THE LEXICON OF ANIMAL CLASSIFICATION IN JAVANESE: A COGNITIVE SEMANTIC APPROACH

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Abstract
This study aims to describe the lexicons of animal classification in Javanese. The classification refers to a categorization system based on the semantic aspects of naming constructions. The results of the analysis are presented in the description along with the classification chart. In general, the lexicons in animal classification can be divided into, at least, five classifications, namely classification (a) ingon-ingonan, (b) alasan, (c) satoan, (d) buron, and (e) pangirid. In accordance with the world view of Javanese speakers, there are three wisdom presented in the animal classification, namely (a) ora mateni sakabehe ‘do not kill every living thing’, (b) ora ngrusak sakabehe ‘do not broke anything’, and (c) ora mangan kewan ‘do not eat the specific animals’. For further investigation, the contrastive analysis on lexicon of plant and animal classification in Javanese, especially in farming register, is the interesting research topic in the light of Cognitive Semantics.

Keywords: lexicon of animal classification, linguistic constructions, speaker of Javanese, cognitive semantics.

Introduction
The diversity of fauna in Indonesia was showed by a variety of animal naming lexicons. The same animal, for example chickens, called pitik in Javanese, had several variations of naming sub-categories, for example, ras, kampung, and kate. These variations are driven by the understanding of the speakers of Javanese in classifying the types of chickens. Likewise, for some other animals, speakers of Javanese had certain register of lexicons for naming animal species. Hypothetically, if the types of animals are increasingly diverse, the lexicons are used to refer to various types. The phenomenon related closely to Javanese perspective as a speaker of a language. That is closely related to the concept of the relationship between experience, embodied cognition, and language (Evans & Melanie, 2006; Evans, 2007; Croft, & Cruse, 2004; Geeraerts, 2006).

The likely explanation is the experiences of Javanese speakers in breeding animals, for example, can be a source of the emergence of naming lexicon. With
the intensity of observation, speakers of Javanese can identify animal traits. In the
next process, the mark is classified in the experience space. The identification and
classification process is facilitated by language. Language use can invoke frames
that summon rich knowledge structures, which serve to call up and fill in
background knowledge (Evans & Melanie, 2006, p.11). The experience of
breeding animals, which is then referred to as ingon-ingangan/ingah-ingahan,
forms an understanding of the classification of animals that can be nurtured and
cannot be maintained. Therefore, the kucing "cat" and manuk "bird" can be at the
level of classification of ingons, although biologically both animals are in
different classes, vertebrates, and aves. Thus, it can be seen that the background
knowledge of BJ speakers in classifying animals may be different from biologists
who use physiological elements in classification. In his analysis of plants
classification on Javanese, Suhandano (2000) found that linguistic phenomena
also occur in many languages. For example, dogs can be compared to those
classified as pets by English speakers, but generally not considered pets by the
majority of Indonesian speakers.

The discussion of the classifications of living things through a linguistic point
of view has been carried out by several researchers. There are at least two studies
that can be reviewed carefully. First, observations about the classification of
linguistic data about plant names in Javanese. Based on the data and analysis
conducted, it was found the fact that speakers of Javanese classify plants not
merely referring to the physiological principles commonly referred to by
biologists. Javanese speakers use their cultural background to identify and classify
plants. Second, research on the classification of plants and animals in Aboriginal
language in Groote Eylandt. Waddy (1998) tried to explore the language
perspective of the people in the Groote Eylandt region in classifying plants and
animals. In general, not much different from the findings of Suhandano (2000)
who examined Javanese speakers, research reported under the title Aboriginal
Point of View Classification of Plants and Animals from a Groote Eyland implies
speakers of Aboriginal language use cultural backgrounds to classify animals and
plants. Specifically, it was mentioned that Aboriginal speakers compile a
classification system by utilizing noun devices as categories of words commonly
used to label objects.

Based on some remarks on research findings explained in previous paragraph
and the conceptual framework of cognitive semantics, this study is conducted. In
general, the semantic aspect of language construction that utilized in animal
classification can be divided into, at least, five classifications, namely
classification (a) ingon-ingtonan, (b) alasan, (c) satoan, (d) buron, and (e)
pangirid. In accordance with the world view of Javanese speakers, there are three
wisdom presented in the animal classification, namely (a) ora mateni sakabehe
‘do not kill every living thing’, (b) ora ngrusak sakabehe ‘do not broke anything’,
and (c) ora mangan kewan ‘do not meal the specific animals’. Further explanation
is provided in the discussion.

Method

Through cognitive semantics, this research attempts to describe the lexicons of
animal classification in Javanese. By understanding the way speakers identify and
classify animals, it is possible to describe: (a) aspects of perceptions about culture, (b) habits of life, and (c) views of the world through a language perspective. Thus, this research becomes important because it records the local wisdom of Javanese speakers through linguistic phenomena. Evans and Melanie (2006) reminded “language offers a window into cognitive function, providing insights into the nature, structure and organization of thoughts and ideas.”

This study consists of three main stages, namely (1) data collection, (2) data analysis, and (3) interpretation of the results of the analysis. In the first stage, the identity of the research object is determined, namely the classification of animals in Javanese. Data are collected from the use of Javanese in both oral and written form. Both techniques were used during interviews in several regions in DI Yogyakarta, namely Sleman and Gunung Kidul. In the analysis phase, based on referential matching techniques, the data are analyzed and interpreted, as seen in example 1:

(1) Aku duwe ingon-ingonan kucing ireng mulus.
    1st have pets cat black smooth
    My pets is a smooth-hair black cat.
    Lexicon ➔ ingon-ingonan ‘pets’
    Construction ➔ {ingon} + {R} + {-an}

After identifying the semantic field of the words, the lexicon is classified according to the dominant category. The dominant category is a naming group which is often referred to by respondents. Based on the arranged categories, interpretation is done by referring to cognitive semantic theory. Next, the results of the analysis are presented. Analysis of the naming and linguistic construction of the naming classification meanings is presented in a descriptive presentation accompanied by a classification chart (Nesset, 2008; Isac & Reiss, 2008). Descriptive exposure explains each linguistic construction pattern used in naming. The explanation is also accompanied by the rules of naming construction. However, all the previously mentioned methods suffer from some limitations.

Findings and Discussion

The lexicon of animals in Javanese, in general, is classified by the semantic aspect of language linked with world view of Javanese speakers. Duranti (1997, p.168) mentioned one (related) assumption is that linguistic forms are shared by a particular group of speaker. It means that there was a linguistic form that used by a speaker of language in their context of convention. Based on the analysis, lexicon as the linguistics form was used by Javanese in order to classify the variety on animals. In particular, at least, there were five lexicon classifications, namely (1) ingon-ingonan, (2) alasan, (3) satoan, (4) buron, and (5) pangirid. Based on the light of cognitive linguistics, there are some semantic features of those classifications as presented on table 1.

The Lexicon of Ingon-ingonan

First, the lexicon of Ingon-ingonan. The lexicon of ingon-ingonan covers a range of animals name. The Lexicon means ‘pet’. There are, at least, three semantic features that identified from the lexicons, namely +USEFUL,
+PRODUCTIVE, and –WILD. For example, the word mendha ‘goat’ appeared on data as in (2) as follow.

(2) Mendhanipun sampun dipun sadhe.
His/her goat sell
His/her goat has been sold.
Lexicon → mendha ‘goat’
Construction → {mendha}

The lexicon ingon-ingonan used as a marker in animal classification in Javanese. In sentence (2), the lexicon mendha is a subcategory of ingon-ingonan. If the lexicon is substituted with the lexicon macan, sentence (2) becomes odd because Javanese speakers do not place the macan as a pet or ingon-ingonan. The acceptability is based on the understanding of BJ speakers about macan who are not pets. Semantically, macan lexicons have –USEFUL, -PRODUCTIVE, and + WILD features. Beyond that construction, speakers of Javanese believe that the data reflect the value: (a) ora mateni sakabehe ‘do not kill every living thing’ and (b) ora mangan kewan ‘do not meal the specific animals’.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Semantic Features</th>
<th>Example of Lexicons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingon-ingonan</td>
<td>+ USEFUL</td>
<td>Sapi</td>
</tr>
<tr>
<td></td>
<td>+ PRODUCTIVE</td>
<td>Mendha</td>
</tr>
<tr>
<td></td>
<td>- WILD</td>
<td>Bebek</td>
</tr>
<tr>
<td></td>
<td>- USEFUL</td>
<td>Macan</td>
</tr>
<tr>
<td></td>
<td>- PRODUCTIVE</td>
<td>Kidang</td>
</tr>
<tr>
<td></td>
<td>+ WILD</td>
<td>Ulo</td>
</tr>
<tr>
<td>Alasan</td>
<td>+ WILD</td>
<td>Celeng</td>
</tr>
<tr>
<td></td>
<td>+ PRODUCTIVE</td>
<td>Tikus</td>
</tr>
<tr>
<td></td>
<td>+ DESTRUCTIVE</td>
<td>Bajing</td>
</tr>
<tr>
<td>Satoun</td>
<td>+ WILD</td>
<td>Kancil</td>
</tr>
<tr>
<td></td>
<td>+ PRODUCTIVE</td>
<td>Manuk/Peksi</td>
</tr>
<tr>
<td></td>
<td>+ DESTRUCTIVE</td>
<td>Celeng</td>
</tr>
<tr>
<td>Buron</td>
<td>+ ABLE TO USE</td>
<td>Jaran</td>
</tr>
<tr>
<td></td>
<td>+ PRODUCTIVE</td>
<td>Sapi</td>
</tr>
<tr>
<td></td>
<td>+ INSTRUMENTATIVE</td>
<td>Kebo</td>
</tr>
</tbody>
</table>

In addition to those result, in her study, Kurnia (2013) found the lexicons of animal on Javanese proverbs as a part of semantic phenomenon that interpreting as a meaning (a) of nature’s rule, (b) of emphasis, (c) of illustration, (d) of world view, (e) of warning, and (f) of special explanation. Other findings by Suhandano (2000) explained that lexicons of plant also presenting the Javanese’s thought. In contrast to those two findings, it is very difficult to trace the origin reason of the used of animal and plant as a presentation of Javanese world view.

Cognitive semantics is a part of cognitive linguistics (cognitive linguistics). Referring to the birth of its scientific branch, cognitive semantics is a development of cognitive understanding (Pasaribu, 2013). Clearly, Kridalaksana (2008, p.127) provides an explanation of cognitivism as theory that always tries to find parallelism between the way the language works and the way the human brain works, and all grammatical concepts are given semantic characteristics. Departing from this school of thought, some generative semantics, semantics that
develop after the structural period, try to see language constructs as part of a more complex framework, namely a marker of systems of thinking of speakers of language. Brown (2008, p.569) affirms this with the statement “on a broad understanding, any approach that views language as residing in the minds of its speakers and a linguistics description as a hypothesis about a speaker's mental state would merit the designation cognitive.” using this paradigm, this study tries to describe the classification of animals carried out by speakers of Javanese.

**The Lexicon of Alasan**

Second, the lexicon of Alasan. The alasan’s lexicon includes several animal names. This lexicon means 'animals that live in the forest'. At least, there are three semantic features of the lexicon, including +WILD, –USEFUL, and –PRODUCTIVE. This can be illustrated briefly by example (3).

(3) Nalika ketiga, macan kerep ngangsu ing tlaga.

When summer lion always drink in lake

*In summer, lion always drinks water in the lake.*

Lexicon ➔ macan ‘lion’

Construction ➔ {macan}

The lexicon alasan is used as a classification of animal classification in Javanese. In (3), the lexicon macan is a subcategory of alasan. If the lexicon is substituted with the lexicon kucing, sentence (3) becomes odd because Javanese speakers do not place kucing as a alasan. The acceptability is based on the understanding of BJ speakers about macan who are not pets. Semantically, macan lexicons have +WILD, –USEFUL, and –PRODUCTIVE features. Kurnia (2013) found a lexicon of animals also used in Javanese’s proverb to present several meanings, for example (a) the laws of nature as in *ana gula ana semut*, (b) hiperbole as in *padune kaya welut dilengani*, (c) parables as in *kaya kucing lan asu*, (d) a way of life as in *opor-opr beben mentas awake dhewek*, (e) prohibition as in *cedhak celeng boloten*, dan (f) special case as in *asu rebutan balung*.

The first understanding of cognitive semantics is traced through linguistic dictionaries. Kridalaksana (2008, p.217) defines cognitive semantics as in a cognitive paradigm that treats meaning as conceptualization. The first definition gives an understanding that the study of meaning in cognitive semantics is not a structural study that places meaning in the position of lexical and grammatical meaning. The meaning is placed as a sign of a broader system of conceptual understanding. Evans and Melanie (2006) assert that there is a connection between embodied cognition, experience, and language. Furthermore, Geeraerts and Cuykens (2007, p.3) additional explanations as follows.

The analysis of the conceptual and experiential basis of linguistics categories is of primary importance within Cognitive Linguistics: the formal structures of language are studied not as if they were autonomous, but as reflections of general conceptual organization, categorization principles, processing mechanisms, and experiential and environmental influences.
The main points in the definition are the study of cognitive semantics is not far from the discussion of conceptual networks, categorization principles, the mechanism for processing object naming, and the influence of experience and environment in classifying objects. The discussion involves linguistic constructs, language symbols, as initial markers. Thus, indeed, it can be seen that cognitive semantic studies are parts of linguistic studies. Cognitive semantics is a theory. In linguistic scientific work, theory can be used to make descriptions, classifications, and explanations of observed language events, as well as to make predictions about language phenomena that can arise (Baryadi, 2015, pp.6-7).

The Lexicon of Satoan

Third, the lexicon of Satoan. Satoan’s lexicon means ‘harmful animals’. This Lexicon includes several animal names. At least there are four semantic features of the lexicon, including +WILD, +NOT USEFUL, +NOT PRODUCTIVE, and +DAMAGEABLE. For example, the word bajing appeared on data as in (4) as follow.

(4) Wit klapa iki pupus jalaran bajing kang ana ing kene.
Tree coconut this vanish because squirrel in this area
This coconut tree vanished because of the presence of squirrels in this area.
Lexicon $\rightarrow$ bajing ‘squirrel’
Construction $\rightarrow$ \{bajing\}

The lexicon satoan is used as a classification of animal in Javanese. In (4), the lexicon bajing is a subcategory of alasen. If the lexicon is substituted with the lexicon lele, sentence (4) becomes odd because Javanese speakers do not place lele as a satoan. The acceptability is based on the understanding of BJ speakers about lele who are not satoan or dangerous animals. Semantically, lele lexicon have features of -WILD, +USEFUL, and +PRODUCTIVE.

In connection with the results of this study, Suhandano (2000) underlines the linkages between these classification systems and the way in which Javanese speakers view the plant world. The classification of plants in Javanese, which is referred to as taxa in the study, consists of at least four types, namely (a) uwit ‘tree’, (b) suket ‘grass’, (c) jamur ‘mushroom’, and (d) lumut ‘moss’. The four types of classifications are used by Javanese speakers in daily life. The lexicon categories used in the four classifications are primary lexemes. Primary lexeme is a linguistic construction that is monomorchemic or consists of only one basic morpheme as an attribution of the phrase fill in the uwit generic taxa, for example uwit gedhang ‘banana tree’, suket gajah ‘elephant grass’, and jamur damen ‘straw mushroom’. These lexemes are representations of generic taxa. Meanwhile, in generic taxa, speakers of Javanese still keep more specific knowledge. For example, speakers of Javanese have specific taxa construction of klapa gading, klapa puyuh, and klapa kopyor on generic taxa uwit klapa ‘coconut tree’. Other forms are gedhang kepok ‘banana kepok’, gedhang raja ‘banana plant’, gedhang awak ‘banana awak’, and gedhang ambon ‘ambon banana’ on generic taxa of uwit gedhang.
The Lexicon of Buron

Fourth, the lexicon of Buron. This lexicon used as an identification to the group of animals that can be use for something pheripheral purpose, such as part of decoration or furniture. This can be illustrated briefly by example (5).

(5) Ana kewan sing anane gawe drusila, arane kancil.
Animal that disturb that’s mousedeer
There is a disturbing animal that is mousedeer.
Lexicon ⟷ kancil ‘mousedeer’
Construction ⟷ {mousedeer}

The lexicon buron is used as a classification of animals in Javanese. In (5), the lexicon kancil is a subcategory of buron. If the lexicon is substituted with the lexicon bebek, sentence (5) becomes odd because Javanese speakers do not place bebek as a buron. The acceptability is based on the understanding of speakers of Javanese about bebek which is not buron or dangerous animals. Semantically, bebek lexicon have features of -WILD, +USEFUL, and +PRODUCTIVE. Beyond that construction, speakers of Javanese believe that there was the value of (a) ora mateni sakabehe ‘do not kill every living thing’ and (b) ora mangan kewan ‘do not meal the specific animals’.

Furthermore, the classification in cognitive semantics is different from the area classification and typological classification commonly used by language researchers. The classification of areas classifies languages based on geographical location (Kridalaksana, 2008, p.123), while the classification in cognitive semantics does not classify language, but rather it sees language as a sign of the background of the speakers’ understanding of various objects in the environment. The typological classification classifies language based on structural characteristics (Kridalaksana, 2008, p.124), while the classification in cognitive semantics places structural aspects as certain categorical or strata level markers. carefully, Taylor (2008, p.572) states the following.

What is the basis for categorization? Intuitively, we might want to say that things get placed in the same category because of their similarity. Similarity, however, is a slippery notion. One approach would be to define similarity in terms of the sharing of some common feature(s) or attribute(s). Similarity, then, would reduce to a matter of partial identity. Feature-based theories of categorization often require that all members of a category share all the relevant features. A corollary of this approach is that categories are well-defined, that is, it is a clear-cut matter whether a given entity does, or does not, belong in the category. It also follows that all members have equal status within the category.

In the line of that result, Sereno (1991) tried to trace the similarities between language perception systems and biological cell perception systems. In the Four Analogies between Biological and Cultural / Linguistic Evolution, we present a comparison chart of the two systems of perceptions. Furthermore, Waddy (1998) describes four types of classifications formed by Aboriginal speakers, namely biological classification, food classification, totemic classification, and linguistic classification. The four classifications are described as forming context
descriptions, so that the presentation of the linguistic classification can be comprehensively understood. These considerations are taken by researchers based on the fact that speakers of the language being studied are unique and tend to be tribes, especially those who do not live in towns or cities. Referring to the context and nature of the speech community, it is conveyed that linguistically, there are three levels of plants and animals, namely (a) noun classes, (b) noun classifiers, and (c) noun incorporation.

The Lexicon of Pangirid

Fifth, the lexicon of Pangirid. Pangirid’s lexicon means 'animals hunted in the forest'. This Lexicon includes several animal names. At least, there are three semantic features of the lexicon, including +USEFUL, +PRODUCTIVE, and +INSTRUMENTATIVE. Those classifications appeared on data as seen in example (6):

(6) Gerobak sapi lewat ing dalan Tajem.

(cart cow cross in road of Tajem

A cow cart is crossing in the road of Tajem.

Lexicon → sapi ‘cow’

Construction → {sapi}

The lexicon pangirid is used as a classification of animals in Javanese. In (6), the lexicon sapi is a subcategory of pangirid. If the lexicon is substituted with the lexicon gajah, sentence (6) becomes odd because Javanese speakers do not place gajah as a pangirid. The acceptability is based on the understanding of BJ speakers about gajah who are not pangirid or dangerous animals. Semantically, gajah lexicon have features of +USEFUL, +PRODUCTIVE, and +INSTRUMENTATIVE. Beyond that construction, speakers of Javanese believe that there was the value of (a) ora mateni sakabehe ‘do not kill every living thing’, (b) ora ngrusak sakabehe ‘do not broke anything’, and (b) ora mangan kewan ‘do not meal the specific animals’.

The construction of linguistics is a symbolic system used to mark two things together. Objects are labeled using language units. Likewise, language is used to find out the relation between one part and the other part of understanding. In this regard, Taylor (2008, p.569) argues as follows.

Cognitive linguistics signaled a return to the basic Saussurean insight that language is a symbolic system, which relates signifiers (that is, language in its preceptible form, whether as sound, marks on paper, or gesture) and signifieds (that is meaning).

Therefore, language data that accommodate the object of research, not only must be analyzed structurally. As an example of the word pangirid in Javanese, it is not just a construction of polymorphemis. The construction is a fill in other systems, namely the classification system through cognitive semantics which provides knowledge about the nature of the data (Baryadi, 2015, p.7). Thus, cognitive semantic research is always based on theoretical assumptions about the status of processed language data. Linguistic data are studied not only structurally. The process of interpretation should be based on context in order to obtain the
results of the analysis according to the scope of classification in cognitive semantics.

**Conclusion**

This study describes the lexicon of animals by Javanese speakers. Based on the analysis and discussion, it is known that the lexicons are used to mark at least five categories. Behind the use of the lexicon, speakers of Javanese Language keep wisdom that is summarized from the behavior of living side by side with animals. Future research can explore the wisdom behind the use of lexicons in other classification systems. It is possible that the lexicon in classifying houses reflect values in Javanese wisdom.

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