1075/aplv.19009.mud.
- 22. Mudd, K., de Vos, C. and de Boer, B. (2020) 'A Preliminary Study of The Iconic Preferences of Kata Kolok Signers', in *Cognitive and Cultural Influences on Language Emergence*, pp. 2–3.
- Perniss, P. (2015) 'Collecting and Analyzing Sign Language Data: Video Requirements and Use of Annotation Software', in Orfanidou, E., Woll, B., and Morgan, G. (eds) Research Methods in Sign Language Studies: A Practical Guide. first. WILEY Blackwell, pp. 55–73.
- 24. Putri, D. R. (2021) 'Ethnolinguistic Study of Agricultural Sign Language Kata Kolok Bengkala Buleleng Bali', *Kolita. Atmajaya. Ac. Id*, pp. 104–109. Available at: https://kolita.atmajaya.ac.id/assets/uploads/K19/104-109 Dian Rahmani Putri.pdf.
- 25. Putri, D. R. and Sutjaja, I. G. M. (2019) 'Study of Kata Kolok (Signs and their meanings)', 257(Icollite 2018), pp. 1–7. doi: 10.2991/icollite-18.2019.1.

- 26. Rocillo-Aquino, Z. *et al.* (2021) 'What is a traditional food? Conceptual evolution from four dimensions', *Journal of Ethnic Foods*, 8(1). doi: 10.1186/s42779-021-00113-4.
- 27. Slobin, D. I. (2008) 'Breaking the molds: Signed languages and the nature of human language', *Sign Language Studies*, 8(2), pp. 114–130. doi: 10.1353/sls.2008.0004.
- 28. Taub, S. F. (2001) 'Iconicity in American sign language: concrete and metaphorical applications', pp. 31–50.
- 29. De Vos, C. (2016) 'Sampling Shared Sign Languages', *Sign Language Studies*, 16(2), pp. 204–226. doi: 10.1353/sls.2016.0002.
- 30. De Vos, C. and Nyst, V. (2018) 'Introduction: The time-depth and typology of rural sign languages', *Sign Language Studies*, 18, pp. 477–487.
- 31. De Vos, C. and Pfau, R. (2015) 'Sign Language Typology: The Contribution of Rural Sign Languages', *Annual Review of Linguistics*, 1(1), pp. 65–88. doi: 10.1146/annurev-linguist-030514-124958.
- 32. De Vos, C. and Zeshan, U. (2012) 'Introduction: Demographic, sociocultural, and linguistic variation across rural signing communities', *Sign Languages in Village Communities*, pp. 2–24. doi: 10.1515/9781614511496.2.
- 33. Wilcox, S. (2008) 'Sign and gesture: Towards a new paradigm', (2008), pp. 273–275. doi: 10.1075/gs.3.18wil.
- 34. Winata, S. *et al.* (1995) 'Congenital non-syndromal autosomal recessive deafness in Bengkala, an isolated Balinese village', *Journal of Medical Genetics*, 32(5), pp. 336–343. doi: 10.1136/jmg.32.5.336.
- Woll, B. (2009) 'How the brain processes language in different modalities', Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 5398 LNAI(March), pp. 145–163. doi: 10.1007/978-3-642-00525-1_15.
- 36. Zeshan, U. (2007) 'The ethics of documenting sign languages in village communities Language Documentation & Linguistic Theory', *Proceedings of the Conference on Language Documentation and Linguistic Theory*, pp. 269–279.

Ни Путу Л. Ведајанти Универзитет Удајана, Бали, Индонезија Алис П. Линтангсари Универзитет Бравиђаји, Источна Јава, Индонезија

КУЛТУРНИ ФАКТОРИ У ОБЛИКОВАЊУ СЛИКА ЗА ЛЕКСИКУ ЗНАКОВНОГ ЈЕЗИКА

Резиме

Храна као дио културе неког друштва твори културни аспект који је кадар да представља обичаје друштва, те динамику друштвених и економских промјена. Користећи претходне наводе, рад настоји да испита основу за избор слика знакова који означавају храну у знаковном језику Ката Колок. Користи се метод квалитативне анализе са фокусом на језичким појавама које постоје у заједници глувонијемих села Бенкала на сјевероистоку острва Бали (Индонезија). Подаци који су кориштени у овој студији прикупљени су из корпуса знаковног језика који се може наћи на сљедећој интернетској страници: www.signbank.ru.nl. У погледу наведеног корпуса аутор се усредсређује на дио који се односи на храну и подлијеже даљој класификацији на традиционалну и нетрадиционалну храну. Резултати истраживања дају нам за право да тврдимо како је заједница одабрала знакове за традиционалну храну, с обзиром на то да располажу солидним знањем о припремању овакве врсте хране. У погледу знакова нетрадиционалне хране приказује се слика саме хране. ► *Къучне ријечи*: културни фактори, знак за храну, Ката Колок, лексикализација.

> Preuzeto: 13. 1. 2024 Prihvaćeno: 7. 5. 2024.