THE ACQUISITION OF INDONESIAN AFFIXATION ON INFLECTION AND DERIVATION OF TWO TO FIVE YEAR OLD CHILDREN

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Abstract

This study is aimed to reveal affixation both on inflection and derivation and its morphological process, and the phonological process whether children are able to utter every word correctly. The data of this study were utterances taken from two to five year old children at Dharma Wanita Day Care of Central Java Province. The data were collected with observation and conversation methods. The observation method was performed with recording and non-participant observation. Meanwhile, conversation method was performed with elicitation technique. The data were analyzed with distributional method. The results of the analysis are as follows. Firstly, each inflection and derivation has standard and non standard Indonesian affixes. Secondly, both in inflection and derivation, there are deviations of affixations found in the utterances of two to five year old children. Thirdly, there are phenomena in terms of morphological process both in inflection and derivation.

Keywords: affixation, inflection, derivation

INTRODUCTION

Dardjowidjojo (2005, pp. 244-256) mentioned that children learn a language by going through five stages which are cooing, babbling, one-word utterance, two-word utterance and clausal utterance stages.

The structure of language in terms of morphology has been found to play an important role in understanding how language is produced and comprehended during activities such as speaking, listening, reading, and writing. Based on the illustration above, I am interested in studying the acquisition of Indonesian affixation on inflection and derivation of two to five year old children.

There are two research problems in this study as follows:

1. How does the acquisition of Indonesian affixation on inflection and derivation of two to five year old children?
2. Are the children able to utter every word correctly in terms of phonological process?
3. How is the morphological process of Indonesian affixation on inflection and derivation of two to five year old children?

These research problems lead the writer into two objectives of the research, they are:

1. To describe the acquisition of Indonesian affixation on inflection and derivation in children's utterances.
2. To describe the ability of children to utter every word correctly in terms of phonological process.
3. To describe the morphological process of Indonesian affixation on Inflection and derivation?

The scope of this study is on the morphology of the utterances produced by two to five year old children. Morphology discussed in this study include inflection and derivation. This study uses the concept of word formation by Booij (2005).

Grady said that inflection is expressed primarily by means of affixation (1996, p. 161). In English, for example, the plural is marked by the –s suffix (except *man/men, child/children, fish/fish, etc*) while the past is generally marked by the–ed suffix (although a number of verbs use internal change, as in *sink/sank* and

ride/rode). In short, affixation in inflection does not change the grammatical category (word class and the meaning).

Meanwhile, derivation (Grady, 1996, pp. 161-163) characteristically changes the grammatical category (word class and the meaning). Therefore, it is said to create a new word. For instance, *-ize* in *modernize* makes a verb out of an adjective, changing the type of meaning it expresses from an adjective (*modern*) to an action (*modernize*).

Methodology

1. Type of Research

This study is descriptive in nature as it aims to know the acquisition of indonesian affixation on inflection and derivation used by children. The subjects of the research are 2-5 years old children. In this research, the writer describes inflection and derivation of the Indonesian language used by children.

2. Data and Units of Data Analysis

The data of this study were utterances taken from two to five years old children at Dharma Wanita Day Care of Central Java Province. The population in this research is all utterances produced by children. The samples were taken by using a purposive sampling technique, that is: based on the researcher's consideration they are properly chosen as the subject of research. Thus, every respondent's utterance collected through the interview which contains inflection and derivation are considered as units of data analysis of this research. The sample was coded by using capital alphabet for each respondents' names, using capital roman for each records and using numbers for each utterances separating the transcript among Marsya (M.I.6), Raffa (R.III.3), Lucky (L.V.13), and so on.

3. Method of Collecting Data

The data needed in this research is children's performance in producing some kinds of sentences in their language. In order to get the data, the researcher used observation and interview method. The observation method was performed by recording and note taking technique. Meanwhile, interview method was performed by elicitation technique.

While she conducted an interview, she recorded the children's utterances. The interview was recorded by using a voice recorder. Then, she collected the utterances that had been understood by the children. After that, the researcher continued to make transcripts of the data. Next, she coded the utterances. The coding transcript was the data which were ready to analyze. Finally, the researcher selected the proper data to analyze.

4. Method of Analyzing Data

Analyzing the data is the important stage in a research because this stage will describe and compare the theory and the data. The method of analyzing data used in this research is the Distributional Method (Metode Agih) which means a method with the part of language itself as the instrument (Sudaryanto, 1993, p. 15). After completing the data, the first step of data analysis is coding the transcript of interview by using capital alphabet for each respondents' names, using capital roman for each records and using numbers for each utterances separating the transcript among Marsya (M.I.6), Aganti (Ai.II.6), Raffa (R.III.3), and so on R.III.3 means that the transcript got from the speaker named Raffa in the third recording (Sunday, 20 January 2014) and his utterance is the third turn's of conversation in the recording. After that, the writer describes inflection and derivation of the utterances produced by pre-school children. Then, the writer analyzes the data.

5. Method of Presenting Data

When the data had been collected, classified and analyzed, the writer continued the process of the research by presenting the result of analyzed data. The presenting result of data analysis can be done both in formal and informal method. On the formal scale, the result can be presented in the form of pictures, figures, and tables. While, informal method formed the result or such

of formula using ordinary sentences and no symbolic used in explaining the result (Sudaryanto,1993, p. 144). In this research, the writer used both formal and informal method in order to show the result of data analysis.

Findings and Discussion

Based on the word formation, children utterances can be classified into inflection and derivation. Each inflection and derivation has standard Indonesian and non standard Indonesian affixes. Inflection only occurs in the form of affixation. While, derivation occurs in the form of affixation, compounding and reduplication. This paper only discusses affixation in derivation.

1. Morphological Constructions

This chapter discusses morphological constructions such as inflection and derivation.

Table 1. Inflection and Derivation

Inflection		Derivation	
Standard Affixes	94,12%	Standard Affixes	67,86%
Non-standard Affixes	5,88%	Non-standard Affixes	32,14%
Total	100%		100%

a. Inflection

Inflection is marked by affixation but it does not change the word class or the meaning (grammatical category). The following table shows that there are no alteration of grammatical category between bases and the inflected forms. However, a number of sound changes occur when affixes and bases are combined.

The following table shows the appearance of the affixes produced by five to two year old children. It is important to note that *ber-* and *meng-* prefixes are morphemes because they have wider distributions and the highest survival rate, namely [ŋ] appearing before the vowel /a,i,u,e,o/, velar /k,g/ and glottal fricative /h/ (Pastika.2012:156). For instance, the *ber-*

prefix, has three allomorphs, which are *bel-, ber-,* and *be-*. With the base *ajar,* the /r/ in *ber-* changes to consonant /l/: ber- + ajar → belajar. Hence, it has one phonological process which is consonant change.

Table 2. Inflectional Process

Function	Affixes	Frequency	Attaches to	Example
Active verb	*bel-* Prefix	2,94%	V	aku kemarin ikut belajar (I.I.6)
Active verbs	*ber-* Prefix	5,88%	V	- Bertahan pokoknya tahan (Z.I.375)
Active verb	*be-* Prefix	5,88%	V	- Berenang (Z.I.709)
Active verb	*me-* Prefix	2,94%	V	- Untuk melihat (H.V.59)
Active verbs	*men-* Prefix	5,88%	V	- menanam (M.I.101)
			V	- menimbang (M.I.194)
Passive verbs	*di-* Prefix	64,7%	V	- Diminum. (M.I.221)
			V	- Inikan mau dimasak (R.III.167)
Passive verb	*ter-* Prefix	5,88%	V	- Rel keretanya terlindas sekarang. (H.IV.285)
Passive verb	*ke-* Prefix	5,88%	V	- tidak ketabrak truk (Nr.I.831)

In conclusion, children are commonly able to use affixation correctly. However, there are two deviations of affixations are found in the utterances of a two year old child. The child utters *berkerja* and *mentidur*. The phonological process of the two words are not finished yet. Firstly, the phoneme [r] in *ber-*prefix is deleted when it meets the base form *kerja (ber + kerja →bekerja).* It has one phonological process which is deletion of /r/. Secondly, *mentidur* belongs to the first step of the process (assimilation) in which place of nasal articulation [ŋ] is assimilated by place of obstruent articulation [t].

Moreover, there are two phenomena occuring in the inflectional process such as single morphological process with no phonetic change and single morphological process with phonetic change such as in the following.

Table 3. Single Morphological with No Phonetic Change

Base Form	Inflectional Process	Morpheme	Allomorphs
tahan [tahan]	bertahan [bərtahan]	ber-	ber- [bər-]
tengkar [təŋkar]	bertengkar [bərtəŋkar]	[bər-]	

Table 3 shows single morphological process with no phonetic change. The example can be explained such as follows. The base form of the first example is *tahan* (V). The morpheme in this example is *ber-*prefix. Then, *ber-* prefix is only added in the beginning of the base form with no phonological process (*ber-* + tahan →

bertahan). It becomes *bertahan* which still has the same grammatical category (the same meaning and the same word class) with the base form. Hence, it is called inflection.
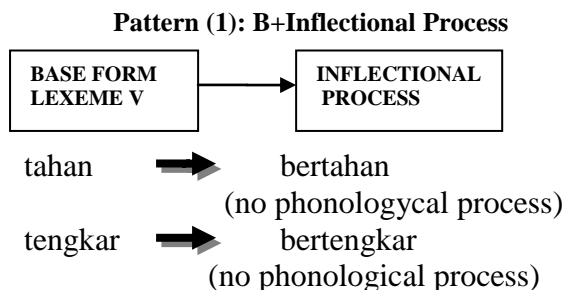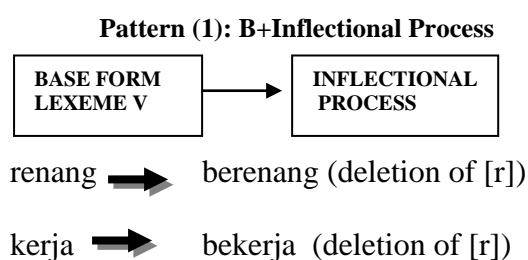
Pattern (1): B+Inflectional Process

BASE FORM LEXEME V	→	INFLECTIONAL PROCESS

tahan ➡️ bertahan
(no phonologycal process)
tengkar ➡️ bertengkar
(no phonological process)

Table 4. Single Morphological Process with Phonetic Change

Base Form	Inflectional Process	Mor-pheme	Allomorphs	Phonological Process
renang [rənaŋ] kerja [kərja]	berenang [bərənaŋ] bekerja [bəkərja]	ber-	be- [bə-]	deletion of [r]

Table 4 shows single morphological process with phonetic change. The base form of the first example is *renang* (V). The morpheme in this example is *ber-* prefix. Then, *ber-* prefix is only added in the beginning of the base form (*ber-* + renang → berenang) with deletion of [r]. It becomes *berenang* which still has the same grammatical category (the same meaning and the same word class) of the base form. Hence, it is called inflection.

Pattern (1): B+Inflectional Process

BASE FORM LEXEME V	→	INFLECTIONAL PROCESS

renang ➡️ berenang (deletion of [r])

kerja ➡️ bekerja (deletion of [r])

b. Derivation

While inflection does not change the grammatical category, derivation is conversed. It changes the grammatical category of a base form. Then, it also needs additional argument after the use of the derived form. The following table shows that there are alteration of grammatical category between bases and the derived forms. Moreover, a number of sound changes occur when affixes and bases are combined.

Table 5. Derivational Process

Function	Affixes	Frequency	Attaches to	Example
Active verbs	*ber-* Prefix	9,52%	N A	- Berbagi (As.V.23) - Aku bekerja, rajin dan shalat bersama-sama (Av.VI.117)
Active verb	*men-* Prefix	1,19%	N	- Pesawatnya mendarat ditabrak jeduar (A.IV.162)

It is important to note that *ber-* and *meng-* prefixes are morphemes because they have wider distributions and the highest survival rate, namely /ŋ/ appearing before the vowel /a,i,u,e,o/, velar /k,g/ and glottal fricative /h/ (Pastika, 2012, p. 156). Of the data, *meng-* prefix has one allomorph which is *men-*. With the base *darat, meng-* becomes *men-* before the base form *darat* (*meng-* + darat → mendarat). The phonological process of this word is assimilation because place of nasal articulation /ŋ/ is assimilated by place of obstruent articulation /d/). *Meng-* prefix serves to form an active verb and gets 1,19%.

Furthermore, there are four phenomena occuring in derivation such as single morphological process with no phonetic change, single morphological process with phonetic change, double morphological process with no phonetic change, and double morphological process with phonetic change such as follows.

Table 6. Single Morphological Process with No Phonetic Change

Base Form	Derivational Process	Morpheme	Kinds of Allomorphs
bagi [bagi] sama [sama]	berbagi [bərbagi] bersama [bərsama]	ber-	ber- [bər-]

Table 6 shows single morphological process with no phonetic change. The base form of the first example is *bagi* (N). The morpheme in this example is *ber-* prefix. Then, *ber-* prefix is only added in the beginning of the base form (*ber-* + bagi → berbagi) with no phonological process. It

becomes *berbagi* which has different grammatical category (different word class) of the base form. Hence, it is called derivation.

Of the examples above, children are able to use the derived words with different kinds of allomorphs. Those examples are called single morphological process because they only have one pattern which does not have a hierarcy of affixation.
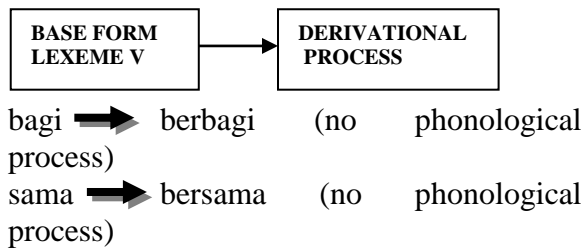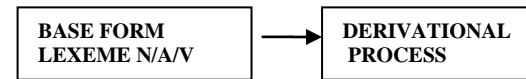
Pattern (2): B+Derivational Process

BASE FORM LEXEME V	→	DERIVATIONAL PROCESS

bagi ➡ berbagi (no phonological process)

sama ➡ bersama (no phonological process)

Table 7. Single Morphological Process with Phonetic Change

Base Form	Derivational Process	Morpheme	Allomorphs	Phonological Process
tani [tani]	petani [pətani]	peng-	pen- [pən-]	deletion of [n]
padam [padam]	pemadam [pəmadam]	peng-	pem [pəm-]	assimilation & deletion of [p]

Table 7 shows single morphological process with phonetic change. The base form of the example is *tani* (N). The morpheme in this example is *peng-* prefix. Then, *peng-* prefix is only added in the beginning of the base form (*peng-* + tani → petani). When [ŋ] appears before voiceless obstruent sounds such as /p,t,c,k/, the obstruent sounds will be deleted (Subiyanto, 2010, p. 157). Yet, the deletion will never occur on the voiced obstruent sounds such as /b,d,j,g/. It becomes *petani* which has different grammatical category (different meaning) of the base form. Hence, it is called derivation.

Of the examples above, children are able to use the derived words with different morphemes. Those examples are called single morphological process because they only have one pattern which does not have a hierarcy of affixation.

PATTERN (2): B+DERIVATIONAL PROCESS

BASE FORM LEXEME N/A/V	→	DERIVATIONAL PROCESS

laut ➡ pelaut (deletion of [ŋ])

padam ➡ pemadam (assimilation & deletion of [p])

Table 8. Double Morphological Process with No Phonetic Change

Base Form	Derivational Process	Morpheme	Allomorphs
hadap [hadap]	dihadapkan [dihadapkan]	di-...-kan	di-...-kan [di...kan]
habis [habis]	dihabisi [dihabisi]	di-...-i	di-...-i [di-...-i]
wama [wama]	diwamai [diwamai]		

Table 8. shows double morphological process with no phonetic change. The base form of the first example is *hadap* (V). The morpheme in this example is *di-...-kan*. Then, *di-...-kan* affix is only added before and after the base form (*di-...kan-* + *hadap* → *dihadapkan)* with no phonological process. It becomes *dihadapkan* which has the same grammatical category (the same meaning and the same word class) of the base form but it needs more than one argument. Hence, it is called derivation.

Of the examples above, children do not have any problem to use the derived words with different morphemes. Those examples are called double morphological process because they are referred to the hierarcy of affixation with the pattern (3)B+DERIVATIONAL PROCESS(2) +INFLECTIONAL PROCESS (1). It can be explained as follows.The writer only took a few examples from the table in the following pattern.

Pattern (3): b+derivational process (2)+inflectional process (1)

BASE FORM LEXEME V/A	→	DERIVATIONAL PROCESS LEXEME V	→	INFLECTIONAL PROCESS

hadap ➡ hadapkan ➡ dihadapkan

habis ➡ habisi ➡ dihabisi

Two hierarcies of affixation are found on the above verbs. The first is the derivation affixes–*kan, -i* and –*in* on the

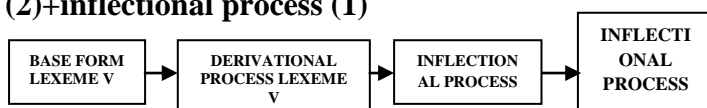verb lexemes. The second is the inflectional affix process *di-*.

The hirarchical pattern of affixation above is in accordance with the theory of Poedjosoedarmo, dkk., 1979; Ramlan, 1987; Kridalaksana, 1996 in Ermanto (2007:28). In the formation process of an Indonesian derived verb such as *memecahkan*, *-kan* suffix attaches first on the base form *pecah* (PROCESS verb/ intransitive verb) into – *pecahkan* (PROCESS-ACTION verb/ transitive verb). The writing form, – *pecahkan* ,using the sign (-) in the beginning of the verb shows that the verb is PROCESS-ACTION verb which can always be attached by the inflectional affix such as *meN-* and *di-*.

Table 9. Double Morphological Process with Phonetic Change

Base Form	Derivational Process	Morpheme	Allomorphs	Phonological Process
dengar [dəŋar]	mendengarkan [məndəŋarkan]	meng-...-kan [məŋ-...-kan]	men-...-kan [mən-...-kan]	Assimilation [ŋ]→[n]/-[d]

Table 9 shows double morphological process with phonetic change. As can be seen in the table, the *meng-...-kan* morpheme has one allomorph which is *men-..-kan*. *Meng-*becomes *men-* before the base form *dengar* (*meng-* + *dengar* →*mendengar)*. The phonological process of this word is assimilation because place of nasal articulation /ŋ/ is assimilated by place of obstruent articulation /d/). One example of these categories is found from the data. So far, the children are able to use this derived word with the *meng-...-kan* morpheme. Moreover, this example is referred to the hierarcy of affixation with the pattern (3) B +DERIVATIONAL PROCESS (2) +INFLECTIONAL PROCESS (1). It can be explained as follows.

Pattern (3): b+derivational process (2)+inflectional process (1)

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BASE FORM     →  DERIVATIONAL      →  INFLECTION    →  INFLECTI
LEXEME V         PROCESS LEXEME       AL PROCESS       ONAL
                 V                                     PROCESS
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dengar ➤ dengarkan ➤ mendengarkan

Two hierarcies of affixation are found on the above verbs. The first is the derivational affix–*kan* on the verb lexeme. The second is the inflectional affix process *men-*.

Conclusion

Based on the word formation, children utterances can be classified into inflection and derivation. Each inflection and derivation has standard and non standard Indonesian affixes.

In inflection, there are two deviations of affixations found in the utterances of a two year old child. The child utters *berkerja* and *mentidur*. This deviation is the example where children are not able to utter every word correctly in terms of phonological process. Moreover, there are two phenomena occuring in the inflectional process such as single morphological process with no phonetic change and single morphological process with phonetic change.

Meanwhile, according to derivation, there is deviation of affixations found in the utterances of three and two year old children. They are not able yet to utter *ber-* prefix correctly in the words such as *bedarah* and *besama*. They get difficult to utter phoneme /r/. However, children tend to use informal style by using non-standard Indonesian affixes such as –*in* and –*an* suffixes, *-ke* prefix, *di-....-in* circumfix. Furthermore, there are four phenomena occuring in derivation such as single morphological process with no phonetic change, single morphological process with phonetic change, double morphological process with no phonetic change, and double morphological process with phonetic change.

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