

# Acehnese *Peunajoh* of *Timphan*: A Study of Ecolexical Taxonomy

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## ABSTRACT

The richness of lexicons in a language becomes the diversity of natural, social, and cultural representation of a society. Lexicons that are related to nature are known as the ecolexicons, such as *timphan* which is one of the Acehnese *peunajohs* and very popular among the local people. Its diversity of species is sufficient to represent and reflect the Acehnese nature, language, and social culture although some people only know a small number of types of *timphan*. The paper aims to identify the taxonomy of lexicons and ecolexicons in *peunajoh timphan* and uses descriptive and qualitative approach. The data was taken from oral interview, observation, and written sources and the interview was video-recorded and involved several informants. The results showed that the *peunajoh timphan* consisted of local biotic, abiotic, flora, and fauna ecolexicons. Since *peunajoh timphan* has religious, social and economic values, the Acehnese speakers' knowledge in recognizing types of *timphan* varied among age groups.

**Keywords:** Taxonomy, ecolexicon, Acehnese *peunajoh*, preservation, and ecology

## INTRODUCTION

The diversity of *peunajoh* or Acehnese food reflects the abundance of natural resources, either from sea or from land. The natural wealth can be utilized by local community to fulfill their livelihood and, at the same time, to be used as a culinary. The Acehnese *peunajoh* is a term used to describe various types of traditional foods, which are made from plants and animals. Linguistically, the food is related to ecology or to nature as well as to socio-culture.

Since language, culture and nature are interrelated and even systematic, in which if there is a change in one element, then the other elements also change, thus, the existence of the Acehnese language can describe or represent the culture and the environment of the language, both the natural and the social environment. In other

words, the richness of the Acehnese lexicons becomes the representation of various natural, social and cultural environments, as well as the lexicons associated with Acehnese *peunajoh* in which its lexicons can be seen from the diversity of names, types, shapes and functions as well as the source of their raw materials.

The certain types of local food, such as *Apam U* and *Haluwa* were only 20 percent consumed, and of 14 types of traditional food surveyed, only two types, for instance Kue Lapeh (55%) and Pulot (65%) were consumed (Zurriyati and Suadi 2014). The paper is limited to the taxonomy and the taxonomic description is explained based on the type and materials used in the manufacturing process of *timphan* which are seen through the relation of lexical meaning.

## *Ecolinguistics*

Muhlhausler (2001) argued language ecology is a study of functional reciprocal relationships and Mbetse (2009: 1) stated ecolinguistics examines language and environment. Bunsgaard and Steffensen argued ecolinguistics includes the whole aspects of language, covering the dimensions of pragmatics, semantics, syntax, morphology, phonetics and others (in Lindo and Bundsgaard (eds), 2000: 33). Haugen (in Fill dan Muhlhausher, 2001: 57) argued "Language ecology may be defined as the study of interactions between any given language and its environment. The definition of environment might lead one's thoughts first of all to the referential world to which language provides an index. However, this is environment not of the language but of its lexicon and grammar."

Haugen (2001: 57) described that language can only exist in the minds of its users, and only functions in the user's relationship with others and with their environment, both social and natural. So, the language ecology includes psychological aspects, namely the interaction with other languages contained in the minds of bilingual or multilingual speakers; and sociological aspects, namely the interaction with the community that functions as a medium of communication. Thus, the environment of a language is determined by the people who learn it, use it and transmit it to others. Haugen (1972) also argued the efforts to save the language from its rapid extinction are also related to the salvation of the natural environment and with biodiversity reflected in the vocabulary. In an ecolinguistic perspective, diversity, interaction, interplay and interdependence of various entities in an environment, including humans with language and certain environments are ecological parameters (Odum 1996), which include human ecology and the ecology of particular languages.

Fill (1993) in Lindo and Simonsen (2000: 40) stated "Ecolinguistics is an umbrella term for ... all approaches in which the study of language (and language) is any

way combined with ecology". Furthermore, more specifically, ecolinguistic studies - the ecolexicon is the dissection of the sociological (natural) meanings behind the lexicon, and language is specified at the level of the lexicon (Lindo and Bundegaard, 2000: 10). Bang and Door (1996: 10) argued that ecolinguistic theory is the link between ecology that reflects humans and problems in language phenomena. More clearly, Bunsdgaard and Steffensen explain ecolinguistics is the study of the interrelation of the dimensions of biological, sociological, and ideological languages (in Lindo and Bundsgaard, (eds), 2000: 11). In the ecolinguistic study the existence of these three dimensions is known as the dialectical model proposed by Bang and Door (1993) as a tool to solve the problems in this study.

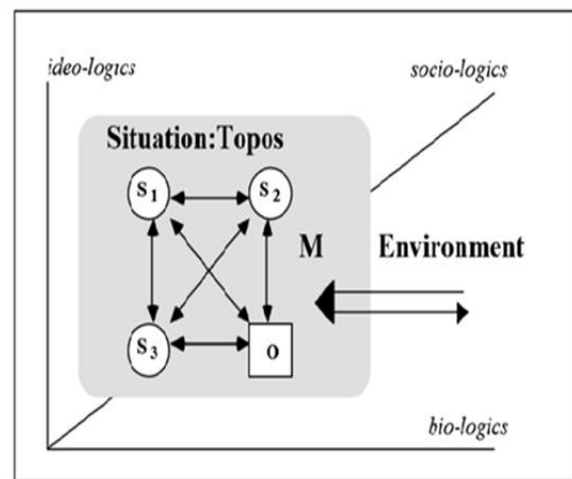


Figure 1. Interconnected ecolinguistic dimensions by Bang and Door (1993)

### Taxonomy

Etymologically, taxonomy is derived from the Greek words *taxis* 'arrangement or division' and *nomos* 'law'. The arrangement often appears in a hierarchical structure and is associated with each other in the supertype-subtype relationship (Enghoff, 2009: 442). Similarly, O'Malley and Griffin stated taxonomy is the science of identifying, naming and qualifying living organisms in a hierarchical structure from broad or general categories to special categories. Thus, classification of information into groups or classes can

explain its characteristic similarities (in Horodski, 2014: 30).

There is a difference between taxonomy and classification, where taxonomy means classifying in structure according to several relationships between entities on an internal basis, while classification uses external grounds. For example, the taxonomy of internal grounds, spinach is vegetables and each vegetable is not spinach, so spinach is a subclass of vegetables. The decision to place spinach in the vegetable category is based on the data attached to the entity. This means that a taxonomic relationship is a relationship between entities in a subclass relationship (Ress, 2003: 2).

Currently, the term taxonomy has been used in a broader sense, exceeding aspects of biological or organic life, so that it does not only mean the classification of hierarchies or system categorization, but also refers to any way of organizing concepts of knowledge even though some professionals do not like taxonomic terms, because they are too often ambiguous and often misused (Hedden, 2010: 1). Furthermore, although a classification is arranged in a hierarchical structure and applies to certain domains and is often used to refer to the classification of living organisms according to physical characteristics, taxonomic terms and principles can be applied in various disciplines to carry out classifications, which are usually not included synonyms and associative relationships.

According to Enggoff & Seberg (2009: 3), taxonomy in the broad sense includes seven activities, namely:

1. Introduction, description and naming of taxa (species, genera, family, etc., also revisions to old descriptions, synonyms, etc.) ( $\approx$  alpha-taxonomy).
2. Comparison of taxa, including the study of relationships (phylogeny) ( $\approx$  part of beta-taxonomy).
3. Classification of taxa (preferably based on phylogenetic analysis) (agian part of beta-taxonomy).
4. Study of variation (genetic) in species ( $\approx$  gamma-taxonomy).
5. Formation of tools for identification (keys, barcode DNA).
6. Identification of specimens (by referring to taxa, using tools).
7. Inventory taxa in specific areas or ecosystems (using tools for identification).

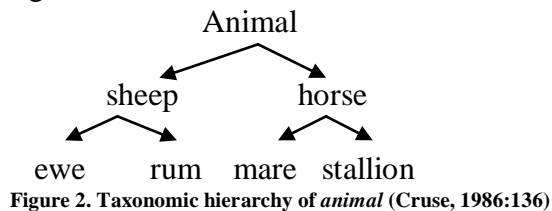
Regarding the language discipline, especially in the lexicon aspect, taxonomy of the lexicon is the organization of words into classes and sub-classes (etc.); not on the basis of form but on the basis of meaning, not grammatical class but semantic class (Halliday, 2004). The taxonomy of the lexicon plays an important role in information retrieval and the process of forming natural language. For example, by encoding the semantic relationship between terminological concepts, the taxonomy of the lexicon can enrich application reasoning capabilities in information retrieval and language formation processes (Cleuziou, et al., 2015: 955).

### ***Relations in Lexical Meanings***

A language expressed by a person will contain certain meanings that are captured by the opponent, according to his social and cultural context. Kridalaksana (2001: 132) defined meaning as the intention of the speaker; influence of language units in understanding human perception or behavior; relationship in the sense of equivalence or incompatibility between languages and nature outside of language; and how to use language symbols. The discussion of meaning in words is a study of lexical semantics. The meaning of the word is considered as an independent unit, not the meaning of the word in the sentence (Pateda, 2001: 74). According to lexical semantics, the meaning of one word corresponds to its referent, according to the results of observations of the senses, or meanings that are truly real in life. The word is the foundation in the discussion of lexical semantics.

The lexical semantics involves the meaning of connected interconnections (lexical relations) in certain lexicons such as terms in agriculture, economics, health, education, the arts and cooking activities, interconnected like networks (Saeed, 1997: 63). There are several types of lexical relations. A special lexeme is likely to have a number of lexical relations so it is more accurately referred to as a lexicon as a network, not a list of words as in a dictionary. The types of lexical relations include homonym, polysemi, synonym, antonym, hyponym, meronym, and membership collection and the study only focuses on the hyponym type.

Hyponymy is the relation of the inclusion of special lexicons (daughter-nodes) that have one lexicon as a common source point (mother-nodes). Hyponymy is represented by taxonomy, which is a taxonomic lexical hierarchy based on the relationship of taste and reason to the meaning of lexical items (Cruse, 1987: 136). The vocabulary connected in the participation system will produce semantic networks in the form of taxonomic hierarchies as explained in the following figure:



Taxonomy consists of hyponymy and taxonomic sisterhood or also called co-taxonomy (Cruse, 1987: 137). To sum up, hyponymism is a vertical relationship in taxonomy, while taxonomic sisters are shown in horizontal relations, for example the relationship between *ewe* and *rum* is co-taxonomy, as well as *mare* and *stallion*.

## MATERIALS AND METHODS

The paper is descriptive-qualitative. Data collection produced written words, or verbally from speakers, and their behaviors were observed through values, group norms,

and other social forces. The selection of informants was determined purposively in the categories of elderly, young, and adolescent females. The secondary data was taken from articles. In addition, personal experience methods were also used (Denzin and Lincoln, 2009: 497). The method was important in the acquisition of data because the reflection of ideas in conversation was different in interpreting their interactions with the environment through different personal experiences of speech. To anticipate data loss, researchers recorded and made notes. Furthermore, the data obtained was analyzed using the equivalent method. (Sudaryanto, 1993: 13; Mahsun, 2007: 120).

## RESULTS AND DISCUSSION

The Fig. 3 shows the taxonomy of *Acehnese peunajoh timphan* having three layers of lexicon categories (top-down). The *timphan* is a general term and it has several specific divisions and terms which are specific because of their raw materials and the way to produce.

Acehnese speakers generally mentioned the *timphan teupong* ‘flour timphan’ as the *timphan* for short; it’s basic material is the *teupong leukat* ‘sticky rice flour’ (or *ketan* ‘sticky rice’) which is combined with fruits such as *boh pisang* ‘banana’, *boh panah* ‘jackfruit’, *boh labu tanoh* ‘ground pumpkin’, and *boh drien* ‘thorned fruit’ or durian. In this case, the *timphan teupong* represent all the *timphan* divisions in its layer becomes and the other four names in the second layer are more specific entities which can be distinguished from the mixture used. Speakers mentioned the *timphan boh drien* because its basic ingredients used include the mixture of *teupong leukat*, *boh drien*, and *timphan labu*.

Other types, such as *timphan ue* ‘U *timphan*’ and *timphan asoe kaya*, become the sub-classification of *timphan teupong*. The first is named because it is filled with *inti kelapa* ‘sweet grated coconut’ and the second gets its name because it is mixed

with a specific fruit of *serikaya*. Both timphans were made from the mixture of

*timphan pisang*, *timphan labu*, *timphan boh panah*, and *timphan boh drien*.

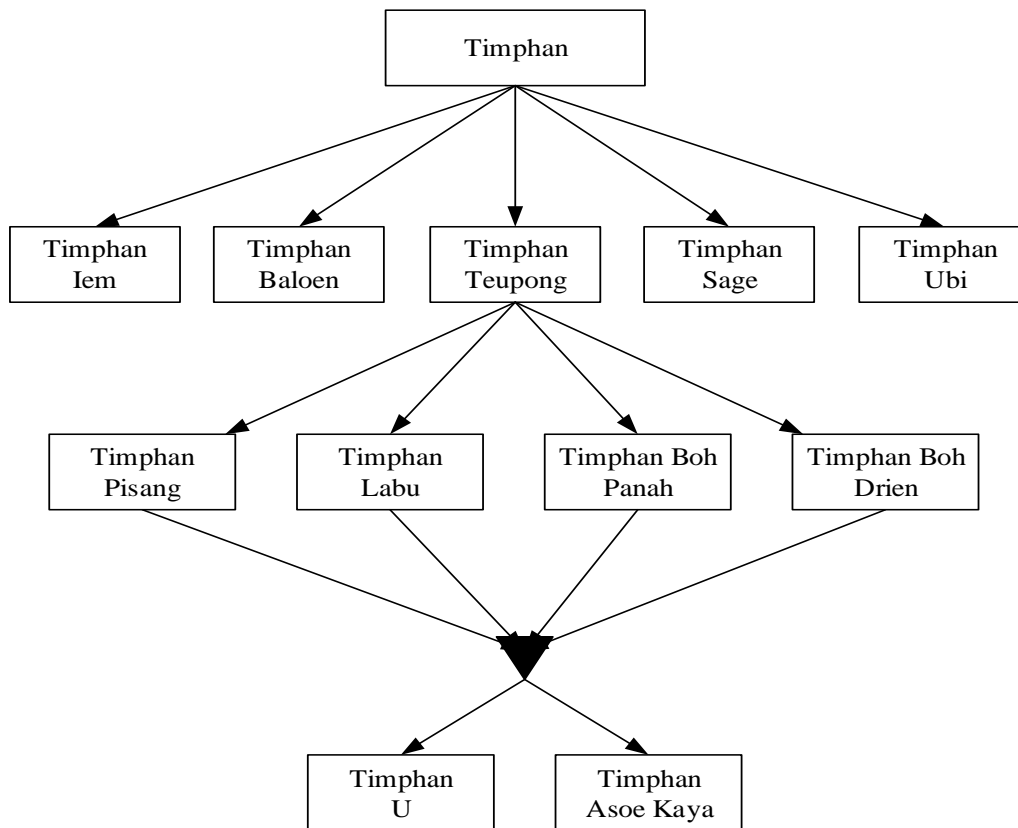


Figure 3. Hyponym hierarchy of *peunajoh timphan*

The *timphan sage* ‘sago *timphan*’ was made from *teupong sage* ‘sago flour’ mixed with ripe *pisang wak* ‘monkey banana’ which has been completely cooked and filled with *asoe u* or *inti kelapa*, then it was wrapped with half-old banana leaves. The *timphan ubi* ‘cassava *timphan*’ was made from *boh ubi* ‘cassava’ that was grated and then squeezed to eliminate the water it contains and then flattened on *banana pateun* ‘banana leaves’ and filled *inti kelapa*; after all, it is wrapped and then steamed ‘*di-seuop*’. The *timphan iem* was made from *breuh leukat* ‘sticky rice’ which was soaked with *ie* ‘water’ for several hours and mixed with ripe *wak* banana which was crushed or blended; then, all this was wrapped using young banana leaves and steamed. The *timphan baloen* was made from *teupong gandong* ‘wheat flour’ with a mixture of several other materials such as *santan* ‘coconut milk’ and *boh manok*

‘eggs’ and formed like *kulit lumpia* ‘spring rolls’ and filled with *inti kelapa*.

All types of *timphan* are rectangles, filled with sweet grated coconut (*inti kelapa*), wrapped with banana leaves, and steamed except *timphan baloen* which has different manufacturing process and is not wrapped with banana leaves and also not steamed. Almost all Acehnese speakers mention all types of *timphan* in Acehnese language because they communicate with the same speech community. But, when communicating with different speech communities, they translate the types in Bahasa Indonesia. In case of the levels of closeness, speakers (elders, adults, youth, adolescents, and children) are still very familiar with the *timphan teupong* or *timphan asoe kaya* both types of wealth and richness, but small number of them understand the *timphan iem*. There are also speakers who have never heard, seen, or eaten this food; this is due to the lack of



interaction between them and the food. Although *timphan* is used for some purposes, such as for *adat* ceremonies, speakers do not preserve the food.

### ***Dialectical Ecolinguistics of Peunajoh Timphan Lexicons***

In the concept of dialectical ecolinguistics, there are speakers (S1), speech partners (S2), third persons (S3) who influence S1 and S2 and bring them into S3's social context (s3) in one language environment (*topos*), with the presence of objects (O) which are influenced by sociological, biological, and ideological factors. The *timphan teupong* is especially provided for festivals or ceremonies, such as *Eid al-Fitr* and *Eid al-Adha* as well as *khanduri seuneujoh* 'the seventh day of death', *peutron aneuk* 'placing baby down on the ground', *peusujuk lueng* 'seventh month of pregnancy' and other formal and non-formal banquet events. The types of *timphan sage*, *timphan iem*, and *timphan baloen* are provided for *ie sirap* eaten for breakfast or for snacks by farmers, laborers, traders, employees, and other professionals.

In case of biological aspects, *timphan* becomes one of Acehnese food for *peunajoh*, which has a diversity of materials, shapes, tastes and functions. Thus, the presence of *timphan* is to meet the needs of traders who should do business. With reference to ideological aspects, the food teaches Acehnese to maintain their natures, so that a harmony between human beings and nature remains available. Moreover, the *peunajoh timphan* could give influence to the society to regulate their relationship with the Creator by the principle of establishing good relations between them and environment. The concept of life is used as a practice of worship to God.

### **CONCLUSIONS**

The hyponym taxonomy of Acehnese *peunajoh* of *timphan* has several types which are ecolinguistically can be taxonomized into the biotic, abiotic, flora, and fauna ecolexicons. The knowledge of

Acehnese speakers in recognizing such types varies among age groups. There are several types that are still understood by all groups; other types are a little known by elders but not known by children, adolescents, and youth. With regard to dialectical ecolinguistics, the *timphan* has religious, social, and economic values, as well as important roles in people's lives because of its benefits as a means of fulfilling life's needs. The existing ideology is due to mutual connection and dependence between the community and the *peunajoh timphan*. This can encourage the emergence of ecological characteristics for Acehnese society to preserve the environment and the wealth of the *timphan* as well as to realize good relations between human beings and the Creator.

### **REFERENCES**

- Bang, J. Chr. dan Door, J. (1996). *Language and Ecology. Ecolinguistics. Problems, Theories and Methods*. AILA.
- Bang, J. Chr. and Door, J. (1993). *Ecolinguistics: A Framework*. Blackwell Publishers.
- Bogdan, Robert and Steven J, Taylor, (1992). *Pengantar Metode Penelitian Kualitatif*. A translation. Ali Furchan. Surabaya: Usaha Nasional.
- Cleuziou, Guillaume, Davide Buscaldi, Gael Dias, Vincent Levorato, Christine Largeton, 2015. QASSIT: A Pretopological Framework for the Automatic Construction of Lexical Taxonomies from Raw Texts, Proceedings of the 9th International Workshop on Semantic Evaluation (SemEval 2015), pages 955–959, Denver, Colorado, June 4-5, 2015. c 2015 Association for Computational Linguistics. <https://pdfs.semanticscholar.org/e3d8/187b71b5bcbe59b4fdf1cf5368a38bffe3fa.pdf>.
- Cruse, D.A. (1987). *Lexical Semantics*. New York: Cambridge University Press.
- Denzin, Norman K dan Lincoln, Yvona S. (2009). *Handbook of Qualitative Research*, Yogyakarta: Pustaka Pelajar.
- Enghoff, Henrik. (2009). What is taxonomy? – An overview with myriapodological examples, SOIL ORGANISMS Volume 81 (3) 2009,

- [http://www.senckenberg.de/files/content/forschung/publikationen/soilorganisms/volume\\_81\\_3/16\\_enghoff.pdf](http://www.senckenberg.de/files/content/forschung/publikationen/soilorganisms/volume_81_3/16_enghoff.pdf).
- Fill, A. and Muhlhouse. (2001). *The Ecolinguistic Reader: Language, Ecology, and Environment*. London and New York: Continuum.
  - Halliday, M. A. K. Teubert, Wolfgang. Yallop, Colin. and Germakova, Anna. (2004). *Lexicology and Corpus Linguistics: An Introduction*. London. New York.
  - Haugen, E. (1972). The Ecology of Language. In Dil, A.S. (ed) *The Ecology of Language: Essays by Einar Haugen*. Stanford: Stanford University Press.
  - Haugen, E. 2001. The Ecology of Language. In A. Fill and P. Mühlhäusler (Eds.), *The Ecolinguistics Reader: Language, Ecology and Environment*. London: Continuum, pp. 57-66.
  - Hedden, Heather. (2010). *The Accidental Taxonomist*, <http://books.infotoday.com/books/The-Accidental-Taxonomist/At-SampleChapter.pdf>
  - Horodyski, John. (2014). *Metadata & Taxonomy Fundamentals*, <https://community.nten.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=1ebfad98-7570-4040-b1e5-f3ac1d428505>, <http://cogsci.uci.edu/~ddhoff/interface.pdf>
  - Kridalaksana, Harimurti. (2001). *Kamus Linguistik*. Jakarta: Gramedia Pustaka Utama.
  - LindØ, Anna Vibeke dan Simon S. Simonsen. 2000. The Dialectics and Varieties of Agency-the Ecology of Subject, Person, and Agent. *Dialectical Ecolinguistics Three Essays for the Symposium 30 Years of Language and Ecology in Graz Desember 2000*. Austria: University of Odense Research Group for Ecology, Language and Ecology
  - Mashun. (2007). *Metode Penelitian Bahasa. Tahapan, Strategi dan Tekniknya*. Jakarta: Raja Grafindo Persada.
  - Mbete, Aron Meko. (2009). *Problematika Keetnikan dan Kebahasaan dalam Perspektif Ekolinguistik*. Medan. Universitas Sumatera Utara.
  - Pateda, Mansoer. (2001). *Semantik Leksikal*. Jakarta: Rineka Cipta.
  - Ress, Reinout Van. (2003). *Clarity in The Usage of The Terms Ontology, Taxonomy and Classification*, [http://reinout.vanrees.org/\\_downloads/2003\\_cib.pdf](http://reinout.vanrees.org/_downloads/2003_cib.pdf).
  - Saeed, John Ibrahim. 1997. *Semantics*. Oxford: Backwell Publisher Ltd.
  - Sudaryanto. (1993). *Metode dan Aneka Teknik Analisis Bahasa, Pengantar Penelitian Wahana Kebudayaan Secara Linguistik*. Yogyakarta: Duta Wacana University Press.
  - Sugiyono. (2008). *Metode Penelitian Kuantitatif Kualitatif and R&D*. Bandung : Alfabeta
  - Zurriyati and Suadi. (2014). *Makanan Khas Tradisional Aceh dan Potensi Pengembangan Ekonomi Masyarakat di Kota Lhokseumawe*. Laporan Penelitian LPSDM, Banda Aceh.

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