THE PHONOLOGICAL PROCESSES OF METATHESIS WORDS IN A CHILD'S LANGUAGE ACQUISITION: A CASE STUDY OF A 3-YEAR-OLD CHILD

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Abstract

Metathesis is one of the unique phenomena among children during their language acquisition phase. This study aimed to examine the phonological process of phenomena metathesis words in a child's language acquisition, especially children aged three to half years. The participant of this research was a 3.5-year-old child. She is researcher's daughter. The research method used was the qualitative method with a case study design. The data were collected through observation, documentation, and daily notes or diary. This research showed that the metathesis phenomena in that child were related to ten phonemes. It included pure metathesis in the same syllable phonemes, pure metathesis in the different syllable's phonemes, metathesis followed by phonemes addition, and metathesis followed by phonemes omission. The study revealed some words containing metathesis that produced by the participant. They were six pure metathesis words in the same syllable and six pure metathesis words in the different syllables then followed by addition phonemes involve two words.

Keywords: *Child, Language Acquisition, Metathesis, Phonemes, Phonological*

INTRODUCTION

Children's language acquisition is an interesting topic to study since every child has a different capacity in acquiring a language. Some children are fast in developing the language. However, the others acquire the language slowly. According to Maftoon and Sarem (2012), several factors affect language acquisition, one of them being individual cognitive. Children are unique creatures who have a different cognitive level from one to another, that is why cognitive factor may affect language acquisition. In addition, Aimin (2013) stated that the other factor affecting language acquisition is the socio-cultural factor. In this case, the environment plays a key role in language acquisition. All of the factors affecting language acquisition make it becomes interesting topic since it will be dynamic for every child.

Moreover, related to the acquisition stages, children have to face certain stages. Hutauruk (2015) stated that it begins from cooing to babbling, holophrastic, the two-

words, telegraphic, and later multiword stages. In accordance with the previous explanation, children in the same years can face different stages. Furthermore, related to the children's language development, language acquisition in children begins from phonological acquisition, which develops to syllable and word acquisition. Usually, word acquisition, which is called as a morphological process, is followed by meaning acquisition or semantic process. Finally, the children will learn to construct complete sentences through some steps which are called syntaxes processes. Especially for second language acquisition, it is quite different from first language acquisition (Maftoon & Sarem, 2012). It is also stated that in second language acquisition, the children acquire the language at different speeds and mastery level. It is about age, aptitude, intelligence, cognitive, attitude, personality, and motivation usually. In addition, all of the stages in language acquisition cannot be generalized since many factors influence the process.

At the age of three and a half years, language acquisition includes speech produced by sounds and choice of words, formations, and sentences made by imitating adults. However, the complexity, regularity, and limitations of language sounds are still faced. In language acquisition, especially in children aged three and a half years, various aspects can be seen, one of which is phonology. Phonological acquisition at the age of three and a half years can be seen when he speaks.

Furthermore, phonological acquisition in children is difficult to analyze if it stands alone. It is an important thing to explore phonological acquisition through the words as the media. The topics that can be studied through the relationship of those parts of language can be various. One of them is the metathesis phenomena. This topic captures the effort of the children in producing the language, but they are failed because they change the position of some phonemes in words. Based on the reason above, the researchers were interested in conducting research on children's language acquisition, especially on the phonological process of metathesis phenomena.

Phonological process is when one sound is changed when it is placed next to another sound or placed in a certain position. In the Indonesian language the [b] sound naturally becomes [p] sound when it is occurred in the final position. Thus, this process is also called a pronunciation process. In the phonological process when acquiring languages, the children can make unintentional mistakes, such as failure to produce some phonemes and some words in the right order of phonemes. Sometimes, they also add

some phonemes that are not needed in some words or omit some phonemes required to construct some words. The mistakes belong to assembling mistakes. According to Dardjowidjojo (2008), assembling mistakes is defined as the mistakes happen when the words chosen are correct, but the order is incorrect the mistakes are also called as transposition. There are three types of transposition which are spoonerism, anticipation, and perseveration/repetition. One of the specific types of mistakes in producing the language is the change of the phonemes positions that is called metathesis. In the other term, it is called as syllabic mistake (Dardjowidjojo, 2008).

Moreover, metathesis can be in the form of the change of phonemes or syllables positions in a word. Metathesis phenomena often happen in children's language acquisition process. The children sometimes unintentionally utter the words in incorrect order of phonemes or syllables. For example, they want to say */jilbab/* but in fact they say */jiblab/*, where phoneme /l/ is changed into phoneme /b/. Furthermore, Brown (2007) says that language producing mistakes can be in the form of adding, omitting, changing, and wrong ordering. The mistakes can happen because of the intra-language or inter-language factors. It means that the mistakes can happen when the children fail to acquire the first language or transfer the first into the second languages.

This study is aimed to be carried out to examine the phonological process of metathesis words phenomena that happen in a child's language acquisition especially children with aged three half years. In this case, the researchers are curious to know about phonological process of metathesis words phenomena to a 3-Year-old-child.

REVIEW OF LITERATURE
Language Acquisition

A mechanism that has not been addressed satisfactorily is how children learn their first language. Language acquisition is a process of acquiring language, as a process of development, by children naturally. In an attempt to grasp language production more thoroughly, language learning is a critical term (Bialystok & Ellen, 1991). There are several stages of language development, and it is widely accepted that by the time children between 3 and 4 years of age usually have learned thousands of vocabulary, words, complex grammatical and phonological structures, and similarly complex rules on how to properly use their language in many social contexts (Gleason & Ratner, 1998). There

are three approaches in the area of language acquisition that illustrate how children learn their first language, namely behavioral, linguistic, and cognitive (De Bot, Lowie & Verspoor, 2007).

The approach to behaviorism assumes that the child is like a blank slate (tabula rasa). The babies will mimic vocal speech sounds repeatedly, and then imitate the adult's vocalization. This approach suggests that children's language learning is affected by adults' stimuli. Sadly, this strategy has some drawbacks. Language is actually based on a series of constructs or laws that do not literally operate by mimicking individual utterances. Children's errors show that they do not merely imitate but work actively to apply the rules.

A child who says "drinked" instead of "drank", for example, does not mimic an adult, but rather over-applies a rule. The child has found that by adding [d] or [t] sound to the base form, past tense verbs are formed. The "mistakes" occur because there are irregular verbs that do not function in this manner. These styles are also referred to as intelligent errors or virtuous mistakes.

Stages in Child Language Acquisition

The progression of language phases has been summarized by Pavio (1981) as follows:

1. Infants Period (birth – 0;6):

    - crying, cooing, shrieking, and chuckling

2. Babbling Period (0; 6 – 1; 0):

    - child is beginning to produce sound sequences that vary across the situation

    - repetitive, sometimes resemble words

    - become increasingly word like

3. Echoic Period (0; 9 – 1; 0) :

    - Strings of utterances with adult-like patterns of stress and intonation

    - Sometimes imitative

4. Holophrastic Period (1; 0 – 2; 0) :

    - Using single words to express complex ideas

    - Vocabulary increase from 20 to 300 words until 2: 0

5. Simple and complex sentence Period (3;0 – onwards) :

    - Using sentences having grammatical features

    - Resulting speech called telegraphic speech because it resembles telegram c

A Basic and Complex Sentence Cycle for the Learning of Children's Language

Children can utter multiple words at this time. Dardjowidjojo (2000) stated that sentences for children do not only range from two to three words but also multi-word. Kids should have an active vocabulary of 300 or more words at the age of three.

They would be able to speak in five or six-word sentences and mimic most sounds of adult speech. Language helps them communicate their feelings. The more advanced children are in communicating and understanding words, the more resources they will have to think, build, and inform people about it. The speech of children should be simple enough that much of what they say can be understood by even strangers. Even so, as many as half of the speech sounds, they use can still be mispronounced.

For example, [w] for [r] [wabbit], [wice], [wose], [d] for [th] [dis],[dat], [den], or t for [tee] for three, [tik] for six. The sounds [b, p, m, w,h] will only begin to emerge midway through this year, and it may take months after that for them to perfect their use of them.

Indonesian children would also have the fish phenomenon at this age. The fis hypothesis is a child language learning phenomenon that indicates that the interpretation of phonemes takes place faster than the child's capacity to generate certain phonemes. It is also an example of a larger trend in child language learning: that linguistic comprehension ability normally precedes corresponding linguistic development abilities. Dardjowidjojo (2000) claimed that these symptoms are: like the word fish, the child cannot pronounce the sound; he pronounced it as [fis].

METHOD

This research was a qualitative descriptive research. This research is a case study of children which aged three half years to as respondents. The data consist of speech sounds transcribed in phonetic transcription form taken at the middle of December 2019 until the beginning of January 2019. At the time of data collection, the research subjects is three half years old. The name of subject is Zahra Almaira Musa. She is daughter of researcher that born in Belitung and stay in Bogor with parents and the environment that use Indonesian as an everyday language.

Therefore, Indonesian is the first language for respondents. The first language of mother is Belitung language, while the father's first language is Indonesia. The people

around her also use Indonesian when communicating with respondent. However, because they live in a migrant environment that accepts Java, the sounds produced by the informants are more for the sounds produced by Javanese speakers. However, in this research, it will not be taken into account the type of language used will only describe all sounds that appear without looking at the type of language.

Moreover, related to the data collection, this study was conducted in ten days. Then, the research procedures used in this research were adapted from a case study model proposed by Anggaira (2016) which involves the selection of the case, data collection, data analysis, refinement, and report. The subjects of this study were a child, his parents, and the child of neighbors or Zahra's friends while the components to capture in this study were pure metathesis, metathesis followed by addition, and metathesis followed by omission. Then, since this research belongs to qualitative research, this research used the researcher herself as the key instrument of the study and the researcher also used some supporting instruments such as an observation guideline, documentation, and notes daily or diary. Moreover, validity in this study was gained through triangulation. Next, the data in this study was analyzed based on Miles and Huberman's interactive cycle model (Miles and Huberman, 1984: 23) which involves data collection, data reduction, data display, and conclusion.

In this research, qualitative research methods are used with naturalistic techniques because the researcher focuses to attention on real life situations. Research data was collected through daily notes by recording and writing speech sounds issued by Zahra on daily activities such as when playing alone or playing with her father. Researchers record the phonological process of metathesis which is the main subject of research by observing words expressed in daily activities at least ten days.

Techniques for checking the validity of data are using triangulation techniques. According to Moleong (1993: 178), the triangulation technique consists of four types namely: triangulation of sources, theories, methods and investigators. In this research, the researcher only uses source triangulation. The key of instrument that researcher used is the researcher herself. The researcher as a mother provides some stimulus and response to Zahra as the research subject, while the field diary as a supplementary instrument.

FINDINGS AND DISCUSSION

Metathesis phenomena or the change of the phonemes or syllables in constructing

a word usually happens in the children's language acquisition process. The main subject of this research also made some mistakes related to the metathesis phenomena. For almost ten days of research, the researcher found 16 words containing metathesis. It consists of six words with pure metathesis in the same syllable, six words with pure metathesis in the different syllable, two words with metathesis followed by addition, and two words with metathesis followed by omission. The data were grouped and analyzed as follow.

Pure metathesis in the same syllable

There are six words with pure metathesis in the same syllable. They are displayed and analyzed in Table 1.

Table1. Pure Metathesis in the Same Syllable

No	Metathesis	Utterance	Description
1	/nu – lur/	/nu- rul/	/r/ was changed into /l/ and vice versa.
2	/pur- ti/	/put-ri/	/t/ was changed into /r/ and vice versa
3	/kon – tlor/	/kon – trol/	/r/ was changed into /l/ and vice versa.
4	/lo- bong/	/bo-long/	/b/ was changed into /l/ and vice versa
5	/bir-sik/	/bri-sik/	/r/ was changed into /i/ and vice versa
6	/tre – mos/	/ter - mos/	/e/ was changed into /r/ and vice versa.

Based on the data, in the first word, the sound /r/ was changed into /l/ and vice versa. For the second word, the sound /t/ was changed into /r/ and vice versa. Next, in the third word, the sound /r/ was changed into /l/ and vice versa. Then, in next word, the sound /b/ was changed into /l/ and vice versa. Moreover, in the next word, the sound /r/ was changed into /i/ and vice versa. In the last, the sound /e/ was changed into /r/ and vice versa in the last word.

Pure metathesis in different syllable

There are also six words with pure metathesis in the different syllables. They are displayed and analyzed in Table 2.

Table 2. Pure metathesis in different syllable

No	Metathesis	Utterance	Description
1	/ji – blab/	/jil – bab/	/l/ in the end of the first syllable was changed into /b/ in the beginning of the second syllable and vice versa.
2	/mar – gib/	/mag - rib/	/r/ in the beginning of thesecond syllable was changed into /g/ in the end of the first syllable and vice versa
3	/pa – la – ron/	/pa–ra–lon/	/r /in the beginning of the second syllable was changed into /l/ in the beginning of the third syllable and vice versa.
4	/gol – bog/	/go – blog/	/l/ in the middle of the second syllable was moved into the end of the first syllable.
5	/ser – pe – ti/	/se – per – ti/	/r/ in the second syllable was moved into the end of the first syllable.
6	/ter-ni-mal/	/ter-mi-nal/	/m/ in the beginning of the second syllable was changed into /n/ in the beginning of the third syllable and vice versa.

Based on the data, in the first word, the sound /l/ in the end of the first syllable was changed into /b/ in the beginning of the second syllable and vice versa in the next word. Second word explained the sound /r/ in the beginning of the second syllable was changed into /g/ in the end of the first syllable and vice versa. In the next word, the sound /r /in the beginning of the second syllable was changed into /l/ in the beginning of the third syllable and vice versa. In fourth word, the sound /l/ in the middle of the second syllable was moved into the end of the first syllable. Next, the sound /r/ in the second syllable was moved into the end of the first syllable in the next word. In the last word, the sound /m/ in the beginning of the second syllable was changed into /n/ in the beginning of the third syllable and vice versa.

Metathesis followed by addition

There are two words only two words with metathesis followed by addition. They are displayed and analyzed in Table 3.

Table 3. Metathesis followed by addition.

No	Metathesis	Utterance	Description
1	/jag – rung/	/ja – gung/	/r/ was appeared in the first of second syllable
2	/gor-li-la/ /go-ri-la/	/go-ri-la/	/r/ was appeared in the end of first syllable

Based on the data, in the first word, the sound /r/ in the first of second syllable was moved to the end of the second syllable. In the next word, /r/ was appeared in the end of the first syllable. In addition, table 3 have different word with different syllable. In the first word consist of two syllables and the second word consists of three syllables.

Metathesis followed by omission

There are two words only two words with metathesis followed by addition. They are displayed and analyzed in Table 4.

Table 4. Metathesis followed by omission

No	Metathesis	Utterance	Description
1	/ri – tik/ /	/lis – trik/ /	/r/ in the second syllable was moved into the first syllable to change /l/ in the beginning of the first syllable. /l/ and /s/ in the first syllable were omitted
2	/bi-tung/	/be – li – tung/	/e/ in the first syllable and /l/ in the middle syllable was omitted

.
Based on the data of table 4, /r/ in the second syllable was moved into the first syllable to change /l/ in the beginning of the first syllable. /l/ and /s/ in the first syllable were omitted. In the second word, /e/ in the first syllable and /l/ in the middle syllable was omitted. Same with the

table3 above, in table 4 have different word with different syllable. In the first word consist of two syllables and the second word consists of three syllables.

Significantly, the data above it can be shown that the metathesis is related to 10 phonemes. They are /l/, /e/, /r/, /n/, /i/, /m/, g/, /s/, /b/, /t/. In detail, the phonemes are divided into four groups. First, metathesis in the same syllable phonemes are /i/, /b/, /l/, /e/, /r/. Second, pure metathesis in the different syllables' phonemes are /m/, /r/, /l/, /b/, /g/, /n/. Third, metathesis followed by addition phonemes involves only /r/. Fourth or the last, metathesis followed by omission phonemes involves /l/, /s/, /r/, /e/.

Based on the discussion, the findings of this study showed that every child grows in their own rate. It is quite different from the theories which propose that there are fixed stages in language acquisition. The evidence will be stronger when it is supported by the other relevant studies.

CONCLUSIONS

After conducting the research, the researcher found 16 words containing metathesis that produced by Zahra as the main subject. Firstly, there are six words with pure metathesis in the same syllable produced by the main subject that consists of phonemes /i/, /b/, /l/, /e/, /r/. Second, the researcher found six words also but with pure metathesis in the different syllables that consist of phonemes are /m/, /r/, /l/, /b/, /g/, /n/. Third, metathesis followed by addition phonemes involves only /r/ in two words. Fourth or the last, metathesis followed by omission phonemes involves /l/, /s/, /r/, /e/ in two words also.

From the results of the study, it is proposed for language researchers to be able to conduct further research on language acquisition in children in addition to research on phonological acquisition, namely on the acquisition of morphology, syntax, and semantics. The research conducted is expected to provide knowledge about the community about educators and mothers who have toddlers about children's language development.

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