ICONICITY IN THE NAME OF TRADITIONAL SUNDAANESE MEDICINAL PLANTS

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Abstract

Ferdinand de Saussure may have to wince when he was presented with several names of medicinal plants that are not as easy as ‘arbor’ ‘tree’ in the semiosis process. Once people hear marker /tree/ necessarily we associate them with the signifier ‘tree’ in the form of images in the mind. The semiosis process is complete. The signified in the mind is approximately equal but there is no requirement that a marker is denoted /arb/or. The relation between signifier and signified was called arbitrary. Papers to be presented with regard to the arbitrariness of the meaning of the names of Sundanese medicinal plants to prove that the naming of traditional Sundanese medicinal plants is not purely arbitrary (unmotivated). The theory of meaning of Ferdinand de Saussure used in this study. Regarding iconicity is used the theory of Peirce. The study is qualitative. Data were collected from the field, including the district of Cianjur, Sukabumi, Tasik, Pangandaran, Kuningan, Majalengka and Indramayu; all in the province West Java, Indonesia. It will assess whether the process of naming is pure arbitrary or there is a process of iconicity (motivated). Also it will be proved whether the naming process is related to the hidden desire of the people so that the plant has healing properties. The names of the herbs that arbitrar are for example binahong (Bassela rubra linn), cikur (Kaempferia galanga L.), seureuh (betel), and manggu (mangosteen). The names of herbs that are not pure arbitrary for example koneng ‘turmeric’ (for yellow), kumis kucing (like a cat’s whiskers), jukut bau (bad smells grass; Ageratum conyzoides L.), and jambu batu ‘guava’ (it is hard). That the herbs have the power to heal is also demonstrated by using the name of ki (short form of aki ‘grandfather’; also a term for people who have supernatural powers to cure diseases): kiurat (Plantago major L.) that works to relieve aches for breakdown, kikoneng (Arcangelisia flava L.) which among other things can cure jaundice, and koneng bodas (Curcuma zedoaria) similar to turmeric but white in color with no meaning with regard to efficacy.

Keywords: medicinal plants, Aarbitrary, Iconicity, Signifier-signified.
1. INTRODUCTION

Ferdinand de Saussure may have to wince when he was presented with several names of medicinal plants that are not as easy as 'arbor' 'tree' in the process of semiosis. Once people hear marker /tree/ necessarily we associate them with the signifier 'tree' in the form of images in the mind. The semiosis process is complete. The signified in the mind is approximately equal but there is no requirement that a marker is denoted /arbire/. The relation between signifier and signified was called arbitrary. Papers to be presented with regard to the arbitrariness of the meaning of the names of Sundanese medicinal plants to prove that the naming of traditional Sundanese medicinal plants is not purely arbitrary (unmotivated). The theory of meaning of Ferdinand de Saussure used in this study. Regarding iconicity is used the theory of Peirce. The study is qualitative. Data were collected from the field, including the district of Cianjur, Sukabumi, Tasik, Pangandaran, Kuningan, Majalengka and Indramayu; all in the province West Java, Indonesia. It will assess whether the process of naming is pure arbitrary or there is a process of iconicity (motivated). Also it will be proved whether the naming process is related to the hidden desire of the people so that the plant has healing properties.

2. READER REVIEW

2.1 Language

Language is a system of signs verbal arbiter used by members of a speech community to communicate and interact with one another based on the culture they have in common (Dardjowidjojo 2003, p. 16). In the existing system elements and their relationships to each other which eventually form a constituent that is hierarchically. Signs can form words in a language. Language in primary form is spoken so signs of it also be verbal. The relationship between signs it with an object, situation, or event that represents it is arbitrary, meaning there is no reasonable relationship. There is no reason why the objects used to sit named chair, sent by post named letter, and potable water named. Animal sounds are often used to refute the arbitrary properties because there are elements of an imitation sound (onomatopoeia); roosters crowing, meowing cats, rats squeaking. In onomatopoeia is phenomenon of iconicity because if a word was spoken as if the simulated sound similar to it; so, in which there is motivation.

2.2 Semiotics

Hoed (2014, p. xxix) states that semiotics is "science" which examines the sign of human life. Humans have the ability to give meaning to the various social, cultural and natural phenomenon, the author continues that the sign is a part of human culture. Thus, semiotics is the "science" that can be used to assess signs of human life.

Human beings are always looking for the meaning of several things that are in the vicinity (Hoed 2014, p. 3). Small children who have started to interact with the world outside his own way has been able to interpret what is happening around them. The science of signs as semiotic (Sobur 2004 Hoed 2014). Signs are all things, whether physical or mental, both globally and in the universe, both in the human mind as well as human and animal biological systems, which are given meaning by humans; so, a sign is a sign only if meaningful to humans (Hoed, 2014, p. 5). Hoed (2014, pp. 5-10) semiotic theory divides into three major groups, namely structural, pragmatic, and a combination of both. In this paper we review only two theories, namely the structural and pragmatic. Linguistic studies usually rest on the theory that structural while the study of literature and culture in the pragmatic theory.

2.2.1 Structural Semiotics

Structural semiotic is originated from Ferdinand de Saussure. In his lecture that was later recorded in 1916 were noted five important issues (Hoed, 2014, pp. 5-6), namely (1) the sign consists of the signifier (signifiant) and the signified (signifié) which the meaning relations based on social conventions; (2) therefore, language is a social phenomenon that is arbitrary as well as conventional and consists of a device that's commonly known social rules (langue) and social practices (parole); (3) relations between signs are syntagmatic (in-praesentia) and associative (in-absentia); (4) The language can be approached diachronic (development) or synchronous (the system at a certain time); and (5) as a social phenomenon, language consists of two levels, namely the rules of the internal system (langue) and social practices (parole).

Making of a sign language according to de Saussure happen if people associate the signifier with the signified. Because sign language is spoken, the link between signifier and signified is constituted by social convention. Language consists of signs that are arranged linearly and side by side (syntagmatic). Sign
language can also be seen in the context of relations paradigmatic (associative).

Semiotic outlined above stated structural because (1) concerning the sign and the meaning with a bilateral basis; (2) the meanings identified through between signs relations; and (3) the meaning of the sign is not only the individual, but also social (based on social conventions) (Hoed, 2014, p. 8). Theory of Saussure also called dichotomous (bilateral) for using models of the two parties, namely signifiant-signifié, syntagmatic-associative, and langue-parole. Although it deals with the social, de Saussure semiotic theory is cognitive, because the opposite of what is found in the human mind. The sounds of language, painting or music tones are recorded and captured the image is perceived by humans and then the meaning is given.

2.2.2 Pragmatic Semiotics

According Hoed (2014, pp. 8-10) the other semiotic expert is Charles Sanders Peirce. For Peirce signs and the meaning process are not the structure but a cognitive process called semiosis. So, semiosis is a process of meaning and interpretation of signs. Semiosis process it through three stages. The first stage is perceiving aspects of representamen of sign (first through the senses), the second phase representamen spontaneously associate with the experience of human cognition that interpret the representamen (called an object), and third interpret the object in accordance with her wishes. The third stage is called interpretant. How the meaning of the sign through the connection link between representamen and the object based on the idea that the object is not always the same as reality given by representamen. Object arises because experience gives meaning to the sign. So, semiosis is a process of sign opposite of representamen is spontaneously associated with the object in human cognition and then given a particular interpretation by humans concerned as interpretant. That process is called semiosis. Because there are three stages to interpret the sign, Peirce's theory is called is trichotomous (tryadic) and because initially semiosis contrary to the terms of the concrete, than it is called "pragmatic semiotics".

Because the sign starts from representamen which seems to represent what is in the human mind (object), semiotic theory of Peirce defines the sign as "something that represents something else", which theoretically could be translated into sign is representamen who spontaneously represent object. Representing here means in relation to cognitive that is simply the process of meaning: there is a link between "reality" and "what is in their human cognition". There are three categories of signs based on the nature of the relationship between representamen and object, namely the index, icon and symbol.

Index is a sign that the relationship between representamen and its object is causal and kontigu. Examples index is when we look at the flip the father is not in place anymore (representamen), it means that the father was at home (object). There is a relationship between an empty space, namely "lack of slippers father in his place" (representamen) and "father at home" (object) that is causal. Icon is a sign that representamennyna category has similarities with object identity that exists in human cognition is concerned. For example, a photo of a person is the icon itself. For someone painting of a buffalo is the icon of buffalo that is tated in the person's mind. Symbol is a sign that the meaning of the representamen is given by social conventions. The red flag on the sea is the meaning socially representamen "ban passed, the danger" (object). Various systems of language, verbal and nonverbal, is a symbol system because the meaning of each of its representamen obtained by social conventions. Index and icon can be used as a symbol. The smell of incense (representamen) may not necessarily represent the object 'incense', but can have social meaning 'a ghost is present' (object).

The examples above illustrate the process of semiosis from representamen to object. The next process is the interpretant which is the stage of interpretation. The interpretation stage is more open than the object. In the example father flips, the interpretant could be 'children should take a bath' or 'children had to wait by-by what will be a father'. Because the process was started on something sensed, Hoed (2014, p. 10) called the process "pragmacognitive". Semiotic pragmatics that by Larsen (1994) referred to as American semiotics.

2.2.3 Iconicity

Icon is a term for a sign of a non-arbitrary (motivated). The relationship between the signifier and the signified can be arbitrary (unmotivated), for example, arbó in Latin that means 'tree' (Hoed, 2014, p. 44). The word was a sign consisting of two terms i.e. /arbó/ (signifier) and ♣ (concept ‘tree’; signifier). There is no causality or motivation between signifier and signified, for example in Sundanese tangkal and Javanese uwit. On the icon the relationship between the sign and the object or character reference is similar (Subor 2004, p. 41); sign resemblance or similarity with its object (Budiman 2005, p. 45). For Pierce, the icon is a sign that is based on the "likeness" or "similarity" ("resemblance") between representamen and its object. However, the icon does not merely include images as realistic as paintings, photographs, but also expressions of a kind of
graphs, schemes, geographic maps, mathematical equations, not even a metaphor (Budiman 2005, p. 56). Pierce characterize icon as "a sign that replaces (stands for) something simply because he looked like him", as a sign that "taking part in object code"; or as a sign that "quality reflects its object, evoking sensations analog in mind because of the similarities." (Budiman 2005, p. 62).

Icon is not always based on the similarity as in the "ordinary" everyday sense, but also a similarity in the sense as abstract relations or structural homology (Budiman 2005, p. 62). Abstract relationships may be similarities in nature. The icon is a sign that is based on the similarity between the signifier (representamen) and its object, although not solely rely on imaging "naturalistic" as it is, because the graph scheme, or the map is also included which can be said to be an icon (Budiman 2005, p. 23). Based on the type of sign that it is a sign of iconic resemblance and the symptoms can be referred to as iconicity (Budiman 2005, p. 43). The sound of a rooster in the Java language is cukurukuk. If you heard it feels like the sounds (at least according to the Javanese). Selection of the sound /cukurukuk/ it motivated, while the selection of the sound /uwit/ for 'tree' is unmotivated or arbitrary. Compare with the mountain and foothills. The first is arbitrary while the second is not.

3. DISCUSSION AND RESULTS

3.1 Arbitrary

The semiosis process of the naming of the following medicinal plants is arbitrary because it is unmotivated. An example of the medicinal plants that can be said to be arbitrary is babadotan. Some people call bandotan (lecher 'goats'). It can nothing be associated with the goats. Goats don't like shrubs intruders as it might smell that stung.

Picture 1: Babadotan (http://sumbersumbermanfaat.blogspot.co.id/2012/01/khasiat-bandotan-atau-babadotan.html)

Bandotan (Ageratum conyzoides L.) or in the Sunda region babadotan, is a wild plant species, or can be called as weeds, bandotan usually grow in the yard and on the estate farmers. It can be used to treat gout, uterine tumors, influenza, inflammation of the inner ear, bleeding wounds, ulcers, eczema, uterine bleeding, sore throat, malaria, abdominal bloating/heartburn/vomiting, hair care.

Binahong

The naming of vines binahong (Bassella Rubra Linn) also are arbiter. If seen from the types of plants had absolutely no reason to be called binahong. The word is also used only for the types of plants. This medicinal plants that are believed to cure various diseases.

Picture 2: Binahong (http://manfaat.co.id/25-manfaat-daun-binahong)
The leaves *binahong* contain the following substance. Antioxidants; the substance can counteract free radicals that cause cancer cells trigger carcinogen. Eating *binahong* leaves can reduce the risk of cancer as well as the benefits of soursop leaves or benefits of mangosteen peel. Alkloid substances; the substances commonly used in people with diabetes, because it has hypoglycemic properties that will lower blood sugar levels in the body. Saponin, a substance that gives a decline towards heart-healthy cholesterol levels. Generally, the boiled water of the leaves *binahong* is used for treatment of shortness of breath, hypertension, cough, and lung.

The naming of the following medicinal plants is also arbitrary:


In terms of form most of the arbitrary names of the plants consists of a single word, except *kaca piring* that is compound.

### 3.2 Iconic

Names of the medicinal plants that are discussed in this section are iconic in the semiosic process, because the process of naming is not arbitrary but motivated. The reason is partly because of the color, similarity with other objects, properties, efficacy, privileges, grow, origins, and its usefulness. Most of the iconic names of Sundanese medicinal plants Sunda consists of two words, but there are some that one word. Here discussed the name of the medicinal plant consists of two words.

a. Color

The naming of the following medicinal plants are grouped by color in the semiosic proces: *bawang beureum* 'onion; *beureum* 'red', *bawang bodas* 'garlic; bodas 'white', kamboja *beureum* 'red frangipani', kamboja *bodas* 'white frangipani', *koneng* 'turmeric, *koneng* 'yellow', *koneng bodas* 'white turmeric ', *koneng hideung* 'black turmeric ', *seureuh beureum* 'red betel ', *seureuh hejo* 'green betel'.

**Konéng**

Konéng is turmeric (*Curcuma Domestica Val.*). In Sundanese is used both for turmeric or yellow (color). The process of naming is motivated because of its color. Not yet known whether *Ki Sunda* (the ancestors of Sundanese people) found turmeric first and then the word *konéng* 'yellow' or vice versa. Turmeric look really yellow after a peeling or cutting so that the inside is visible. *Konéng* is truly one word.


Almost everyone Indonesia and India as well as Asian nations generally have to consume this spice plants, both as a culinary spice supplement, or herbal medicine to maintain health and beauty. Turmeric is believed to treat include diabetes mellitus, typhoid, appendicitis, dysentery, vaginal discharge, menstrual noncurrent, breastfeeding is not smooth, chicken pox, tonsils, mucous stools, and morbili.

**Konéng Bodas**

Konéng *Bodas* (*Curcuma zedoaria*) is white turmeric. It seems that the Sundanese found turmeric first and then *konéng bodas*. Turmeric is yellow while *konéng bodas* is white. First it is considered as turmeric because of its resemblance, but having seen the inside was white, and finally the Sundanese named it *konéng bodas*. This plant comes from the Himalayan region, then spread to several areas in the Indo-Malaya. The plants are green herb with a height of two meters.
Benefits of white tumeric are among others to strengthen digestion and appetite (stomakhik), stimulating bowel movements (carminative), improve digestion, warms the body, stimulates the appetite, cure the disorder spleen, epilepsy, flatulence, worms, piles, tumors, tuberculosis, toothache, bruises, and sprains. White turmeric also useful as a tonic, offering toxins, eliminate bad breath, as a laxative, and stimulant.

b. Similarities with other objects

The semiosic process of the naming of the following medicinal plants is grouped based on similarity to other objects: *kumis kucing* (the cat's whiskers), *lidah buaya* ‘the tongue of crocodile’ (alo vera), *mamangkowan* (likes a bowl), *jambu batu* ‘guava; it is hard like a stone), *jantung pisang* ‘the heart of banana’, *jawer kotok* ‘likes a crest of a rooster’.

**Jawér Kotok**

Sundanese jawér means crest of a rooster while *kotok* (old Sundanese) is a chicken. The Plant had the name since old Sunda. In temporary Sundanese it is *hayam*. The semiotic process as follows. The plants leaves like a rooster crest in terms of shape and color. When it is first discovered Ki Sunda associated it with a rooster crest. The color of a rooster crest is attractively purple just as the leaves jawér kotok (*Scutellaroides Plectranthus*). It has purple leaves.

Although it can grow wild and are often only used as an ornamental plant, but jawér kotok reality also has properties as a medicinal plant. One example is used as an anti-inflammatory drug. This example can be known according to research conducted in experimental pharmacology. Based on the results of these studies, it was found that flavonoids have a role as an anti-inflammatory, antiseptic, anti-hypertensive, and anti-cancer properties.


Other diseases that can be treated by jawér kotok are: piles and hemorrhoids, vaginal discharge, delayed menstruation, ulcers, constipation, colitis, sore eyes, and red eyes.

c. Nature

The semiotic process of the naming of the following medicinal plants is grouped according to the nature: *jukut bau* ‘smell grass’, it has smells bad, *konéng gede* ‘big turmeric’, it likes a curcuma and it is big in size.
The semiosic process of the naming of the following medicinal plants is grouped according to the efficacy: kicaang (eyes), kiurat (muscle), kikonéng ('yellow disease', jaundice).

Kicaang

The iconicity of medicinal plants kicaang (Isotoma longiflora Presi; caang 'light') is not related to its shape, but with its powerful properties especially in treating eye diseases. People who are experts in a particular field and have supernatural powers in Sundanese is often called ‘ki’, which is short form for ‘aki’ (grandfather). It makes no sense if the ‘Ki’ stands for ‘kai’ (timber): kidadaap, kirambutan because kicaang not the kinds of trees. In some sources ‘ki’ is written separately to ‘ki’. The name was a tribute to the healing plants. Medicinal plants that can make the eyes bright again. The semiosic process is not derived from plant forms but from the properties of the new plant. It is not known when the Sundanese ancestor knows that the plant was efficacious. These various types of eye disease (watery eyes, cataracts, glaucoma under 30 years) can be cured with the plant. Other diseases that can be cured with kicaang among other injuries are toothache, asthma, bronchitis, sore throat, diabetes, cholesterol, and cancer.

![Picture 6: Kicaang](http://www.kompasiana.com/mieyami/kitolod-tanaman-pinggiran-berkhasiat_55009383813311501afa7853)

Kikonéng

If we see the picture of this herbaceous plant (Arcangelisia Flava (L.) Merr.) not at all reflected in the color konéng (yellow) so that we can call it arbitrary process in the naming. However, when viewed on the properties turns the plant can treat yellow disease (jaundice); so the semiosic process is iconic.

Kikonéng has a bitter taste. Some of the chemicals contained in the leaves, of which gutta-percha and dammar. Leaves, stems, stalks, and roots of ikonéng contain chemicals others barberin and other alkaloids. The pulp contains mucous substances. Meanwhile seeds contain saponin which is hard toxic to fish. The pharmacological effect are including anti-inflammatory, to treat wounds, indigestion, ulcers, intestinal worms, and fever.

![Picture 7: Kikonéng](http://carasehatlo.blogspot.co.id/2015/11/manfaat-khasiat-ki-koneng-bagi.html)

Kiurat

Kiurat is known as Plantago Major, but also called Plantago L. Asiatika or Plantagodepressa Wild. The plant is called kiurat because the properties mainly in relieving muscle pain, aches, and pains. Its semiosic
process is similar to kicaang. It is probable that originally related to the efficacy of tendon/muscle so that the name was chosen. It is still unclear how and who Sundanese ancestor first know the properties of the plant so that the name was chosen.

![Picture 8: Kiurat](https://www.google.co.id/search?q=tanaman+ki+urat&biw=1366&bih=651&tbm=isch&imgil=JYd-T5f-Nad9M%253A%252520252F16%252520%252520F01%252520%252520F30-khasiat-tanaman-daun-sendok-untuk.html&source=iu&pf=m&fir=JYd-T5f-Nad9M%253A%252CC1jvHEocbVHCCM%252C_&usg=__EugsE5KzFL3ys6ykSDeiaF3Sh3I%3D&ved=0ahUKEwiIirP10obQAhXMOY8KHVIDMsOyicJwweiwU&ei=9iRV8iGA8zzvATXILPYDA#imgrc=JYd-T5f-Nad9M%3A)

Besides being able to relieve muscle pains and joint pain, *kiurat* can also relieve urinary tract infections, urinary fatty, bloody urine, swelling due to kidney disease (nephrotic edema) and little urination because of the heat in, gallstones, kidney stones, inflammation prostate (prostatitis), a disease associated with the eye, such as red eye (conjunctivitis), explains blurred vision, diabetes (diabetes mellitus), acute hepatitis with yellow (hepatitis jaundice acute), high blood pressure (hypertension), and not increased excitatory especially in men (aphrodisiac).

e. Special feature

The naming process of the following medicinal plants is grouped based on its special feature: *mahkota dewa* ‘the gods crown’. It is believed to have healing properties of various diseases (diabetes, cancer, gout, dysentery), so it is named pretentious.

f. A place to grow

The semosic process of the following medicinal plants is grouped based on the growing place: *benalu téh* ‘parasite tea’, *lumut témbok* ‘wall moss’. Tea epiphyte is a plant parasite on the tea tree which is believed to cure cancer. Wall moss is actually alike green mushrooms and indeed grows on the old walls.

g. Origin

The semosic process of the following medicinal plants is grouped based on the origins: *asem jawa* ‘Java tamarind’. Tamarind was believed to have originated in Java. *Asem jawa* is used to treat dysentery, diphtheria, raise low blood pressure, lowering cholesterol, throat, and relieve fever.

h. Usefulness

The semosic process of the following medicinal plants is grouped based on its usefulness as a seasoning ingredient: *jeruk pecel* ‘pecel orange’. Pecel is a traditional Javanese spicy salad. It is indeed a kind of orange as a food supplement for pecel. Oranges can improve stamina, relieve cough, and treat hypertension.

In terms of form the most names of Sundanese medicinal plants are iconic in its semiosic process and consist of two words in the form of a noun phrase or compound. Only *konéng* is consisting of one word.

4. CONCLUSION

The names of the medicinal plants that are arbitrary in the semiosic process are *cikur* (*Kaempferia galanga*), *seureuh* (betel), and *manggu* (mangosteen). The names of medicinal plants that are not purely arbitrary are
konéng 'saffron' (for yellow), kumis kucing (like a cat's whiskers), jukut bau (smell grass), and jambu batu 'guava' (as hard). Medicinal plants that have the power to heal is also demonstrated by using the name of ki (short form of aki 'grandfather'; also a term for people who have supernatural powers to cure diseases): kiural potents to relieve aches for breakdown), kikonéng which among other things can cure jaundice but not yellow in color, and konéng bodas is similar to white turmeric but the meaning is not related to efficacy. The causes of iconicity are among other colors, similarities with other objects, properties, efficacy, privileges, grow, origins, and its usefulness. In terms of form the most of the arbitrary names of Sundanese medicinal plants are single words, while most of the iconic names of medicinal plants consist of phrases or compound. More words make semiosic process iconic.

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REFERENCE LIST