

## **PHONOLOGICAL ACQUISITION IN PRONOUNCING INDONESIAN CONSONANT WORDS BY TWO YEAR OLD CHILDREN**

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### **ABSTRACT**

This study was about phonological acquisition, especially on phonological process theory by David Ingram. It focused on the consonant word production by three two-year-old Indonesian children. The researchers applied qualitative research methods and the data were taken from the three Indonesian children's speech in naturalistic conversation. Based on the data analysis and interpretation, the researchers found that not all of Ingram's phonological processes occur in the subjects' word production. There were nine from twelve processes. In addition, the researchers also found four other phonological processes which did not reflect Ingram's theory and there were still several sounds which were not acquired yet by the subjects at the end of her research.

Key words: phonological process, language acquisition, consonant.

Language is the source of human life and power. It is a means of communication using arbitrary vocal symbols or sound production. It has a very important role in creating interaction among human beings. Fernandez and Cairns say that language is used to communicate, to interact socially, to entertain, and to inform (2011: 3). It means that human being especially children can acquire the language and develop it in order to avoid misunderstanding among others in communication. Basically children are not taught language. They can extract the rules from the language around them. For the most part, the acquisition of words and sounds has been investigated independently. Fromkin, Rodman and Hyams (2003: 534) state "A basic cause of change is the way children acquire the language. No one teaches a child the rules of grammar. Each child constructs the rules of her language alone, generalizing rules from the linguistic input she receives."

Moreover Clark states that they acquire the language through a process of acquiring, starting immediately from birth (2009: 1). This acquiring process of course is not done in the class as a formal way where the children learn any subjects by the teacher's help. The children acquire the language with their own ability without the process of teaching. The behaviorism approach believes that the infant is like a blank sheet. The infants will repeat vocal speech sounds over and over again, and then they will imitate the adult's vocalization (Purba, 2010: 2). It means that children's language acquisition is started from a sound. They can develop their language acquisition process by the help of environment is in their surrounding such as things or human being like mother, father, sister, and the others. They hear and imitate the sounds of their surrounding people who sometimes cannot understand their obscure speeches.

In social of their interaction, children communicate to convey their message or feeling in order that the others know what they want although the children's pronunciation and words are sometimes perfect and still not perfect yet. Jakobson in Ingram (1989: 191) sees phonological acquisition as the result of the interaction of the child's internal structure (or innate knowledge) and the linguistic environment. In other words, Chomsky in Clark (2009: 369) proposes that the human capacity for language was innate. Based on the statements that human's ability to communicate with others relate to their innate capacity and the stimuli from others which make people, adults, and children are able to communicate. The social of interaction and cognitive development can affect and determine the children language acquisition how actually children get their language faculty especially on their phonological acquisition.

Thus, when the children use their phonological acquisition, they tend to make errors in producing sounds. These normal speech errors are known as phonological process. Therefore the writer considers that investigating this phonological process issue through the word production of a child who has a high curiosity to talk about everything is interesting to do. By the age of two, whether the child is producing 200 or 300 distinct 'words', he or she will be capable of understanding five times as many,

and will typically be treated as an entertaining conversational partner by the principal caregiver (Yule, 2010: 174).

In becoming participants in conversation, children need to know how to engage in this joint activity, how to contribute, and how to take turns. That kind of case is the main background for this study to be observed because there are many two-year-old children who have articulation problems when they produce and pronounce the words. Some children have difficulty with one sound, while the other children have difficulty with a whole group of sounds.

Many people consider that all children have misarticulations while their language is developing. These phonological processes are efforts by the children to simplify words until they are learned correctly. The thing that is often heard by the writer is the difficulty in pronouncing words which consist of consonant. For example, they delete one consonant or change one consonant into another one. Then, the writer of this study concentrates and focuses on the aspect of phonology because the development of sounds production in children's speech is a necessary phase to communicate with others.

### **Formulation of the Problem**

The researcher formulates the following major study questions:

1. What is the phonological process of two year old Indonesian children's speech found in producing Indonesian consonant sounds?
2. How are the phonology productions of the word acquired by two year old Indonesian children?

### **Theoretical Overview**

Yule (2010: 170-174) says that first language acquisition is remarkable for the speed with which it takes place. In addition to the speed of acquisition, the fact that it generally occurs, without overt instruction, for all children, regardless of great differences in their circumstances, provides strong support for the idea that there is an innate predisposition in the human infant to acquire language. We can think of this as a special capacity for language with which each newborn child is endowed. By itself, however, this inborn language capacity is not enough. In child phonology, one of the tasks facing a child learning his or her language is to figure out the sound system. This involves learning how to distinguish all the linguistically important differences, and also how to produce them. It's rather easier to record what small children say than to determine what they understand, so most systematic research has examined production (Radford et al, 2009: 96). Furthermore, Clark (2009: 12) states that children need to learn the sound system, the phonology. In other word, Fikkert in Lacy stated that child phonology was about defining the (ordering of the) constraints that characterize children's productions and child phonology traditionally studies patterns in child language production data.

Radford et al consider that the three attributes of voicing, place of articulation and manner of articulation provide a convenient three-term description for many sounds. Therefore, Bickford and Floyd (2006: 1) say that articulatory phonetics is only one of several disciplines dealing with the production, perception, identification, and categorization of speech sounds. Kreidler states (2004: 234) in describing the variant forms of function words it was convenient to refer to full forms and reduced forms and to describe the reduced forms as derived from the full forms through the application of certain rules, which are called phonological processes.

### **Method**

The data of this research were the forms of phonological acquisition, especially on the phonological processes which occurred in the consonant word production of phonology. Data source in this research were from three Indonesian children's speech in naturalistic observation. All words that were produced the children were identified, chosen, and changed of the form of International Phonetic Alphabet transcription on the note and recording then moved into making a comparison between the actual words which were produced by the children and the intended words' form which were produced by adult.

From that comparison, the word production done by three two-year-old Indonesian children could be interpreted and analyzed through the theory of phonological process delivered by Ingram in Fletcher and Garman (1997: 223-231). The processes were divided into three categories: substitution,

assimilatory, and syllable structure process. Those three categories were still divided more in several sub processes. Descriptive qualitative is applied as the method of the research.

### **Finding and Discussion**

<b>Phonological processes</b>	<b>The First Subject</b>	<b>The Second Subject</b>	<b>The Third Subject</b>
<b>Substitution processes</b>	<b>Fronting Gliding Substitution of stop</b>	<b>Stopping Fronting Gliding Substitution of alveolar Substitution of retroflex/lateralization</b>	<b>Fronting Substitution of alveolar Substitution of stop Substitution of retroflex</b>
<b>Assimilatory processes</b>	<b>Consonant harmony Velar Denasalization</b>	<b>X</b>	<b>X</b>
<b>Syllable structure process</b>	<b>Cluster reduction Deletion of unstressed syllables Deletion of initial consonant Deletion of reduplication</b>	<b>Deletion of unstressed syllables Deletion of initial consonant</b>	<b>Deletion of final consonant Deletion of reduplication</b>

### **Substitution Processes**

From analyzing and finding, the researchers find the process of substitution done by all subjects. The first process is stopping, the researchers find five processes of stopping which are only occurred by the second subject. The substitution of /f/, /v/, /s/, and /z/. The fricatives sounds are changed into stop sounds. These processes are /f/ or /v/ sound is replaced by /p/ instead of /tivi/, /fifi/, and /s/ or /z/ sound is replaced by /t/ or /d/ sound instead of /mas/, /sendo?/, /faiz/. Thus, all subjects pronounce the substitution process of fronting. Their velar consonants /k/, /g/, /ŋ/ commonly is substituted by /t/, /n/, /d/. Meanwhile, the substitution process of gliding is just found to the first and second subjects. They replace liquid consonant /r/, or /l/ with sound /j/ or /w/ such as when they pronounce /bu:juŋ/, /ejuŋ/, and /u:waŋ/ instead of /bu:ruŋ/, /təluŋ/, and /u:lar/.

Beside those substitution processes which reflect Ingram's theory, the researchers also find three substitution processes which is not based on Ingram's theory, the first and the third subjects substitute affricative /dʒ/ with stop consonant /g/ such as in the word /dʒidʒi/ instead of /gigi/, it is called substitution process of stop. Meanwhile, the second and the third subject replace alveolar /s/ with velar /tʃ/ as like words /bətʃal/, /tʃutʃu/ or /pətʃal/ instead of /bəsar/, /susu/, or /pasar/, it is called substitution process of alveolar and the substitution process of retroflex or lateralization is also occurred by them that they pronounce the retroflex /r/ in which replaced into the lateral consonant /l/. It is often acquired in initial, medial or final positions. Both of them say /lambot/, /telbən/ or /bələjal/ instead of /rambut/, /terbən/ or /bələjar/.

### **Assimilatory Processes**

In assimilatory process, the researchers just find two processes which reflect Ingram's phonological process theory. Those processes are consonant harmony-velar assimilation and denasalization. Yet, in assimilation process of voicing which is voiced consonant at the end of syllable tend to be devoiced because of the influence of its neighbouring sound such as a voiced consonant /b/ is changed into a voiceless consonant /p/ since it follows the vowel and its position at the end of syllable is not found while labial assimilation process which is alveolar consonant tends to assimilate to a neighbouring labial consonant, the researchers cannot find too to their all subjects' consonant words.

As the explanation of the theory, consonant harmony of velar assimilation is alveolar consonant to assimilate to a neighbouring velar consonant. The researchers find to the first subject's words that apical consonants /l/, /n/, /r/ assimilates into neighboring velar consonant /ŋ/ such as /apəŋ/ and /botəŋ/ instead of /apəl/, /botəl/. She pronounces the velar sounds /l/ to assimilate sound /ŋ/ in final position. Meanwhile, the assimilation process of denasalization is only acquired by the first subject's words. As a result, she denasalizes her words and pronounces them without any nasal consonants because she seems hard to produce a consonant directly followed by other consonant in the next syllable while the others subjects are not so difficult to articulate them.

### **Syllable Structure Processes**

The researchers find that all of the sub processes of syllable structure are found in the some of subjects' word productions. Those sub processes involve cluster reduction, deletion of final consonant, deletion of unstressed syllable, and reduplication.

In the cluster reduction, the researchers find that the first subject is still not able to say a cluster consonant which occurs in a word. Thus, the subject tends to eliminate one consonant in a cluster and makes it into a single consonant to overcome it. For instance, in the word /stop/, there is a consonant cluster of /st/ in which the subject gets difficulty to pronounce it altogether. So, she eliminates consonant /s/ and makes a single consonant /t/ in that word. Then, she pronounces it as /tɒp/ instead of /stɒp/. For the consonant that is eliminated, the writer finds a pattern that the first consonant in the consonants cluster tends to be reduced.

The second process is the deletion of final consonant occurred by the third subject who deletes some of certain final consonant. This process occurs in the words /monjet/, /pʌnas/, /balɒn/. Those words are divided into two syllables; they are mon-jet, pʌ-na, ba-lɒ. The last syllable in that word is /jet/, /nas/, /lɒn/ which patterns are CVC syllables. Then, those are simplified by the third subject by deleting the final consonant /t/, /s/, and /n/ in the last syllable. Therefore, it makes the pronunciation of the word /monje/, /pʌna/, /balɒ/ without producing the final consonant.

The next process of syllable structure is the deletion of unstressed syllable. This process occurs in the first subject's word production. She tends to delete unstressed syllables which occurs within a word and deletes the first syllable which is unstressed and pronounces it becomes /səpuluh/ instead of /puwu/. She is deleting the first unstressed syllable /sə/. Then, the second subject also pronounces a word, /bæka/ instead of /boneka/. Therefore the writer assumes that the first syllables of a word tend to be eliminated.

The last process is reduplication that is a tendency for young children to simplify their word by repeating the syllable. It occurs in a multisyllabic word in which for children they still have a difficulty in pronouncing the word correctly. It can be seen in the pronunciation of a multisyllabic word /ku:pu:ku:pu/ or /gadʒa/. The first and second subjects tend to simplify it by taking just the last syllable and then repeat it becomes /pu:pu/ instead of /ku:pu/ and /dʒadʒa/ instead of /gadʒa/. In the pattern of this process of reduplication, subjects do not articulate initial of a word, but the final syllable of it.

Beside those four processes based on to Ingram's theory, the writer also finds another process of syllable structure of deletion in initial sound. For the first process, there is a tendency to eliminate all consonants which occur at the beginning of a word. The writer finds that bilabial sounds /p/, /b/, /m/; alveolar /t/, /d/, /s/, /l/, /r/; velar /k/, /g/, and glottal /h/. Thus the first and second subjects' pronunciation becomes /ɔti/ and /u:wa/ instead of /rɔti/ and /du:wa/.

### **Conclusion**

Based on the data analysis, there are some conclusions on this research which is related to the subjects' first language acquisition of phonological processes based on Ingram's theory. Phonological processes which are found in the phonology production with several processes, they are substitution processes namely stopping, fronting, and gliding processes, and the assimilation process namely consonant harmony that are velar assimilation and denasalization, then the last syllable structure process, the processes which are cluster reduction process, deletion of final consonant, the deletion of unstressed syllable, and reduplication. The subjects who pronounce the consonant words do not experience such as voicing and labial assimilation.

Beside those processes, the writer also finds four other phonological processes that are not included in the phonological process theory of Ingram occur yet in the word production of the subjects. The first process is substitution process of alveolar that is velar /tʃ/ is replacing alveolar /s/, the second is the substitution of stop that is opposite of stopping process that is based on the theory. It is a process when the subject changes the stop consonants /p/, /b/, /t/, /d/, /k/, or /g/ with fricative /f/, /v/, /s/, /z/, /h/ or affricative /tʃ/, /dʒ/. The third is deletion of initial consonant that is the subjects tend to delete a consonant which occur at the beginning of a word. The fourth is lateralization or substitution process of retroflex /r/ with lateral /l/.

The subjects who are two-year-old children innately tend towards producing speech sounds. When they acquire the word and produce it, their family helps them. They practice the phonological process in their first language acquisition with simplifying their sound productions. The manner and place of their articulation tend to produce the bilabial, alveolar, velar stop or affricative consonants. There are several sounds which do not exist in subject's speech; they are /x/, /ʃ/, /r/, and /ŋ/. The writer considers that the absence of those sounds is caused by the subjects have not acquired them yet because they are not born being able to produce all the sounds and sound patterns their language and are still blocked by their biological growth which disables them to produce those sounds. Thus, there are different to produce their sounds in acquiring the words between the subjects. It depends on their abilities and environment around them.

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