Analysis of the Derivation and Inflection Process in Javanese Language

Analisis Proses Derivasi dan Infleksi dalam Bahasa Jawa

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Abstract
The objective of this study was to conveyed the word classes in Javanese language that undergo derivational and inflectional process. Specifically, this study focused on derivational and inflectional morpheme, which are very closely applied to the linguistic context of the language. The research was conducted using a qualitative methodological approach, employing a methodological rigor employed in data collection, coupled with a meticulous application of morpheme theory and the insights derived from interviews. The data was taken with interview technique. The qualitative approach, with its emphasis on participant perspectives and the exploration of underlying themes, provided an opportunity for in-depth interviews. The data of the research were the derivations and inflections of words in Javanese language. This in-depth exploration contributed valuable knowledge about the interaction between affixation and its impact on word structure and meaning. This study illustrated the presence of various affix forms in Javanese language, and affixes played a crucial role in modifying and shaping words, allowing for a diverse range of expressions in linguistic communication. This study revealed that not all categories within derivational and inflectional morphemes are represented in the data set under study. The results of this study indicated the presence of affixation processes in the Javanese language, including prefixes, suffixes, infixes, and circumfixes. Additionally, there are only noun and verb as word classes identified in Javanese undergo affixation processes to form new word classes and meanings through derivation processes. However, the inflectional process does not introduce new meanings or word classes to the respective words, including noun, verb, and adjective.

INTRODUCTION

Morphology, positioned as an indispensable domain within the expansive realm of linguistics, engages in an intricate examination of the grammatical architecture and configuration of words, including their constituent elements. In the insightful framework, (Fromkin et al., 2014) assumes that morphology plays a pivotal role in comprehending the grammatical intricacies embedded in the internal structure and regulations governing words within a given linguistic system. Essentially, morphology serves as the intellectual compass guiding the exploration of words and their metamorphoses, offering a profound insight into the multifaceted nature of linguistic transformations.

The evolution of a word, a process laden with numerous symptomatic manifestations, unfolds within this academic discipline, intertwining with various linguistic dimensions. These dimensions encompass the intricate interplay of sound, navigating the nuanced changes in phonemes resulting from the convergence of interphonemic elements, and the diverse manifestations of morphemes, marking the terrain where the dynamic nature of language undergoes scrutiny and revelation.

The transformative phenomenon of morphological change unfolds through a triad of prominent modalities, namely: (1) affixation, (2) reduplication, and (3) composition, as expounded by (Subroto, 1991), (Verhaar, 1996), and (Sudaryanto., 1993). Each of these modalities delineates

the procedural dynamics of morphological transformation, encompassing the alteration of word forms induced by affixes, the metamorphosis arising from repetitive elements, and the reshaping of linguistic structures through compositional processes.

A morpheme is a grammatical unit consisting of meaningful elements in a language. When connected with the pattern, morphemes are the smallest grammatical units that have certain patterns by (Hockett, 1958). In the realm of English linguistics, a morpheme takes center stage as the fundamental building block of words. Precisely defined as the tiniest unit within a word that carries distinct meaning, a morpheme operates as a discrete section contributing to the overall meaning of the encompassing word. It wields the ability to exist in isolation as an independent word or seamlessly interweave with other morphemes, culminating in the formation of intricate and nuanced vocabulary.

This linguistic entity bears significance not merely in its standalone existence but exerts a transformative influence on the entire word to which it is appended. Morphemes are categorized into two main types (Martini, 2016). They are free morphemes, which can function independently as complete words, and bound morphemes, which must attach to free morphemes to convey meaning. This intricate interplay between morphemes forms the basis for the creation and interpretation of words across language. These morphemic categories serve as the basic framework for the origin and comprehension of words in the broad tapestry of language. The cohesive interaction of morphemes, whether operating independently or together, manifests as a dynamic force that shapes the intricacies of linguistic expression and comprehension at the core of language acquisition and articulation.

Free morpheme is a morpheme that has the ability to stand alone as a whole, both in terms of grammar and meaning. This type of morpheme is often referred to as a word of origin, which is a word that has not changed (has not undergone changes) from its origin. There are many forms of this morpheme in Javanese. For example: turu 'sleep', mangan 'eat', tangi 'awake', and so on. In the study of Javanese morphology, this kind of unit is called wuwuhan or affix.

On the other hand, bound morpheme is the smallest unit of language that does not have the ability to stand alone. This unit, which consists of a number of phonemes, will only have meaning and value when it joins an independent morpheme (whole word). So, a tie morpheme has no meaning at all. Their value and contribution will only be determined after this unit meets other morphemes. These morphemes, devoid of standalone meaning, rely on interactions with other morphemes to contribute value.

According to (Fromkin et al., 2014) introduces two distinct types of morphemes: those are derivational morpheme and inflectional morpheme. Derivational morphemes possess clear semantic content. In this sense they are like content words, akin to content words, except that they are not words. As we have seen, when a derivational morpheme is added to a base, they yield a new word with altered meaning. Importantly, derivational morphemes have the capacity to change the word class and meaning of a base word, exemplifying the dynamic and transformative nature of morphology in language structure and evolution.

(Fromkin et al., 2014) established a comprehensive categorization of derivational morphemes, distinguishing them from inflectional morphemes in terms of their impact on the grammatical category of attached stems. Derivational morphemes, as categorized by Fromkin, bring about changes not only in the meaning but also in the grammatical category of the base word.

Noun to Adjective
boy + -ish
virtu + -ous
Elizabeth + -an
pictur + -esque
affection + -ate
health + -ful
alcohol + -ic

Verb to Noun
acquitt + -al
clear + -ance
accus + -ation
sing + -er
conform + -ist
predict + -ion

Adjective to Adverb
exact + -ly

Noun to Verb
moral + -ize
vaccin + -ate
hast + -en

Adjective to Noun
tall + -ness
specific + -ity
feudal + -ism
free + -dom

Verb to Adjective
read + -able
creat + -ive
migrat + -ory
run(n) + -y

Some derivational suffixes do not cause a change in grammatical class. Prefixes never do.

Noun to Noun
friend + -ship
human + -ity
king + -dom
New Jersey + -ite
vicar + -age
Paul + -ine
America + -n
humanit + -arian
mono- + theism
dis- + advantage
ex- + wife
auto- + biography

Verb to Verb
un- + do
re- + cover
dis- + believe
auto- + destruct

Adjective to Adjective
pink + -ish
red + -like
a- + moral
il- + legal
in- + accurate
un- + happy
semi- + annual
dis- + agreeable
sub- + minimal

Picture I
The type of Derivational (Fromkin, 2014)

In contrast, inflectional morpheme exhibits a more subtle influence, leaving the grammatical category of the stems unchanged. Inflectional morpheme does not change the word class and only makes the meaning of the word change slightly or not at all.

English Inflectional Morphemes		Examples
-s	third-person singular present	She wait-**s** at home.
-ed	past tense	She wait-**ed** at home.
-ing	progressive	She is eat-**ing** the donut.
-en	past participle	Mary has eat-**en** the donuts.
-s	plural	She ate the donut-**s**.
-'s	possessive	Disa**'s** hair is short.
-er	comparative	Disa has short-**er** hair than Karin.
-est	superlative	Disa has the short-**est** hair.

Picture II
The type of Inflectional (Fromkin, 2014)

The process of affixation is also known as the process of affixing. Affixation encompass a range of techniques, namely prefixes, infixes, suffixes and confixes. Each change process is: (1) prefixes are affixes that are added at the beginning of a word. In Javanese Paramasastra, it is called ater-ater. The process is usually called prefixation. For example, di-, ke-, sa- and so on; (2) infix (insertion), which is an affix that joins the base word in the middle position. in the middle position. The process is called infixation. For example, -em-, -in- and so on; (3) suffixes, involves attaching affixes to the end of words. The process is called suffixation. For example -en, -an and so on; (4) confixes, are the joining of two affixes at the beginning and at the end of the word to which they are attached simultaneously. The process is called confixation. The process of confixation is if one of the affixes is removed, it will damage the structure and meaning. damage the structure and meaning. Thus, confixes are whole affixes that cannot be separated. Therefore, confixes (even though it consists of two affixes) is still counted as one morpheme. For example, {ka-+-an}, {pi-+-an} and so on. This underscores the integral role played by confixes in shaping the structure and meaning of words in a way that distinguishes them from other affixation processes.

The research conducted by (Anjariah et al., 2022) only focuses on derivation and inflectional cases found in short stories. Therefore, the gap identified lies in the difference in data sources as this recent study focuses on data from native Javanese speakers.

(Sumadi, 2012) research, focuses solely on the transformation of denominal adjectives within Javanese vocabulary. Consequently, the identified gap pertains to the narrower scope of data results limited to denominal adjectives, contrasting with the broader approach of the recent study.

Herawati (2016) study concentrates exclusively on the formation of denominal verbs in Javanese, utilizing data derived from Javanese words. This presents a gap concerning the specific focus on denominal verbs, contrasting with the recent study's more comprehensive analysis across various word classes.

(Sukardi, 2013) research confines itself to nouns undergoing derivational transformation into verbs through affixation, primarily sourced from the Banyumas dialect. Thus, the gap lies in the limited focus on denominal verbs and the data's regional specificity, diverging from the recent study's broader approach that doesn't confine to specific word classes or dialects. With this gap, this research is important to do as a novelty and new knowledge related to derivation and inflection as a case of morphology.

This study goes deeper into the details of how the Javanese language works. It looks at a wider range of things and general patterns in how words are formed. The goal is to explain how sentences are put together in Javanese, especially when they change using prefixes and suffixes. The study wants to show how these small word parts are used a lot in Javanese. It talks about many different aspects but focuses on how affixes are used in Javanese. It aims to show how important these word parts are and how they work in the language.

Unlike previous examinations, the current study does not restrict itself to specific objects or topics. Instead, it delves into a thorough discussion of affixes in the Javanese language, coupled with an exploration of their combination within the framework of morpheme theory. The new study builds upon previous research to explore the structure and meaning of sentences in the Javanese language. While earlier studies focused narrowly on specific word classes or transformations, this study takes a broader approach, delving deeply into the morphological intricacies of Javanese. Unlike past research, which concentrated on singular aspects such as denominal adjectives or noun-to-verb derivations, this study examines the comprehensive application of affixes across the language.

The primary concentration of this study revolves around elucidating the structural alterations brought about by derivational and inflectional changes in the Javanese language. Specifically, the research is tailored to scrutinize the derivational and inflectional processes occurring in Javanese words. The researcher's motivation for selecting this topic stems from a keen interest in the words shaped by derivational and inflectional morphemes within the Javanese linguistic context. By unraveling the intricacies of these morphological transformations, this study aims to contribute a nuanced understanding of the dynamic interplay between affixation, derivational processes, and inflectional changes in the Javanese language.

METHODOLOGY

In this study, a qualitative research methodology was employed as the chosen approach. As elucidated by (Creswell, 2009) qualitative research entails a consistent reliance on literature derived from the assumptions of participants, not allowing for researchers' personal perspectives. The qualitative research is generally carried out with the consideration that the research should be exploratory.

(Creswell, 2009) explains that the qualitative research process involves important efforts, including formulating relevant questions and procedures, collecting specific data from participants, and analyzing specific data from participants, analyzing the data inductively from specific themes to general themes, and interpreting the meaning of the data.

The research data consisted of derivational and inflectional words extracted from the Javanese language. Obtained through interviews with four proficient Javanese speakers, the data was meticulously transcribed into detailed notes by the researcher for further analysis. The initial phase of data collection was pivotal, involving the gathering of a wide range of words to be thoroughly scrutinized.

First of all, the data was collected by utilizing in-depth interview of four correspondents. The subsequent step is analyzing the data by transcribing the data collected. Following the initial data collection, a systematic classification process was implemented, organizing the words into categories based on whether they exhibited derivational or inflectional characteristics. This categorization involved analyzing changes in meaning and word class.

To validate the findings, the categorized data was presented to additional Javanese language speakers in in-depth interviews, lasting 30 minutes each and conducted over two days. By employing a qualitative method, which emphasizes participant perspectives and explores underlying themes, the study effectively delved into the complexities of derivational and inflectional words in Javanese. The meticulous and thorough approach adopted in this research ensures the reliability and depth of the findings, thereby contributing valuable insights to our understanding of morphological processes within this linguistic context.

The primary focus of this study involved the utilization of four main datasets because those data consist of derivational morpheme and inflectional morpheme, as conceptualized by (Fromkin et al., 2014).

Moreover, the researcher specifically sought data from the Javanese language, aiming to capture instances of derivational morpheme and inflectional morpheme within its linguistic structure. In addition, the researcher used interview technique as the technique in collecting the data in selecting main data, aligning with the methodological approach outlined by (Creswell, 2009) and guided by specific criteria relevant to the study's objectives.

To systematically gather relevant information, a series of steps were followed: 1) data were sourced from everyday Javanese language usage; 2) words containing derivational morpheme and inflectional morphemes were meticulously selected; and 3) the chosen data points were systematically compiled to form the main dataset, ensuring a comprehensive representation of the morphological aspects under investigation.

The amassed data underwent a thorough analysis, guided by the morphemic theory proposed by (Fromkin et al., 2014). The analytical approach involved two key steps 1) the application of the theory facilitated the classification of all data into two main genres of bound morpheme i.e. derivational morpheme and inflectional morpheme that is proposed by (Fromkin et al., 2014); 2) analysis process was enhanced through interviews conducted with native Javanese language speakers.

In essence, the methodological rigor employed in data collection, coupled with the meticulous application of morpheme theory and the insights derived from interviews, has yielded a comprehensive understanding of the derivational morpheme and inflectional morphemes within the Javanese language. This approach not only adheres to established research methodologies but also adds depth to the exploration of morphological structures in the linguistic context of Javanese, offering nuanced insights into the interplay of affixes and their implications for word formation and meaning.

RESULTS AND DISCUSSION
Results

This study shows the analysis in a word that changes the class words or meaning from morpheme. (Fromkin et al., 2014) identify two categories of morpheme: 1) derivational morpheme, change the word class and the meaning of a word; 2) inflectional morpheme, did not change the word class and only makes the meaning of the word change slightly or not at all. This

categorization provided a foundational understanding of the morphological structures present in the Javanese language.

The data of derivational morpheme and inflectional morpheme in Javanese language with prefixes as the first example.

Data I Prefixes "jupuk" (ambil) → ny- + jupuk: njupuk (mengambil).

From the data I, the researcher found a word fittingly formed by inflectional morpheme. The word njupuk is forming by ny- + jupuk. The base word is jupuk that has meaning 'ambil' in Indonesian or 'take' in English.

After adding the prefix ny-, the class word is still a verb that has a meaning to take or lift something from a place. Prefix ny- indicates that the act of taking occurred or was performed by someone or something.

Data II Prefixes "biji" (nilai) → m- + biji: mbiji (menilai).

From the data II, the researcher found a word fittingly formed by derivational morpheme. The word mbiji is forming by m- + biji. The base word is biji that has meaning 'nilai' in Indonesian or 'score' in English. The word 'nilai' is a noun. 'Nilai' or 'score' refers to a concept or idea of how important or valuable something is. In this context, 'score' is a noun used to express a certain usefulness or meaning in various contexts, such as moral values, economic values, or academic values.

After adding the prefix m-, the class word changing into a verb that has a meaning giving a judgement, giving a score, or giving opinion on something.

Prefixes			
Roots	Prefixes	After Prefixes	Morpheme
Jupuk	Ny-	Njupuk	Inflectional
Biji	M-	Mbiji	Derivational

The second example is infixation in derivational morpheme and inflectional morpheme. Infixation tends to be used only in written language of literary scope, so it is rarely found in everyday spoken communication.

Data I Infixes Atur (bilang) → atur + -um-: umatur (bilang).

From the data I, the researcher found a word fittingly formed by inflectional morpheme. The word umatur is forming by atur + -um-. The base word is atur that has meaning 'bilang' in Indonesian or 'tell' in English.

After adding the infix -um-, the class word is still a verb that has a meaning the action of telling or conveying a message. The meaning is still the same that is 'ambil' in Indonesian.

Data II Infixes Tandang (kerja)→ tandang + -um-: tumandang (cekatan).

From the data II, the researcher found a word fittingly formed by derivational morpheme. The word tumandang is forming by tandang + -um-. The base word is tandang that has meaning 'kerja' in Indonesian or 'work' in English. The word 'kerja' is a noun. 'Kerja' or 'work' which refers to activity or work. As a noun, "work" can refer to the act of working or work in general.

After adding the infixation -um-, the meaning changes to 'cekatan' in Indonesian or 'dexterous' in English. The class word changed into an adjective that has a meaning someone or something that performs a task or activity quickly, agilely, and efficiently.

Infixes			
R	I	After	Mor

oots	nfixes	Infixation	pheme
A tur	- um-	Umatur	Inflectional
T andang	- um-	Tumandang	Derivational

The third example is suffixes in derivational morpheme and inflectional morpheme. There is no derivation morpheme in suffixes because suffixes only add endings to the base form to simplify informal conversation.

Data I Suffixes Cekel (pegang) → cekel + -en: cekelen (peganglah).

From the data I, the researcher found a word fittingly formed by inflectional morpheme. The word cekelen is forming by cekel + -en. The base word is cekel that has meaning 'pegang' in Indonesian or 'hold' in English.

After adding the suffixes -en, the class word is still a verb that indicates an actions to hold something. The meaning is still the same that is 'pegang' in Indonesian.

Data II Suffixes Omah (rumah) → omah + -e: omahe (rumahnya).

From the data II, the researcher found a word fittingly formed by inflectional morpheme. The word omahe is forming by omah + -e. The base word is omah that has meaning 'rumah' in Indonesian or 'house' in English.

After adding the suffixes -e, the class word is still a noun. 'Omah' or 'house' is a noun that means the place where someone lives or resides. Suffixes '-e' is '-nya' in Indonesian or in English is '-s' is a possessive pronoun that indicates that the house is owned by or associated with someone or something. In this context, 'nya' is often used to indicate ownership.

Suffixes			
Roots	Suffixes	After Suffixes	Morpheme
Cekel	-en	Cekelen	Inflectional
Omah	-e	Omahe	Inflectional

The fourth example is confixes in derivational morpheme and inflectional morpheme.

Data I Confixes Cilik (kecil) → ke- + cilik + -en: keciliken (terlalu kecil).

From the data I, the researcher found a word fittingly formed by inflectional morpheme. The word keciliken is forming by ke- + cilik + -en. The base word is cilik that has meaning 'kecil' in Indonesian or 'small' in English.

After adding the confixes ke- + -en, the class word is still an adjective that used to describe the size or dimensions of an object that is not large. 'Keciliken' (terlalu kecil) or 'too small' emphasises the smallness of something. In this case, 'terlalu' or 'too' gives a sense of the intensity or smallness of something, while 'cilik' (kecil) or 'small' is an adjective that describes the nature of the object being talked about.

Data II Confixes Takon (tanya) → pi- + takon + -an: pitakonan (pertanyaan).

From the data II, the researcher found a word fittingly formed by inflectional morpheme. The word pitakonan is forming by pi- + takon + -an. The base word is takon that has meaning 'tanya' in Indonesian or 'ask' in English. 'Takon' (tanya) or 'ask' is a verb to express an action or process of asking or requesting information.

After adding the confixes pi- + -an, the meaning changes to 'pertanyaan' in Indonesian or 'question' in English. The class word changed into a noun. As a noun, it is used to refer to an expression or phrase that is asked to get information or an answer from another person.

Confixes

R oots	C onfixes	Afte r Confixes	Morphem e
C ilik	ke -+-en	Keci liken	Inflection al
T akon	pi- + -an	Pita konan	Derivatio nal

Discussion

From the analysis above it can be concluded that not all the category of derivational morpheme found. There are noun to verb (one word), noun to adjective (one words), and verb to noun (one word).

Derivational Morpheme		
Category	Wor d	Word Forms
Noun to Verb	Mbiji	M- + biji
Noun to Adjective	Tum andang	Tandang + -um-
Verb to Noun	Pita konan	Pi- + takon + -an

From analysis above it can be concluded that not all the types of Inflectional Morpheme found. The categories found are Inflectional morpheme refers to Progressive (one word), Inflectional morpheme refers to Possessive (one word), Inflectional morpheme refers to superlative (one word).

Inflectional Morpheme		
Cate gory	W ord	Word Forms
Prog ressive	N jupuk	Ny- + jupuk
Pos sessive	O mahe	Omah + -e
Sup erlative	K eciliken	Ke- + cilik + -en

CONCLUSION

In conclusion, this comprehensive study delves into the intricate analysis of morphemes, particularly focusing on derivational and inflectional morphemes in the Javanese language. The investigation is guided by the morphological framework proposed by (Fromkin et al., 2014), which categorizes morphemes into two distinct types: derivational morphemes, responsible for altering both the word class and meaning, and inflectional morphemes, which bring about subtle or negligible changes in meaning without affecting the word class.

After analyzing the Javanese words as the main data, not all the types of derivational morpheme and inflectional morpheme are found. There are 3 words of derivational morpheme and there are 5 words of inflectional morpheme but only 3 words are the types of inflectional according to Fromkin theory. The findings of this research are consistent with a previous study titled

"Derivational and Inflectional Morphemes in English and Javanese" conducted by (Anjariah et al., 2022), indicating that not all data, specifically in Javanese language, undergo derivational or inflectional changes, despite undergoing affixation.

In the broader analysis, it is concluded that not all categories of derivational morphemes are present in the data, and various transformations include noun to verb, noun to adjective, and verb to noun. Similarly, the study reveals specific types of inflectional morphemes, including progressive, possessive, and superlative, while also noting the absence of certain categories within inflectional morphemes. This insightful exploration contributes valuable knowledge into the morphological processes of Javanese, explaining the dynamic interplay between morphemes and their impact on word structure and meaning.

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