

# Spatial Representation of Baduy Tribe

Santy Yulianti\*, Winci Firdaus

Badan Pengembangan dan Pembinaan Bahasa dan Sastra  
Jakarta, Indonesia

\*santyyulianti019@gmail.com

**Abstract**—This paper focuses on studying the spatial representation of Baduy tribe. This subject is an interesting matter because Baduy tribe have customary rules regarding the layout of buildings and fields in their lives. The conceptual rules affects the vocabulary production that they use in daily life, one of which is the formation of prepositional phrases with spatial meaning. This structure indicates Baduy's spatial cognition in terms of their daily interactions with natural surroundings. The theoretical basis used to produce prepositional phrase rules is conceptual semantics and spatial representations from spatial cognition of the Baduy. The data used are locative prepositional phrases (place functions) with prepositions *di* (in/at) and *ka* (to) obtain from interviews with informants from Baduy Jero (Inner Baduy) and Baduy Luar (Outer Baduy). The method of data collection is transcript the interview and then classified the prepositional phrases that occurred in the interview. The result is that the reference objects for these prepositional phrases are place nouns such as *imah* (house), *leuit* (rice barn), and *huma* (field), and direction nouns such as *luhur* (top), *kaler* (north), *kidul* (south), *kenca* (left), *katuhu* (right), and prepositions of derivatives ending in suffix *-eun*. Spatial representations obtained from the construction of prepositional phrases are reference objects that are mostly allocentric and locative concepts of *kidul* (south) and *kaler* (north). This relates to their experience of the layout of their villages, fields and sacred places which started from the northernmost area as a public area (villages) to the southernmost region as a sacred place (place of worship) of the Baduy. This cognitive map is representing the wisdom of Baduy tribe in conserving the nature.

**Keywords**—*prepositional phrases, place function, spatial representation*

## I. INTRODUCTION

Baduy are registered in the administrative area of Kanekes Village, Leuwidamar District, Lebak Regency, Banten Province. The centre of government is at of Kaduketug subvillage. The location of Kanekes village is in the area of Kendeng mountainous, southern Banten. This area is known as the source of several river springs that flow in all directions. Villages in mountainous areas with steep valleys are customary land that has been recognized by the government since 1986.

In *Saatnya Baduy Bicara* [1] alluded to the terms for Baduy Jero (Inner Baduy) and Baduy Luar (Outer Baduy) which are not only limited to differences rules but rather to the tasks they entail. Baduy Jero is believed as representation of the Baduy

tribe from the past as the original heirs of the culture and inherit the mandate of their ancestors. Original heirs are related to their awareness and obedience in maintaining the customs and consistency of isolating themselves away from outside cultural influences that are considered negative. Baduy Jero (Inner Baduy) are divided into in three villages, namely Cibeo, Cikertawana, and Cikeusik. Meanwhile, Baduy Luar (Outside Baduy) or usually called Panamping is villages formed as supporters, guards, filters, protectors, and at the same time an extension of intensive friendship with outsiders as a form of appreciation, cooperation, and active participation in state activities to show that they are one of the same ethnic groups who have rights and the same obligations as other Indonesian citizens.

Language which is spoken by the Baduy tribe is Sundanese with Baduy dialect. Baduy Sundanese dialect is basically still understood by most Sundanese speakers. Most of the speech is related to their daily activity as farmer. This reality incites me to explore deeper about Baduy viewpoint in arranging their life from their utterances regarding spatial cognition. This study is assumed to be pilot project for constructing a community cognition based on their daily experiences.

## II. THEORETICAL BASIS

Spatial situations and spaces are believed to be the basis for accommodating various collections of ideas and concepts contained in our spatial cognition. Taylor and Brunye [2] suggested that spatial cognition which is a branch of cognitive science seeking human and animal understanding in seeing, interpreting, describing, and relating to the spatial characters that exist in their environment. These characteristics include objects; places of occurrence related to size, shape, scale; in line with relationships between objects such as distance, direction, orientation, and location. Spatial cognition is determined by attention and perception in the memory, categorization, problem solving, and language. Our daily experience and culture will shape our understanding and cognition in seeing all aspects of the world. And then discuss it using spatial expression. In various languages, spatial expressions are in the form of word classes and constructions such as adpositions, adjectives, event markers, attitude verbs, limb construction, and verb classifications.

Jackendoff [3] had developed Langacker's cognitive grammar by starting a semantic conceptual focusing on grammatical construction with psychological aspects. Riemer [3] said that Jackendoff called language as a mental phenomenon. The conceptual semantic of Jackendoff difference with other cognitive semantic approaches, such as Lakoff and Johnson's ICM (Idealize Cognitive Model), Wierzbicka's NSM (Natural Language Metalingua Prototype). Jackendoff uses phonological analysis. The phonological tools used are ([+ VOICE], [+ CORONAL], etc. This device cannot be encoded both linguistically and soundly. Jackendoff uses ontological categories such as Thing, Event, State, Action, Place, Path, Property, and Amount to encode word class concepts. None of these features can be represented in word/lexicon; furthermore, none can even be pronounced independently. Jackendoff [3] begins with meaning actually from all words, but when we break down these meanings, we immediately 'find layers of structure whose units cannot individually function as possible word meanings'. Riemer [3] exemplifies conceptual semantic analysis with the sentence "Bill went into the house ". The syntactical structure of this sentence is [S [NP Bill] [VP [V went] [PP [P into] [NP the house]]]]. Conceptual is in the form of [EVENT GO ([THING BILL], [PATH TO ([PLACE IN ([THING HOUSE])]])]]. The square brackets in the conceptual structure signify the conceptual constituents of the sentence and the semantic content expressed by the sentence. Each of these constituents can be assigned to the main ontological categories, such as Thing, Event, State, Action, Place, Path, Property and Amount, encoded in small capitalization below (subscript capitals). Jackendoff describes these ontological categories as a conceptual word class. Just like the word class namely Noun, Verb, and Adjektive which is a set of categories that are limited by certain criteria, so that the ontological categories are the main groupings that can be the basis of the meaning referenced. Each major syntactic category in the syntactic structure corresponds to conceptual constituents: noun phrases namely *Bill* and *the house* are correspond to the Thing slot in the conceptual structure, the verb *goes* correspond to the Event slot, the prepositional phrase *into the house* correspond to the Path slot [3].

The prepositional phrase (*pangantet* phrase) in Sundanese according to Sudaryat, et al [4] in the "*Tata Basa Sunda Kiwari*" (Sundanese Kiwari Language System), is an exocentric phrase with preposition as connector or marker (*pangantet*). Sudaryat, et al [4] divide prepositional phrases based on semantic functions related to spatial (space), namely place, direction, beginning, and end. Prepositional phrases that have place function semantically are *di* (in/at) and *ka* (to).

The previous study of locative prepositional phrases was written by Toshio Suenobu in a dissertation entitle "*Preposisi Lokatif Bahasa Indonesia*" (Indonesian Language Locative Preposition). Suenobu's dissertation [5] provides an overview of the construction of Indonesian locative prepositions that are widely used by national mass media (newspapers). Suenobu [5] found 25 locative prepositions in Indonesian that can be classified into two major groups, namely simplex and complex

prepositions. The simplex preposition has two subgroups, the true simplex preposition, which consists of three prepositions, namely *di* (at), *ke* (to), and *dari* (from), and the simplex preposition as a result of the grammaticalization process, which consists of four prepositions, namely *pada* (at), *sampai* (to), *hingga* (to), and *lewat* (through). Another study related to Sundanese preposition is Cece Sobarna's [6] dissertation entitled *Preposisi Bahasa Sunda* (Sundanese Language Preposition).

There is also a study that describe the Baduy community from an anthropological perspective made by Suhandi Sam, et al [7] entitled *Tata Kehidupan Masyarakat Kanekes di Propinsi Jawa Barat* (Kanekes Community Life Order in West Java Province) focuses on cultural changes in the form of traditional values as a result of changes that occur in the sphere of life; both the natural and physical environment and the social environment.

Referring to the above description, linguistic research related to Sundanese Baduy dialect focuses more on the structure and meaning of a word, research on the proverbs and proverbs that developed in the Baduy community. Meanwhile, research from anthropological and linguistic aspects relating to the Baduy has not been found so far. Therefore, this study focuses on the spatial meaning contained in the construction of Sundanese locative prepositional phrases Baduy dialect obtained from everyday speech. The results of this study can describe the spatial concepts of Baduy society's life on the background of their culture. In addition, the results of this study also contribute to an inventory of the cultural values of the Baduy community, which is increasingly pressed by modernity.

### III. METHODOLOGY

Qualitative research delivered by Creswell [8] as an approach that explores the meaning of individuals or groups in a social problem or personal problem. The process involves initial assumptions and procedures, data is collected according to the participant's situation, data is analysed inductively from specific to general, and the researcher interprets the meaning of the data.

Data collection was carried out in Kaduketug I village by selecting five main informants from Baduy Jero and Baduy Luar. The classification of Baduy Jero and Baduy Luar is carried out to find out the basic lexicon that they have, especially those related to space. The age selection is based on the productive age of the Baduy in the range of 17-40 years. Productive age groups have clearer and more detailed descriptive and speech skills. The data used is the construction of prepositional phrases from the speech produced in the interview. The data then classified according to the meaning of the preposition referred to. The analysis technique is done by using the locative prepositional phrase conception of Sundanese combined with Jackendoff's spatial rules to produce cognitive schemes as spatial representations of the Baduy.

#### IV. RESULTS AND DISCUSSION

The phrases associated with this study have a construction that is almost the same as the Sundanese language in general. However, the prepositional phrase in the speech of the Baduy community becomes the focus of this research will give a comprehensive picture of spatial representation in their lives that has its own uniqueness. Prepositional phrases that represent spatial meaning are prepositional phrases with locative meanings. Prepositional phrases that have a locative semantic function are prepositional phrase structures which consist of prepositions *di* (in/at) /*ka* (to) and noun or noun phrases as there. Locative prepositional phrases according to the data collected in are as follows.

##### A. *di* (in/at) Preposition

Locative prepositional phrases with the use of prepositions *di* (in/at) and noun indicate the place/location. By the classification of the Baduy description of the surrounding environment, it is found several clauses that have locative prepositional phrases with preposition *di* (in/at) and noun with the following patterns.

1) *Place DI [Thing Y]*: This pattern is formed from by a preposition *di* (in/at) which states the place and thing Y in the form of a place or object. The clauses which have a locative prepositional phrase with preposition *di* (in/at) on the Baduy spatial speech are as follows.

The phrase *dukuh di sosoro* refers to one point in the *sosoro* (living room) area. Spatial relationships occur in *di* (in/at) prepositions which occupy the PLACE function and the noun *cantang* (cupboard shelf) and *sosoro* (living room) as reference objects. The concept of *di* (in/at) preposition above does not refer to a particular point but exists within the radius of the reference noun. The Baduy tribe generally put duku fruits in a portable basket.

2) *Place (DI) beulah [Thing Y]*: This pattern is formed from by a preposition *di* (in/at) and *beulah* which states the place and thing Y in the form of a place or object. The data contains of locative prepositional phrases with prepositions *di* (in/at) and nouns or noun phrases in the cardinal direction system. The directions referenced are such as *timur* (east), *barat* (west), *kaler* (north), and *kidul* (south), in *di belah timur-kidul* (at the southeast), *di beulah barat* (at the west), *di beulah kaler* (at the north), and *di beulah timur* (at the east). The reference object is in the radius of the reference center that are nearby.

Locative prepositional phrases also use relative nouns such as *di beulah gigir* (on the side). The noun *beulah* could autonomous without prepositions *di* (in/at), as in *beulah kaler* (at the north side), *beulah barat* (at the west), *beulah tukang* (at the back), and *beulah gigir* (at the side). The use of prepositions *di* (in/at) and *beulah* in the speech of the Baduy tribe occurs when they are describing the location of a more specific object (reference) using the reference centre of a nearby object (landmark). The difference in the meaning of the

preposition *di* (in/at) and *beulah* is that the preposition *beulah* emphasizes the location of one object on a particular side so that its scope is narrower than the preposition *di* (in/at).

The concept of preposition *beulah* on this locative prepositional phrase refers to a particular point in the radius of the reference object. Similar to the concept of village and *leuit* space, most of the buildings of Baduy tribe should point to the south. The main door of the Baduy house should face to the south. However, the Baduy Luar tribe, whose houses are located in the west and east, is creating two or three doors in their houses. This solution is to anticipate the rule. the main door still faces south, the second door usually faces the road (west /east), and an additional / third door will be placed at the rear (facing north/*goah*). The reference centre that uses an allocentric system makes it easy for listeners or speakers to understand the description of the place.

3) *Place DI (BEULAH) [Thing Y] + eun/na*: This pattern is formed from by the preposition *di* (in/at) and *beulah* which states the place and thing Y. The structure is divided into two groups, that are prepositional phrases with prepositions *di* (*beulah*) with relative nouns such as *burina*, *di luareun bates*, *di kencaean jalan*, *di luhureun cantang*, and *di jeroeun tatajuran* and prepositions *di* (*beulah*) with cardinal nouns, such as *beulah kalerna*, *di beulah baratna*, *di timureun lembur*, *di barateun lembur*, *timureun jeung kiduleun*, *timureun lawang*, and *di beulah kiduleun*.

Data contain of relative nouns such as *burina* (inside), *di luareun bates* (outside border), *di kencaean jalan* (on the left road), *di luhureun cantang* (above the self), dan *di jeroeun tatajuran* (inside the border). The phrases such as *di beulah baratna* and *beulah burina* consist of prepositions *beulah* and noun *barat* and *buri* that experience the addition of suffixes (suffixes) --*na* to become *baratna* and *burina* which means *at the back side/inside*. The suffix *-na* in *baratna* refers to a road with an allocentric reference system, while *-na* in *burina* refers to a house with an egocentric reference system. Phrase *di luareun bates* consist of preposition *di* (in/at) and noun phrases *luareun bates* that have suffixes added —*eun* for *luareun* as an adjective for *bates*. Phrase *di kencaean jalan* consist of preposition *di* (in/at) and noun *kencaean jalan* that have suffix *-eun* in *kencaean* as an adjective for *jalan*. Phrase *di luhureun cantang* consist of preposition *di* (in/at) and noun phrase *luhureun cantang* which have suffixes—*eun* at *luhureun* as an adjective for *cantang*. Phrase *di jeroeun tatajuran* consist of preposition *di* (in/at) and noun phrase *jeroeun tatajuran* that have suffixes *-eun* at *jeroeun* as an adjective for *tatajuran*.

The reference centre of the five clauses are *imah* (house) for *beulah burina*, *bates kampung* for *di luareun bates*, *jalan* for *di kencaean jalan*, *cantang* (cabinet shelves) for *luhureun cantang*, and *tatajuran* (village boundaries) for *di jeroeun tatajuran*. Noun phrases with adverbial *buri* (inside) at *belah burina*, *luar* (outside) at *di luareun bates*, *kenca* (left hand) at *di kencaean jalan*, *luhur* (above) at *di luhureun cantang*, and *jero* (inside) at *di jeroeun tatajuran* are referred to is on one spot of the region (direction) of the reference centre. The lexicon used

for this locative noun phrase, especially complimentary, is a Sundanese lexicon such as *huri*, *kenca*, *luhur*, and *jero*. Meanwhile, the lexicon *luar* is loan word from Indonesian because in Sundanese with Baduy dialect does not have a *luar* concept. Similar to the concept of *Jero* for the Baduy, which is categorized as rustic Sundanese, the lexicon *jero* means inside the region.

Locative prepositional phrases with [Place PLACE - FUNCTION ([Thing y])] patten as explained above have three variations which are marked by prepositions (*di/beulah*) and the Y function that fill the noun. The Y function that fill the noun consists of place, cardinal system direction, and relative noun and also derivative nouns that are marked with the affix *-eun/na*. The use of *beulah* that follow the place/directive noun is categorized as a noun, but will change as a preposition if it replaces the preposition *di* (in/at).

### B. *ka* (to) Preposition

Prepositional phrases with prepositions *ka* (to) could means either locative or directive phrase. The prepositions *ka* with locative meaning consists of direction noun, relative position noun, or derivatives noun. This phrases can be form with pattern as [Static VERBA ([Object X], [Place Y])]. VERBA static is filled with verbs as locative markers. Object X is a noun/noun phrase. Place Y is the locative preposition *ka* or *ka beulah*.

Data (23) - (29) have the usage of nouns with the cardinal direction, i.e. *timur* (east), *barat* (west), *kidul* (south), and *kaler* (north). The verb used is a static verb that states 'in a state/situation/position'. This verb belongs to the category of affixed verbs in Sudanese (*rundayan*) with suffix *-ny* which is allomorphs of *n-*. Rundayan verb *nyanghareup* is a derivative verb from *hareup* (front) and prefix *nyang* to become *nyang/nying + hareup* which means in a state facing one direction/point. The affixation verb used in the spatial utterance indicates that the preposition *ka* explains locative noun, such as *ka kidul* (*nyanghareup*) (*fronts the south*), *nyanghareup ka kidul* (*fronts the south*), *nyanghareup ka timur* (*fronts the east*), *nyinghareup ka kidul* (*fronts the south*), *nyanghulu ka barat* (*fronts the west*), *nyanghareupna ka barat* (*fronts the wesr*), *nu ka barat* (*to the west*), dan *nu ka kidul* (*to the south*). Then, there is also the use of the word 'beulah' after the preposition *ka* to explain the location more specifically, such as *nyanghareupna ka beulah timur* (*fronts the east*). The use of *ka* and *ka beulah* basically has no difference in meaning because both state location/place. The use of cardinal direction in locative noun also indicates that most Baduy tribes always use allocentric references in indicating places/locations.

Data that have prepositional phrases with the preposition *ka* and *ka beulah* such as *ka kidul* (*to the south*), *ka kalèr* (*to the north*), *ka timur* (*to the east*), *ka barat* (*to the west*), and *ka beulah timur* (*to the west*), are influenced by verbs that follow. Data use the same verbs such as *nyanghareupa* (*na*), *nyinghareup*, and *nyanghulu* which means facing/fronting in one point. Likewise, the verb *nyanghulu* comes from the affix *nyang + hulu* (human head) means heads (verb) because body

part (head) is equal with the meaning *heads to*. The object reference used in data is the position of the house with the reference centre in cardinal direction. The reference object occupies the subject or object function in the clause, while the reference object occupies the information function that is marked by the use of the preposition *ka* and *ka beulah*.

Locative prepositional phrases with [Static VERBA ([Object X], [Place Y])] pattern are influenced by static verbs. The preposition *ka* (to) is as a PLACE function. Static verbs can be verbs, verb phrases, or derivative verbs. The Y function can be places, cardinal directions, relative positions, and also derivative nouns that is marked with *-eun/na* affix. The use of *beulah* that follow the place/directive noun is categorized as a noun, but will change as a preposition if it replaces the preposition *ka* (to).

## V. CONCLUSION

Prepositions *di* (in/at) and *ka* (to) as markers of locative prepositional phrases in the speech of the Baduy refer to the location of a particular object or region. The location referred to is distinguished by an allocentric and egocentric system. The allocentric system use cardinal direction to indicate location, while the egocentric system use relative position to indicate location of the subject. The allocentric system refers to the south, west, north and east. In Sundanese the vocabulary is compatible with *kidul*, *kulon*, *kaler*, and *wetan*.

The topography of the Kanekes village become the background of vocabularies acquisition, such as *luhur* (top), *gigir* (side), *jero* (inside), *katuhu* (right), and *kenca* (left). *Luhur*, *jero*, and *gigir* nouns are often used when explaining the location of a place in the surrounding area (villages and fields) such as the position of the house (*imah*), shacks (*saung*), and rice barns (*leuit*) which follows the structure of hilly land. Right/left reference (*katuhu/kenca*) is used when the speaker / listener is in the lane. While noun *luhur* relates to the position of object higher in the radius of other object. This noun is usually used to explain *imah* (house), *tepas* (living room), *sosoro* (terrace), and *golodog* (terrace next to the house). While loan words from Indonesian such as *luar* (outside) and *sisi* (side) already main vocabularies in their daily conversation due to their activities outside the village.

The *barat* (west) and *timur* (east) nouns mentioned earlier, are loan words from the Indonesian language used to indicate the cardinal direction. The two direction nouns have the same reference, that is, the west and east which can be associated with the right/left side of the speaker/listener. Most Baduy speeches related to the position/direction of the west and east use nouns *katahu* (right) or *kenca* (left), depending on the relative position of the speaker. Derivative nouns in *timureun* is a loan word from Indonesian *timur* with the prefix *-eun* and the information *beulah* as a demonstration marker.

The results of this study are expected to provide a new perspective in observing ethnic communities in Indonesia. This research is also expected to be continued in more depth discussion because it is very useful in mapping the spatial

concept of an ethnic community. Furthermore, the results of research with this theme will contribute to the policies made by the government regarding the protection of indigenous communities in Indonesia.

#### REFERENCES

- [1] A. Kurnia, A. Sihabudin, and F. Yustianti, *Saatnya Baduy Bicara*, Bandung: Bumi Aksara, 2010.
- [2] D. Waller and L. Nadel, *Handbook of Spatial Cognition-American Psychological Association*, Wahington, DC: American Psychological Association, 2013.
- [3] N. Riemer, *Introducing Semantics*, Cambridge: Cambridge University Press, 2010.
- [4] K. Sudaryat, Yayat Prawirasumantri, and Abud Yudibrata, *Tata Basa Sunda Kiwari*, Bandung: Yrama Midya, 2013.
- [5] T. Suenobu, *Preposisi Lokatif Bahasa Indonesia*, Depok: Univeritas Indonesia, 2007.
- [6] C. Sobarna, *Preposisi Bahasa Sunda*, Bandung: Syabas Book, 2012.
- [7] S. Sam, Abdurachman, Zarkasih, and Suwandi, *Tata Kehidupan Masyarakat Baduy di Provinsi Jawa Barat*, Bandung, 1986.
- [8] J.W. Creswell, *Research Design (Qualitative, quantitative, and Mixed Methods Approaches)*. Los Angeles, London, New Delhi, Singapore, and Washington DC: SAGE, 2014.