The Morphosyntactic Structure of the Words Having the Root *Nyata*
in the Indonesian Language: A Corpus-Linguistic Approach

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Abstract

One issue which is frequently discussed in linguistic study is the connection between the principle of morphology and syntax. Morphosyntax is a term used in linguistics studying the application of morphology and syntax on grammatical categories. In short, morphosyntax is the combination between morphological and syntactic studies. The writer correlates the relation between morphology and syntax by applying corpus-linguistics, the study of language data on a large scale. Corpus-linguistics is used as a method to identify each form of morphological process in the word having root *nyata* in wider context. The result of this research shows the relationship between morphosyntactic structure and lemmatization (the process of determining the lemma for a given lexeme). According to *Kamus Besar Bahasa Indonesia*, the word having root *nyata* is classified as verb and noun with *nyata* as the head word. In this study, the word having root *nyata* does not merely belong to both verb and noun. Furthermore, the research indicates that morphological process alters not only its parts of speech but also its head word in dictionary.

**Keywords:** morphosyntax, corpus-linguistics, lemma, dictionary, Indonesian language

I. Introduction

Words are categorized into the several word classes. Word classes are often called as a part of speech in English term. Indonesian language has fourteen types of word classes, namely verb, adjective, noun, pronoun, numeral, adverb, interrogative, demonstrative, article, preposition, conjunction, phatic category, interjection, and overlapping of word classes (Kridalaksana, 2005). Words can change their part of speech to which they belong. This can be done by adding affixes to the root. Some words can be merely added by either prefixes or suffixes. However, they can be possibly added by both prefixes and suffixes. Some words that need to be simultaneously affixed to prefixes and suffixes are called confixes.
There have been many studies concerning to morpho-syntax research. One of the studies entitled *Kesalahan Morfosintaksis pada Karangan Narasi Siswa Kelas X Seni Rupa SMKN 9 Surakarta* (2015) written by Ridyawati aims to describe the morphosyntactic error and its factors. However, the validity of the data used in the research is still questionable because the writer does not mention the number of the respondent. Rabita (2004) wrote *Morfosintaksis Reduplikasi Kategori Nomina dalam Bahasa Indonesia* to account the problems including function, influence and use of noun reduplication in the Indonesian language. The data seems to be inaccurate since she used her intuition as the secondary data. A research written by Darheni (2010) discusses *Analisis Konstratif klausa Pasif Bahasa Indonesia dan Bahasa Sunda: Tinjauan Morfosintaksis*. It describes and compares the passive sentences between Sunda language and Indonesian language however the methodology used in the research does not mention how to collect the data. Kwary and Sugiri (2004) wrote *The Influence of Schemata of Indonesian Language Structure on the Ill-Formedness of English Sentences in the TWE of TOEFL Course Students in Surabaya: A Morpho Syntax Study* to explain the impact of schemata of Indonesian language structure towards the ill-formedness of English language sentences in the TWE of TOEFL course students in Surabaya. Other study is *Interferensi Morfosintaksis Bahasa Bugis pada karangan bahasa Indonesia Siswa SD* written by Hamzah (2013). It describes the morphosyntactic interference forms of Bugis language which the most interference coming up in the Indonesian Language (IL) from students.

The main objective of this research is to identify the morphosyntactic structure of the word *nyata* as the subject of research. This research is different from previous studies in term of the approach; the writer applies corpus linguistic approach. The data in this paper were taken from the conclusion sections of several multidisciplinary journal articles. The writer observed the text data by using corpus processing software to know the use of the word *nyata*. As we already know that the word *nyata* is classified as adjective class based on *Kamus Besar Bahasa Indonesia*. The word *nyata* can be added a prefix, a suffix and even a confix. Adding an affix to the root *nyata* potentially makes an alteration on its part of speech; reclassification. This occurs not
only as a different part of speech but also as different meaning. In lexicography, morphological process happening in a word can make a different entry or lemma from its origin. The writer would deeply explain about the influence of morphological process that occurs in the word *nyata* seen from its part of speech, voice and meaning.

Some researchers interchangeably use the term affixation and morphological process. Affixation may be defined as a case when a morpheme engage with a word and change its meaning (Shortis, 2001). Jensen (1990) proposed that a concurrently alteration in the form of morpheme and an addition of a meaningful element cannot be easily regarded as a process such as affixation; he prefers to use morphological process term rather than affixation. By adding morphemes to the root, there is a possibility of new entry or lemma. A lemma is a dictionary form of a collection of words used in lexicology, terminology, terminography and lexicography (Margarita et al., 2015). Talking about lemma or lemmata (plural form), we will be familiar with the term lexeme and word. A lexeme is an abstract element of morphological analysis while a word is a concrete element of morphological analysis (Margarita et al., 2015).

Indonesian language has three kinds of affix based on the morpheme placement; prefix, infix and suffix. Moreover, there are two kinds of affix that carry the additional information for each root; inflectional affix and derivational affix. Walhey (1997) said that derivational morphemes purvey robust semantic information and inflectional morphemes primarily provide grammatical information. Haspelmath et al. (2010) divided morphological relationship into two kinds; inflection and derivation. Inflectional morphology is the relationship between word-forms of a lexeme while derivational morphology is the relationship between lexemes of a word family, for instance form a (e.g. reader), corresponding to lexeme A (reader), is derived from form b (read), corresponding to lexeme B (read). Haspelmath et al. (2010) claimed that derivational morphology proposes a new and different concept from the root. In English, for example, sing, sang, sung, sings, and singing are the word-forms of the same lexeme SING with sing as the lemma but sing and singer are different lemma.

Booij (2005) considered morphology and syntax interact in two directions: syntactic constructs may form parts of complex words, and syntax in its turn governs
the use of morphological case marking on words. Syntax takes its role in defining what morphemes that the root can employ in a sentence. For example, the subject *I* does not agree with the verb *goes* in a sentence *I goes to school*. Subject-verb agreement is one example that shows the relation between morphology and syntax. Since there is no subject-verb agreement in the Indonesian language, the morphosyntactic analysis will be employed on how the root *nyata* conjoins to both inflectional and derivational morphemes and its position in a sentence.

To analyze the morphosyntactic structure of the text data, the writer applied a corpus-linguistic approach. McEnery and Hardie (2011) defined corpus linguistics as an area focusing on a set of procedures for studying language. There are two kinds of main ideas in the corpus-linguistic approach recommended by neo-Firthians: collocation and discourse. This paper deals with the term collocation which refers to the notion that important features of the meaning of a word are not carried within the word itself however they subsist in the characteristic association that the words participate in. Sinclair (1991) proposed that collocation describes the idiomatic rule that words which are not necessarily adjacent appear in pairs or group.

The writer here will present a technique called collocation-via-concordance (McEnery and Hardie, 2011). A concordance is a set of the occurrence of a word-form each of which in its own textual environment (Sinclair, 1991). With this method, the software of computer (here the writer used Unitex) has a role to supply the analyst with a set of concordance lines. The writer examines each line individually, identifying the items and patterns which occur repeatedly in nearness to the central point of word. Concordancers, one of the processing corpus tools, enable the users to take a look words in wider context.

II. **Research Method**

The writer considered employing conclusion sections because conclusion does not contain any statistic data and the length of the words was sufficient for doing analysis. Academic texts were chosen because the writer studies the word having the root *nyata* in formal language. The writer used observation method to collect the data.
There are 280 multidisciplinary journal articles from 140 journals downloaded from the website repositories of 8 universities in Indonesia including Institut Pertanian Bogor, Universitas Diponegoro, Universitas Indonesia, Universitas Padjajaran, Institut Teknologi Sepuluh November, Institut Teknologi Bandung, Universitas Gadjah Mada, and Universitas Negeri Sebelas Maret. The conclusion sections of each article were compiled in .txt format using Notepad++. The next method involved the step of processing the .txt file by running corpus processing software (Unitex IDE 3.1). The writer searched the concordance by inserting the word-forms having the root *nyata* in Locate Pattern tool. The analysis of each line is begun from the morphological process of the word-form *nyata* and identification its occurrence in a sentence. This is done by using qualitative method; descriptive technique.

### III. Result and Discussion

The text of conclusion sections consists of 194175 tokens (the total number of words in a text). The writer recorded the frequency of the word having root *nyata* as in the Table 1 below.

**Table 1. The number of occurrences**

<table>
<thead>
<tr>
<th>No</th>
<th>Word</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nyata</td>
<td>29</td>
</tr>
<tr>
<td>2</td>
<td>Menyatakan</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Dinyatakan</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Kenyataan</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Ternyata</td>
<td>6</td>
</tr>
</tbody>
</table>
Nyata

The word *nyata* which is classified as adjective class has 29 occurrences. Adjective class can be indicated by several patterns of lexical markers following or preceding the adjective. First, the word *nyata* syntactically can be preceded by particles such as *sangat, lebih, and secara*. The examples of the use of *nyata* are as follows:

*Pendampingan terhadap UMKM Pangan di Palu memberikan manfaat yang *sangat* nyata terhadap pemenuhan klausul SNI ISO 9001.*

*....agar dapat ber kemampuan membangun secara *lebih* nyata.*

*Rancangan sistem yang dikembangkan saat ini sampai dengan model ORM oleh karena itu hasil rancangan ini belum bisa diterapkan secara *secara* nyata pada unit kerja tersebut.*

Second, *nyata* also appears after nouns, for examples:

*Dari penelitian yang dilakukan, *dampak* nyata yang dirasakan masyarakat setempat adalah....

*..... mengacu pada *kebutuhan* nyata yang dialami pada....*

Third, *nyata* occurs as an adverbial after verbs

*Faktor-faktor yang *berpengaruh* nyata terhadap produksi sale pisang secara individual adalah jumlah modal, jumlah bahan baku pisang, danteknik membuat kerekel sale*

*Hasil juga menemukan bahwa ibu di perdesaan yang membangun kelekatan emosi yang baik maka *berhubungan* nyata dengan prestasi akademik anak yang semakin baik. Selain itu, orang tua di perdesaan yang memberi dukungan informasional yang baik maka berhubungan nyata dengan prestasi akademik anak yang semakin baik.*

Menyatakan

Prefix and suffix attached to *nyata* are combined and called as confix *men-kan*. Phoneme /n/ on prefix *men-* then can be merged. Prefix *men-* has various allomorphs based on the type of morpheme that follows. Phoneme /l/, /m/, /n/ added to root will
merge with the root and change its form to be *me-*; for instance prefix *men-* becomes *me-* in the word *menyatakan*. The lemma *nyata* changes its part of speech as attached to confix to be verb according to *Kamus Besar Bahasa Indonesia*. Verbs primarily act as predicate or main predicate in sentences although they have other functions (Alwi et al., 1999). The word *menyatakan* belongs to deadjectival verb, a type of verb derived from an adjective. Van Valin et al. (1997) proposed verbs taking one argument are called as intransitive verbs. On the other hand, verbs taking more than one argument are called as transitive verbs; monotransitive (two arguments) and ditransitive (three arguments).

Confix *men-kan* in the lemma *nyata* is used to indicate an active transitive verb that carries grammatical meaning ‘*menyebabkan jadi nyata*’. This aims to explain causative meaning with the component +*tindakan*. Viewed from its syntactic behavior, the word *menyatakan* can be an intransitive verb; however it needs an obligatory complement. The complement is not a verb or phrase but a clause preceded by marker ‘*bahwa*’ (can be implied).

These are the examples of the concordances of *menyatakan* (intransitive verb with obligatory complement).

*Puspadewi (2014) menyatakan *bahwa* persepsi makanan yang sehat berhubungan positif dengan harga.*

.....yang menyatakan *bahwa* suatu sistem hukum dalam operasi aktualnya merupakan sebuah organism kompleks dimana struktur.....

*Hasil penelitian ini menyatakan (bahwa)* semakin baik kelekatan emosi yang dibangun maka semakin baik dukungan sosial yang diterima oleh anak.

The last sentence shows that the conjunction *bahwa* is implied. The writer also discovered in the last sentence that the agent of the verb *menyatakan* does not have to be animate. This is related to the concept that the first argument of verb which acts as an instigator is almost always animate (Van Valin et al., 1997). The last sentence shows that *hasil penelitian*, as the agent, is inanimate argument.
However, the sentence below indicates that the word *menyatakan* belongs to monotransitive verbs. Monotransitive verbs are verbs that need two arguments; one is as the subject and another one is as an object in an active sentence. The object must be the subject in a passive sentence. The second argument as the object will be bold in the following sentence.

*Analisis dan model regresi linier berganda dapat digunakan untuk menyatakan hubungan fungsional perubahan konsentrasi DO terhadap perubahan parameter fisika-kimia.*

Although, the sentence above is passive voice yet the word *menyatakan* carries the active form. So, the word *menyatakan* should be followed by noun or noun phrase as the complement. Since the word *menyatakan* is directly followed by noun or noun phrase, the object of the verb is called as direct object.

*Dinyatakan*

Prefix *di-* does not have any allomorph when it is attached to the root *nyata*. It simultaneously conjoins to the root with the suffix –*kan*, because *di-* does not make a sense without –*kan*. The confix *di-kan* is the opposite of the confix *me-kan* and carries grammatical meaning with the component +*pasif* +*tindakan*. The word *dinyatakan* is classified as verb class.

……..*pembangunan sebagai proses negosiasi dari para aktor yang terlibat, sebagaimana dinyatakan oleh teori Healey.*

Passive voice is used when the writer want to emphasize the recipient rather than the actor (Glenn & Gray, 2010). The word *dinyatakan* has *menyatakan* as the active form. As the word *menyatakan* belongs to either intransitive verb with obligatory complement or monotransitive verb, the word *dinyatakan* need at least a noun as the object of preposition. In the sentence above the phrase *oleh teori Healey* is obligatory. *Oleh* is a passive marker but not all passive sentences can be marked by it.
Another pattern of passive sentence is in the sentence below.

\[
\text{Kebutuhan traktor berdasarkan arahan penggunaan lahan mengalami titik kritis pada 2006, sehingga dapat dinyatakan bahwa tahun 2006 traktor di Kabupaten Bandung mulai mengalami kekurangan, sedangkan pada kebutuhan traktor berdasarkan luas lahan, titik kritis terjadi pada tahun 2020.}
\]

It can be seen that there is no object of preposition after the word dinyatakan. It means that the word dinyatakan not only can be followed by an object of preposition but also a clause (underlined).

**Kenyataan**

The next morphological process is the addition of circumfix ke-an. The circumfix ke-an is categorized to derivational morphemes which is able to alter the part of speech of the root. The word nyata changes its part of speech from adjective to be noun when it is attached to ke-an that carries grammatical component +nomina. Please take a look this following sentence.

\[
\text{Kecenderungan kesadaran moral menghubungkan moralitas suatu tindakan dengan otonomi pelakunya adalah suatu kenyataan yang tidak dapat dikesampingkan dan yang harus diperhitungkan.}
\]

One way to determine the nouns is by identifying numeral marker that usually occurs before the noun. It can be seen that suatu is the numeral marker for tindakan. The word suatu is classified as basic-absolute-numeral. Basic-absolute-numeral is basic number as the origin of other numbers denoting the absolute amount.

**Ternyata**

The prefix ter- is identical to the grammatical concept +pasif +adversatif and usually carry unintentional action in meaning. You must be familiar with the word terbawa which means if something is unintentionally brought. However, the question is whether
the morphological process of the prefix ter- attached to the root nyata belongs to verb.
The full sentence of the first concordance is as follows:

Menyimak anomali arsitektur desa adat di atas, ternyata konsep Hulu-Teben desa adat Bayung Gede bukan hanya terkait dengan bentuk penghormatan terhadap leluhur semata (Pura Kahyangan Desa +Setra Gede), melainkan sistem sosial budaya spesifik sebagai latar belakang pemicu munculnya kekhasan konsep tersebut.

The given sentence shows that the word ternyata occurs before the noun phrase (underlined words). Then, the writer put ternyata after the noun phrase becoming the sentences as follows:

Menyimak anomali arsitektur desa adat di atas, konsep Hulu-Teben desa adat Bayung Gede ternyata bukan hanya terkait dengan bentuk penghormatan terhadap leluhur semata (Pura Kahyangan Desa +Setra Gede), melainkan sistem sosial budaya spesifik sebagai latar belakang pemicu munculnya kekhasan konsep tersebut.

We can see that putting the word ternyata before or after the noun phrase does not change the meaning and the sentences are acceptable.

Suatu uji hypotheses yang dilakukan terhadap kemungkinan hanya daerah tradisional sebagai kontributor dari pekerja anak, secara statistik ditolak karena yang menyumbang pekerja anak ternyata juga dari daerah yang relatif maju.

The same step is done for the sentence above. The word ternyata is put before the adjective phrase (underlined words) becoming the following sentence.

Suatu uji hypotheses yang dilakukan terhadap kemungkinan hanya daerah tradisional sebagai kontributor dari pekerja anak, secara statistik ditolak karena ternyata (orang) yang menyumbang pekerja anak juga dari daerah yang relatif maju.
Actually, there is the word *orang* implied before *yang*. This means that the word *ternyata* occurs before or after the noun phrase with *orang* as its head of phrase. Furthermore, it can be seen that the pattern of the second concordance of the word *ternyata* is similar to the first pattern. Putting *ternyata* either before or after the noun or noun phrase is acceptable and the meaning is constant.

The writer conclude that the word *ternyata* is morphologically independent (differ from *terbawa* and *terangkat*). This means that the word *ternyata* in dictionary is not the derivation from the root *nyata*, although it is formed by morphological process. So, the prefix *ter-* in the word *ternyata* does not carry semantic information. In addition, the word *ternyata* is a new entry in dictionary as a head word. Moreover, *ternyata* syntactically occurs according to the noun or noun or noun phrase which is modified by it. As a result, the placement of *ternyata* itself is optional. In brief, the word *ternyata* is classified as adverb. Alwi et al. (1999) proposed that adverbs not only modify verbs, adjectives, and other adverbs, but also nouns and prepositional phrases. Since the word *ternyata* tends to explain the whole sentence, this adverb is called as adverbial explanatory sentence.

### IV. Conclusion

There are many ways to analyze morphosyntactic structure of words. By applying corpus linguistics, we are able to see the words in wider context. This aims to know how the words are used in sentences. The morphosyntactic structure shows that morphology and syntax are related each other. Morphological process of the words having root *nyata* potentially can alter their grammatical relations. The process changes not only the grammatical relations but also the meanings. In brief, the morphological process itself carries both grammatical function and semantic information.

The writer also found the phenomenon that the word *ternyata* belongs to an adverb. However, *ternyata* is classified as a verb in *Kamus Besar Bahasa Indonesia*. As a result, some programmers who do not have linguistic backgrounds will classify *ternyata* as an adverb when annotating the corpus data especially to make POS Tagger
feature. Since the researcher analyzes only the words having the root *nyata*, it is possible to analyze other morphosyntactic structure of other words for the next study.

References


Appendix

Figure 1. The concordances of *nyata*

*tekan sejajar serat berbeda* *

Figure 2. The concordances of *menyatakan*

*hal. Puspadevi (2014) menyatakan bahwa persepsi makanan *

Figure 3. The concordances of *dinyatakan*

*terlibat, sebagaimana dinyatakan oleh teori Healey.*
Figure 4. The concordances of *kenyataan*

pelakunya adalah suatu *kenyataan* yang tidak dapat

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Figure 5. The concordances of *ternyata*

desa adatdi atas, *ternyata* konsep Hulu-Teben desa; mbangpeekerja anak *ternyata* juga dari daerah yang re; g tiada tandingan *ternyata* tidak sempenuhnya benar. luan upacara adat *ternyata* penempatan ragam hias m; Kondisi tersebut *ternyata* telah merubah pola fiki; hitungan tertentu *ternyata* banyak memberikan keun;