International Journal of Engineering & Technology, 7 (3.25) (2018) 589-595

International Journal of Engineering & Technology

Website: www.sciencepubco.com/index.php/IJET

Research paper

Cross-Lingual Semantic Compatibility of Indonesian and English Concepts of Sensory Perception

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Abstract

This research was conducted to know how Indonesian and English concepts of sensory perception relate to one another in terms of their semantic components and semantic compatibility. The object of the study was the concepts of sensory perception in three sensory channels: auditory, olfactory, and gustatory. The research was designed in qualitative approach with descriptive method of analysis. Data were collected from several printed materials as the main sources i.e. dictionaries, thesaurus, and encyclopedia. The collected data were analyzed by applying componential analysis technique and cross-lingual semantic comparison. The research found that the lexemes used to represent concepts of sensory perception in English were more in number than those used in Indonesian. In terms of semantic components of which the concepts were made up, the research found that the concepts used in both languages were analyzable into a set of semantic components i.e. speech, repeated, crowded, and inherence (auditory-channeled concepts); pleasant, sharp, emanation, and cause (olfactory-channeled concepts); agreeable, acrid, and emphasis (gustatory-channeled concepts). In terms of cross-lingual semantic compatibility, some concepts in either language are mutually translatable with their cross-lingual equivalents in the other language, whereas the rest remain hardly translatable and require circumlocution translation.

Keywords*: Sensory Perception; Semantic Compatibility; Auditory; Alfactory; Gustatory*

1. Introduction

Human beings are equipped by the Creator with approximately the same set of physical organs in perceiving the world; eyes to see, ears to hear, nose to smell, tongue to taste, and skin to feel. The same physical organs (sensory channels) through which the world comes to reach our nervous system should have made perception of world universal to human beings and the world should appear the same to us all. Consequently, linguistic units (lexemes) in different languages used to symbolize the concept of one particular world reality should refer to exactly the same semantic component.

As the matter of fact, a concept in particular language often apparently heightens particular components that are dimed by its equivalence concept in other languages. Everyone's favorite examples are the concepts symbolized by the lexemes snow and color. The latter belongs to Indonesian vocabulary of approximately as many terms as to English. Other languages are more restricted in their color terms than is Indonesian or English. This is made possible by a number of factors such as culture, age, ethnicities, sex, language, and whatever sorts of built-in distinctive characteristics of human groupings.

The Shona of Rodesia have only three color-terms (1) *cipswuka*which stands for orange, red, purple, and some blue; *citema*for blue and some green; and *cinena*for green and yellow. TheBossaof Liberia has only two major color terms: *hui*which represents purple, blue, and green; and*ziza*which represents yellow, orange, and red. While European languages have a single word for the concept snow, Boas in Palmer (2) noted that Eskimo has four: "snow on the ground, falling snow, drifting snow, and snowdrift." While the English people have a single word for the concept rice, Indonesian people have a number of separated words for different phenomena of rice such as *padi, gabah, beras, menir, nasi, ketan, ketupat,* etc. What then significant from these and elsewhere linguistic evidence is the emergence of Fishman's very important thesis "that different linguistic communities have unique ways of viewing the world and that their languages give us systematic clue to what those views are"(3).

2. Literature Review

No single language is linguistically better than the others in the sense that each language has its own degree of expressiveness which is more or less equal to that of the others'. This is to say that all languages are mutually translatable. If it were possible to say certain thing in one language, the other languages are capable as well of saying the thing in question though it might, for some languages, be in various ways of wording. African languages—the ones spoken where there is no snow—do not have a word for it. Still they could describe it as for
example, "white, cold flowers from the sky that turn to water when they are touched"(4). TheAmbonese people of Indonesia do not have any term for Indonesian concept '*sepupu'* (cousin); they say '*saudara'* (brother/sister) instead.

When a need arises to express a concept for which there is no ready-made term in the language, Hudson (5)clarifies, two things can be done: "the language can be changed, perhaps by introducing a new form to carry the desired meaning, or the existing resources of the language can be used to 'unpack' the meaning to be expressed." A community whose language does not have a single word for the concept 'university', for instance, may express the

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concept either by introducing a single new word to its language or by means of circumlocution such as "place where people go to learn difficult things when they are over eighteen."

The ability of speakers of any language to describe extensional reality beyond the reach of their linguistics experience—as in the case of the speakers of African languages and the snow, or the case of the concept university—is not of much surprise as far as we are aware of human position as the key holder of the languages. Such a position enables human beings to make their language say what they want it to. Although it may, for a particular language, be difficult to verbally respond to a given extensional reality or idea, there has never been any proof of being (linguistically) impossible. Indonesian and English, two different languages, each has its own degree of expressiveness. Being spoken by communities of different cultural background, either language conceptualizes any entity based on the world-view unique to its community. This implies that: (i) a number of concepts in either language may or may not have one-to-one translation equivalents in the other, and (ii) a number of concepts in either languages, due to cultural priority, experience, and interest of its community, may or may not be semantically compatible with their translation equivalents in the other.

This research investigated concepts of sensory perception used in Indonesian and English. The term concept in this research refers to either one of two contexts of use: (i) any linguistic item (lexeme) in Indonesian and English used to name and symbolize sensory perception, and (ii) cognitive network or mental image associated with any kind of sensation toward external stimuli perceived and experienced through sensory channels. The research aimed at providing data and information about: (1) what meaning-features constitute each concept of sensory perception; and (2) to what extent the concepts perform cross-lingual semantic compatibility.

The object of the study is all the lexical items representing concepts of sensory perception in three sensory channels: auditory, olfactory, and gustatory. The exclusion of the other two sensory channels, visual and sensory (skin) channels, is consciously decided due to the following consideration. First, the two empirical phenomena perceived through visually-channeled nerves, color and shape, have been adequately investigated by, and thus comprehensive data on this particular domain have been provided in numerous publications of distinguished linguists, sociologist, and anthropologists such as: Edward Sapir, F.G. Lounsbury, Berlin and Key, W. Good Enough etc.(6). Second, the lexemes designated to represent concept of different colors and shapes have had standard criteria in Chemistry and Arithmetic/Geometry respectively. Third, the empirical stimulus for sensory (skin) nerves, temperature, is gradable and scaled in nature, and the lexemes designated to represent concept of temperature may easily lend themselves to the standardized scaling procedure in Physics such as that of thermometers. The other stimulus perceived through this channel, shape, more particularly surface phenomena and the lexemes used to symbolize them are not independent of the involvement of visual nerves.

3. Methodology

The research design was in descriptive qualitative approach. Data of the research were the semantic components of lexical units used to symbolize concepts of sensory perception in both Indonesian and English. The data were traced and collected from the recorded use of the concepts in different dictionaries, thesaurus, of both abridged and unabridged edition as follows.

1. Kamus Besar Bahasa Indonesia, the Indonesia monolingual dictionary officially issued by the Indonesian Government, Editions: III (7)
2. KamusUmum Bahasa Indoensia(8).
3. The Compact Edition of The Oxford English Dictionary, Complete Text, Edited by Robert W. Burchfield of The Oxford University(9)
4. The Random House Dictionary of the English Language, Unabridged, Second Edition(10).
5. International Roget's Thesaurus. Fourth edition(11), Collins Publisher, London.
6. Kamus Indonesia Inggris(12), PT. Gramedia, Jakarta.
7. KamusInggris Indonesia(13), PT. Gramedia, Jakarta.

There were two main phases of data collection: the phase of determining which lexical units representing concepts of sensory perception used in both languages; and the phase of compiling sample utterances (phrases, clauses, and sentences) used in the sources of data for each of the concepts.

Technique of data analysis geared to the data characteristic and to the research problems. To find out meaning-features of which a concept is made up, componential analysis technique was applied. The result of this analysis became the bases and made possible for further analysis on cross-lingual semantic compatibility of the concepts of sensory perception. The cross-lingual semantic compatibility was analyzed and presented descriptively by applying cross-comparison technique.

By componential analysis technique, a concept was decomposed into a number of semantic components resulting in a matrix informing whether a concept has the semantic component in question. The semantic components were determined by the researcher as the result of a very careful and intensive examination on the compilation of sample utterances cited from the sources of data. The utterances exemplifying the use of the concepts were examined to identify what generic attributes (components) under which the varying meaning-features of the concepts may be classified. While some of the identified semantic components of the concepts were characteristically binary opposites, the others are multiple-values in nature.

The cross-lingual semantic compatibility of the concepts was analyzed by comparing a concept or a group of concepts in either language with a concept or a group of concepts in the other language on the basis of the semantic components specified earlier. Such an analysis resulted in gradation of semantic compatibility depending on how much similarity in meaning-features the concepts under comparison may perform.

4. Results and Findings

Concepts of sensory perception are the lexical items used in Indonesian and English to represent sensation as to the access of awareness toward external stimuli perceived through three sensory channels: auditory, olfactory, and gustatory.

4.1. Concepts of Sensory Perception

The Indonesian concepts here considered were taken up from *Kamus Besar Bahasa Indonesia* and *KamusUmum Bahasa Indonesia.* The two dictionaries do not in fact make a special list of Indonesian words assigned as to sensory perception but they served as cross-references for justification or refutation of the diagnostic concepts intuitively prescribed by the researcher.

Lists of English lexemes representing concepts of sensory perception are available in some different publications. The English concepts here considered were selected from the lists available in *International Roget's Thesaurus* and *TheNew Hamlyn Encyclopedic World Dictionary.* As indicated in Table I, the research identified 6 lexical items in Indonesian and another 7 in English representing concepts of sensory perception for auditory channel, 9 Indonesian and 12 English for olfactory channel, and 12 Indonesian and 15 English for Gustatory channel.

Table 1: Indonesian and English Concepts of Sensory Perception

No	Sensory Channels					
	Auditory		Olfactory		Gustatory	
	Ind.	Eng.	Ind.	Eng.	Ind.	Eng.
1	*Berisik*	Blantant	*amis*	Acrid	*Asin*	Acid
2	*Bising*	Boisterous	*anyir*	Aromatic	*Enak*	Bitter
3	*gaduh*	Clamorous	*apak*	Fetid	*Gurih*	Briny
4	*ingar-bingar*	Noisy	*busuk*	Foul	*Hambar*	Delicious
5	*ribut*	Tumultuous	*harum*	Fragrant	*Lezat*	Insipid
6	*riuh*	Uproarious	*pesing*	Moldy	*Manis*	Luscious
7		Vociferous	*semerbak*	Musty	*Masam*	Palatable
8			*tengik*	Odorous	*Pahit*	Piquant
9			*wangi*	Pungent	*Pedas*	Salty
10				Rancid	*Pulen*	Savoury
11				Rank	*sepat*	Sour
12				Smelly	*tawar*	Spicy
13						Sweet
14						Tasty
15						Toothsome

It is worth noting that the concepts which happened coincides the same item numbers in the table should not be taken as if they are equivalent to each other as such. They were instead put so to suit technically alphabetical order of presentation.

4.2. Cross-Lingual Semantic Compatibility

This section concerns with the extent to which a concept in Indonesian may perform semantic compatibility with its equivalent concept(s) in English. The main indicators of compatibility were the semantic components of which a concept were made up, and the compatibility degree of the concepts was determined based on the criteria of how much a concept in Indonesian shares similarity with its equivalent concept in English in terms of its semantic components. The semantic components shared among the concepts of sensory perception are presented in table 2.

Table 2: Semantic Components of the Concepts of Sensory Perception

Sensory Channel	Semantic Components			
Auditory	Speech	Repeated	Crowded	Inherence
Olfactory	Pleasant	Sharp	Emanation	Cause
Gustatory	Agreeable	Acrid	Emphasis	

Note: Three components (inherence, cause, emphasis) are multi-valued; the rest are in binary opposites

4.2.1. Auditory Perception

In *Kamus Indonesia Inggris*, the Indonesian *berisik* is translatable into English noisy, tumultuous, and uproarious. In *KamusInggris Indonesia*, noisy is translatable into *ribut*, *gaduh*, and *berisik/ramai*. Interestingly, *berisik*—which is translatable into tumultuous in *Kamus Indonesia Inggris*—does not belong to the candidates suggested for the Indonesian equivalent of tumultuousin *Kamus Inggris Indonesia.*

Indonesian *berisik* is compatible with all of the English concepts of auditory perception. Indeed, in the broadest sense, each of the Indonesian concepts of auditory perception considered in this research is mutually translatable to each of the English ones. They all share the characteristic of being as perception of highly-intensed sounds.

Indonesian *berisik* and English boisterous—the suggested Indonesian equivalent for the latter is *riuh*—share the same semantic components, both are [+LOUD, ±SPEECH, ±REPEATED, +CROWDED]. They, however, differ in the component inherence because *berisik* may easily lend itself to the sounds of relatively lower quality whereas boisterous denotes the inherently good-high spirit sounds. The evidenceimplies that when *berisik* occurs in a context independent of the traits of low-quality and non-crowded sounds, it is totally translatable into, and perfectly equivalent to boisterous. Similarly, when boisterous occurs in a context independent of good-high spirit sounds, it is totally translatable into and perfectly equivalent to *berisik*.

Berisik and blatant—the later is circumlocuted in*KamusInggris Indonesia* into '*ribut dengan terang-terangan'*—share the features [+LOUD, +SPEECH, +REPEATED, +CROWDED]. While *berisik* may denote lower qualily sounds, blatant signifies disapproval. It follows that blatantcan be adequately rendered into English by *berisik* when it occurs in the contexts which may indicate sounds of lower quality and are independent of the trait disapproval.

With clamorous, *berisik* shares the features [+LOUD, +SPEECH, +REPEATED, +CROWDED]. The distinctive feature of clamorous sounds, in danger, seems to make clamorous a distant equivalent to*berisik*. Such a feature can hardly imply low quality sounds.

Noisy, tumultuous,and uproarious all denote sounds of more or less the same features as those of *berisik*. Each is compatible with *berisik* in the sense of being neutral in the features speech and repeated. When they occur in the indifferently general contexts, they can be translated into Indonesian *berisik* and vice versa.

Vociferous differs form*berisik* in that it signifies the inherently insistent speech sounds. As does clamorous, vociferous is in distant equivalent to*berisik*. It is, however, compatible with *berisik* in that both denote loud sound.

Ribut and noisy each stands as the superordinate of its hyponymous concepts in each language. The evidence benefitsthe discussion on the cross-lingual compatibility of all concept because the concern can be restricted to, and represented by, the analysis of these two concepts.

In the following discussion, each of the two concepts is compared, in terms of semantic compatibility, to every single concept listed in the other language. In addition, another one concept was randomly chosen to be analyzed in the same way as of *ribut* and noisy.

Ribut and boisterous share the components [+LOUD, ±SPEECH, ± REPEATED]. They, however, differ from each other in the components inherence and crowded. While *ribut* is applicable to both crowded and non-crowded sounds, boisterous is [+CROWDED]. Furthermore, *ribut* signifies the inherently disapproved sounds whereas boisterous signifies the characteristically good-high sprit ones. *Ribut* is translatable into boisterous when it occurs in the contexts independent of the sense non-crowded and of the sense disapproval. Similarly, boisterous is translatable into *ribut* when it occurs in the contexts free from the sense good-high spirit sounds.

Ribut and blatant share such semantic components as [+SPEECH, +REPEATED, +CROWDED] and both signify inherently disapproved sounds. However, *ribut* has much wider semantic range than does blatant, and is thus a more general concept. Blatant seems to serve one side of the binary value of the semantic component served by *ribut*, the [+] value, whereas the [-] value is be-

yond the reach of blatant. It follows that blatant may render *rebut* into English when *ribut* occurs in the contexts free from the sense [-] value within any of its semantic component. Blatant is, on the other way round, compatible with, and translatable to *ribut* in almost all contexts of its occurrences.

Ribut and clamorous share the components [+SPEECH, +REPEATED, ±CROWDED], and let some components unshared and unique to each of them. While *ribut*ischaracterized by the components [-SPEECH, ±REPEATED], and disapproval, clamorous specifies sounds indicating sense of 'being in danger'. Clamorous may certainly render *ribut* into English when *ribut* is used in the contexts free from the semantic components uniquely characterize it, and at the same time clamorous is free from danger nature. On the contrary, clamorous is compatible and translatable to *ribut* in almost all of its occurrences.

Ribut and noisy are two concepts most commonly considered as the equivalents for, and mutually translatable to, each other. Both serve as the most general concepts of auditory perception and are almost always neutral in their occurrences in that each may serve as the substitute of the other concepts in the language. They share similar semantic components to each other. In terms of the inherent characteristic of the sounds it perceives, *ribut* appears to be a little bit more specific than does noisy. While noisy is applicable to the sounds of general inherence, *ribut* tends to signify disapproved sounds. Hence, mutual translatability of the two concepts may perfectly exist when *ribut* is used in the contexts independent of its disapproval sense. Noisy is by evidence translatable to *ribut* in any context of its occurrences.

Ribut and tumultuous share the components [+SPEECH, ±REPEATED, +CROWDED]. Tumultuous is, however, restricted to the [+] value of component crowded whereas *rebut* is [±]. In terms of the inherent characteristic of the sounds perceived, the two concepts are identically associated to the sense disapproval, though tumultuous can be regarded as more specific in the cause of the disapproval i.e. confusion and turbulence. Accordingly, *ribut* can certainly render tumultuous into Indonesian in any contexts within which tumultuous occurs, but tumultuous is incapable of rendering *ribut* into English in the contexts where *ribut* occurs to signify disapproved sounds caused by neither confusion nor turbulence.

The compatibility of *ribut*and uproarious is identical to that of *ribut* and tumultuous. In terms of the inherent feature of the sounds perceived, uproarious is most closely associated with laughter. In this sense, uproarious may translate and be translated by *ribut* when laughter admits disapproval.

Ribut and vociferous share the components [+SPEECH, ±REPEATED, ±CROWDED]. They differ from each other in that while vociferous confines its perception to speech sound, *ribut* is applicable to both speech and non-speech sounds. Furthermore, vociferous signifies insistent sounds which may certainly be either or not disapproval in nature. It follows that vociferous can translate and be translated by *ribut* when the insistent sounds are characteristically disapproved ones and, at same time, *ribut* is independent of the non-speech feature.

Noisy and*berisik*hold the same truth of compatibility as do noisy and *ribut* since *berisik* is the closest synonym of *ribut*. *Bising*is still another Indonesian concept of similar truth with noisy. Noisy and *berisik* slightly differ in terms of the inherent features of the sounds they denote. Both are in fact applicable to any loud sound with relatively lower intensity. They are compatible with and mutually translatable to each other in almost every context of their occurrences.

Bising specifies unrepeated and earsplitting sounds. The two features are included in the semantic range of noisy and, therefore, *bising* is compatible with and translatable to noisy but it is, on the contrary, incapable of rendering noisy into Indonesian in some particular occurrences of noisy i.e. in the contexts within which noisy signifies the repeated feature of the sounds.

Noisy and *gaduh*share the components [±SPEECH, ±REPEATED, +CROWDED]. In this case, noisy is more neutral for it is applicable to both crowded and non-crowded sounds. In terms of the inherent features of the sound they denote, noisy is, again, more neutral than *gaduh* since *gaduh* confines to perception of the characteristically untruly sounds. It implies that *gaduh* is always translatable to noisy but it cannot, in some particular contexts, serve translating noisy into Indonesian.

Noisy and *ingar-bingar*hold a generic-specific relation of compatibility with each other. Noisy is the generic concept within which *ingar-bingar* is a sub-concept. In other words, noisy may render *ingar-bingar* into English whereas *ingar-bingar* may do so in some restricted usages of noisy i.e. when noisy occurs in the contexts specifying earsplitting sounds as well as independent of non-repeated and non-crowded features of sounds.

Noisy and *riuh*prove compatibility relation similar to that of noisy and *ingar-bingar*. *Riuh* may serve rendering noisy into Indonesian when noisy is used in the contexts specifying wavy nature of the sounds denoted and being free of the trait of non-crowded sounds.

4.2.2. Olfactory Perception

In order to enhance discussion on the cross-lingual semantic compatibility of the concepts of olfactory perception, the concepts in both languages must first of all be sorted out and put in groups on the basis of the similarity in their distinctive features. The grouping puts particular concept(s) of both languages together in one group. The concepts constituting the same group are taken as the potential candidates of cross-language equivalents for each other. In the discussion, the members of a group are compared to each other in terms of their semantic compatibility.

There exist five groups of concepts, each of which is analyzed in turn, they are:

a) *apak*, moldy, *tangik*, musty
b) *amis*, rancid, anyir, rank
c) *busuk*, acrid, fetid, foul, pungent, smelly
d) *harum*, *semerbak*, *wangi*, aromatic, fragrant, odorous
e) pesing.

a. Apak, moldy, *tengik*, musty. The English concepts moldy and musty are synonymous to each other,both refer to perception of unpleasant odors which potentially emanate from general sources due to decaying, staling, and aging. Such a perception is also conceptualized in Indonesia with an almost identical context to which *apak* and *tengik* are nearest candidates of equivalent.

Apak and tengikare synonyms in all semantic components. If one is to specify the difference of the two concepts, he might pinpoint, though hesitately, that *tengik* is a little bit intense sensation relative to *apak*. Nevertheless, the two are applicable to both sharply and delicately unpleasant odours.

Eventhough,*apak* can translate and be translated by moldy and musty, a potential incongruity in cognitive image of the Indonesian and English natives in using these compatible concepts is by no means avoidable, more particularly in the cross-lingual use of *apak* and moldy. Moldy is characterized by the unpleasantly aging odorsintrinsicly suggestive of mould, the characteristic which is not possessed by *apak*. Accordingly, when the use of moldy in an English discourse specifying this characteristic, the Indonesian translation of moldy into *apak* is certainly performing cognitive image different from that of the (source) English discourse performed.Conversely, if an Indonesian discourse within which *apak* is used without any associative image as to mould is rendered into English by moldy, the supposedly equivalent resultants in fact perform different cognitive images.

When the cross-language translation happens to take place in such an instance, misunderstanding between the speakers of the different natives may certainly occur. What emerges from the concepts of this group is the evidence that *apak/tengik*and mustyare the concepts which can be more savely considered compatible and translatable to each other, wheares the English moldy, in its particular sense, seems to have no edequate Indonesian equivalent.

b. Amis, anyir, rancid and rank. English rancid and rank are used to render Indonesian *amis*and *anyir*into English and vice versa in

Kamus Indonesia Inggris and *Kamus Inggris Indonesia* as well as in the discourse of Indonesian-English bilinguals of both spoken and written.

*Amis*and *anyir*are synonyms and they are used interchangeably in every context of their occurrences. They perform total compatibility referring to sensation suggestive of the smell of fish and blood which is noticeably offensive and unpleasant. Such a sensation is conceptualized in English by rancid and rank. Interestingly, the two English concepts have semantic traits different from that of *amis* and *anyir* do.

In terms of the cause of odors, the so-called *amis/anyir*odors are characterized by their intrinsic nature of being *amis/anyir*; whereas the so-called rancid/rank odors are not necessarily *amis/anyir* in nature (as to the way Indonesian speakers understand it) since an odor which emanates from some particular sources due to decaying, decomposing, and staling may, in English, be said of rancid or rank.

It would be not surprising then if an English speaker of Indonesian may talk of '*tembakau yang amis/anyir'*to mean 'offensively smelly tobacco due to decaying'(rank tobacco) for he understands well—and so do all Indonesian-English bilinguals of either Indonesian or English natives—that the Indonesian equivalent for the English rank is *amis* or *anyir*. Unfortunately, such an utterance sounds odd to Indonesian natives since, as they understand it, only fish and blood as such but not tobacco that emit odor called *amis/anyir*. They expected to hear another wording instead, and (perhaps) '*tembakau yang apak'*is the best candidate to suit their expectation. A more cooperative Indonesia interlocutor might, for his best effort, take the utterance as if the said tobacco had been contaminated with blood as such which had made it smells *amis/anyir*. The cooperative effort had inevitably even made misunderstanding. In such an instance, both the speaker and the interlocutor ultimately arrived at different cognitive/mental image during the course of their conversation.

c. Busuk, acrid, fetid, foul, pungent, and smelly. Being as the superordinate to which all the Indonesian perception of unpleasant odors are hyponyms, *busuk*can render all the English concepts listed in this group into Indonesian because each of the English concepts shares overlapping semantic components, and thus compatible, with *busuk*. Like *busuk*, smelly is a neutral perception relative to the other English perception of unpleasant odors, and is indeed compatible with each of the English concepts listed in this group. *Busuk*and *smelly*are, therefore, the cross-language equivalents for each other.

Acrid, fetid, foul and pungent, although translatable to *busuk*, each of them has its own so inherent characteristic that its translation into Indonesian seems to require circumlocutory wordings rather than simply *busuk*. Conversely, each of these concepts is potential of making misunderstanding if it renders *busuk* into English. In other words, each of the four concepts embodies inherent criteria by which either *busuk* or smelly is characterized. Fetid, for example, is smelly with the worst nature, so bad smell that one should turn his stomach or even vomits because of it. An Indonesian native who was reminded by his English native counterpart not to come closer to an object emitting fetid smellmight, either curiously or stubbornly, approach the object simply because his English counterpart uttered the word busukwhich is taken by the Indonesian as if it was an indifferent smell. In such an instance, the Indonesian native would blame his English counterpart as soon as he finds himself cannot help vomitting. Similarly, the English native would blame his Indonesian counterpart who reminded him by saying smelly because he should have reminded him of the odor by saying fetid.

Acrid and pungent signify offensively unpleasant smell suggestive of acid substance. Acrid slightly differs from pungent in that while acrid signifies disposition toward tartness resulting from objects which are instrinticly containing or given acid substance or vinegar, pungent signifies odours resulting from objects that are not necessarily containing acid substance in their organic compound, but of resembling the smell of acid. In order to arrive at the identical meaning, once acrid and pungent are rendered into Indonesian, the speakers or the writers need to make circumlocutory phrasing since no single Indonesian concept is adequately equivalent to these concepts.

Foul signifies unpleasant smell induced by any object suggestive of aging and contamination. It is still another concept which is compatible with and translatable to *busuk*but requires additional phrasing to clarify the features specified. In short, Indonesian hardly has a single concept equivalent to the English foul.

d. Harum, semerbak, wangi, aromatic, fragrantand odorous. *Harum*is the superordinate to which *semerbak*and *wangi*are co-hyponyms. For the English concepts, odorous is the superordinate to which aromatic and fragrant are co-hyponyms.

Indonesian and English each has three concepts of olfactory perception signifying pleasant odors, and, interestingly, the two threes happen to coincide in semantic components.

Harum and odorous are cross-lingually equivalent to each other. They share similar semantic components which make them semantically identical. *Harum* may render aromatic and fragrant into Indonesian, ang odorous may render semerbak into English.

Semerbak and *wangi*denote pleasant odors which may or may not be offensive to olfactory nerves, emittedby distinct objects due to freshness. The same truth holds with aromatic and fragrant, and the evidence ultimately signify that these concepts are cross-lingually identical.

e. Pesing is an Indonesian concept of olfactory perception which is compatible with every one of the English concepts except those for the pleasant odours. It is save to infer that *pesing* has no adequate single-word equivalent in English. It may in fact be rendered into English by any one of the English concepts signifying unpleasant odoursbut none of which is specific in its distinctive semantic feature as *pesing*. *Pesing* is used for, and only for, the stench of, or resembling urinate. In order to arrive at the identical meaning, the English translation of the concept *pesing* requires circumlocutory phrasing.

4.2.3. Gustatory Perception

The account of semantic compatibility of the concepts of gustatory perception is held in the same way as was of the concepts of olfactory perception. Firstly, the concepts in both language are sorted out and grouped on the basis of their suggested synonyms and equivalents. Secondly, the concepts in each group are analyzed in terms of semantic compatibility and equivalency hold among them. The concepts of gustatory perception are classified into eight groups as below:

a) Asin, briny, salty
b) Enak, gurih, lezat, pulen, delicious, luscious, piquant, palatable, savory, tasty, toothsome
c) Hambar, tawar, insipid
d) Masam, acid, sour
e) Manis, sweet
f) Pahit, bitter
g) Pedas, spicy
h) Sepat

***a. Asin*, briny, salty.** The English briny and salty are said to be synonymous to each other, referring to gustatory perception induced by salt and other substance of similar taste character. In its extended meaning, however, briny is used to refer to the sea. It is in the former sense that *asin*serves as the Indonesian equivalent for briny and salty. Regardless of the intensity of saltiness of the substance in question, the meaning of salty is identical to that of *asin*, and in the contexts independent of the extended meaning, the meaning of briny is also identical to that of *asin.*

b. *Enak, gurih, lezat, pulen,* delicious, luscious, piquant, palatable, savory, tasty, and toothsome. These concepts all signify the pleasant sensation of accompanying an agreeable taste or flavor. Of the Indonesian concepts, *enak* is the super-ordinate to which the other three are co-hyponyms; and of the English concepts, *tasty* and *delicious* may equally be the super-ordinate. This implies

that *enak* can, in general sense, be rendered into English by each of the English concepts in this group, and so can tasty and delicious into Indonesian by each of the four Indonesian concepts in this group.

Compared to tasty, delicious is closer in meaning to *enak* since they stress more strongly the great pleasure that attends a fine-tasting food. Furthermore, they are not necessarily restricted to pleasure induced by flavor but by many more natural phenomena, the semantic trait beyond the reach of tasty. Hence, misunderstanding may take place if the Indonesian construction '*Suasana di desaituenakkarenatidakadakendaraan yang ribut'*is translated into English resulting 'The desa enjoys a tasty silence because it is void of noisy due to vehicles'. In this particular construction, delicious is the best choice instead.

When *enak* occurs in the contexts signifying pleasure due merely to an agreeable flavor, tasty is the best translation. Indonesian *lezat* finds its best place in such a contexts, and therefore tasty and *lezat* are identical in semantic traits. It ultimately implies that *lezat*and tasty form a pair of cross-language equivalents, while *enak*and delicious from another one.

While delicious stresses more strongly the great pleasure that attends a fine-tasting food, savory emphasizes more strongly the agreeable nature of the taste. Such an emphasis makes savory more closely equivalent to *lezat* than to *enak*.

Luscious emphasizes richness in taste in combination with smell, and is characterized by appetizing. It is then an English concept that can hardly find its single-word equivalent in Indonesian. It may of course be rendered into Indonesian by either *enak* or *lezat*, but its canonical traits seem to find appropriate place neither in *enak* nor in *lezat*. Accordingly, Indonesian translation of luscious requires circumlocutory phrasing to allow for its canonical traits accommodated.

In terms of appetizing trait, toothsome and luscious are synonyms. A food is said to be toothsome when it suggests succulent or voluptuous quality that make one cannot refrain from eating it. To render it into Indonesian, *enak* and *lezat* may serve but with additional phrasing to better qualify it such as '*enak dan menggiurkan'* or '*enak dan merangsang selera makan'*, and so on.

Palatable is a perception indicating an indifferently fine taste. It is in fact a degree of deliciousness whose meaning may best be described by such word as 'acceptable' or 'agreeable'. Its meaning is thus wholly inclusive in that of both delicious and tasty, and partly in that of savory.*Enak* is the only Indonesian concept which may render it into Indonesian though palatable cannot render *enak* into English in many contexts within which *enak* occurs.

Gurih and *pulen* each specifies a variety of tastiness induced by particular food stuff. *Gurih* is applicable to (usually) fried food such as that of crispy chips (of banana, potato); fried fish and so on. *Pulen* is said of such food stuff as rice and all kinds of tubers. *Gurih* and *pulen* are compatible with *enak* and thus translatable into English by tasty. Anyhow, the two concepts require circumlocutory phrasing when rendered into English since they can hardly find adequate English equivalents for their specified meaning.

***c. Hambar, tawar,* insipid.** The three concepts refer to perception of gustatory nerves toward any object emitting taste independent of the sensation specified in every single concept of gustatory perception considered in the study. Insipid is the English equivalent for the Indonesian *hambar*/*tawar*. They share identical semantic components and are mutually translatable.

d. Manis and **sweet.** These concepts refer to gustatory sensation suggestive of, or resembling, sugar/honey. They form a pair of cross-language equivalents sharing identical semantic components. They are mutually translatable in almost all contexts of their occurrences.

***e. Masam,* acid, sour.** These concepts refer to gustatory sensation induced by tartness. Regardless of the intensity of tartness an acid/sour object may possess, *masam*is the Indonesian equivalent for the English acid and sour. They share the identical semantic components, and are mutually translatable in almost all contexts of their occurrences.

f. Pahit and **bitter.** These concepts refer to gustatory sensation induced by such substance as aspirin or quinine or any other subject of similar taste character. As do *manis* and sweet, *pahit* and *bitter* perform a considerably perfect pair of cross-language equivalents whose semantic components are identical. They are mutually translatable, and hardly ever contradict in semantic traits and emphasis in any context within which they occur.

g. Pedas and **spicy.** ***Pedas*** symbolizes a gustatory sensation induced by the taste of pepper/chili for which spicy is the nearest candidate of English equivalent. The two concepts are indeed compatible, but spicy finds itself more moderate in semantic range since it symbolizes the sensation induced by any kinds of spice. Spice is understood as the umbrella term under which pepper and chili find their places. It implies that spicy can render *pedas* into English, but *pedas* is, in many instances, incapable of rendering spicy into Indonesian. Indonesian speakers usually describe the meaning of English spicy by verbalizing the specific kinds of the spice that emit the sensation in question.

h. Sepat is an Indonesian concept whose meaning can hardly be rendered into English by a single English word. It symbolizes a gustatory sensation induced by some sorts of unripe fruit, offensive and acrid to gustatory nerves. Its rendering into English requires circumlocutory phrasing. In *Kamus Indonesia Inggris*, for instance, *sepat* is described in circumlocutory way as to 'astringent to the taste', a circumlocution which is certainly, to some extent, acceptable. Anyhow, such a translation may imply as if *sepat* is identical to sour, bitter or other English concepts symbolizing anything astringent or acrid to gustatory nerves, an implication which is of course unacceptable. In short, as the Indonesian natives understand it, *sepat* is well exemplified by such a sensation one may experience when he is eating unripe *salak.*

5. Conclusion

The lexemes used in English to conceptualize sensory perception for the three sensory channels considered in the study are more in number than those used in Indonesian. While English has 7, 12, and 15 lexemes for auditory, olfactory, and gustatory channels respectively, Indonesian has 6, 9, and 12. The concepts of sensory perception are analyzable into several semantic components. The concepts of auditory-channeled perception had four semantic components: speech, repeated, crowded, and inherence; the concepts of olfactory-channeled perception had four: pleasant, sharp, emanation, and cause; and the concepts of gustatory-channeled perception had three: agreeable, acrid, and emphasis. While all the rest are characteristically binary-opposites, three semantic components—inherence (auditory), cause (olfactory), emphasis (gustatory)—are multiple-valued in nature.

While some concepts of sensory perception in either language are mutually and perfectly translatable to their cross-language equivalents in other language, the other concepts remain hardly translatable to the presumably equivalent concepts in the other language. In the latter case, the cross-lingual uses of the concepts may potentially cause two conversants—each is bilingual of either native language—arrive at different cognitive/metal images during the course of their communication, unless they employ circumlocution strategy.

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