

## Investigating First Language Acquisition of Indonesian Phonemes for Toddlers

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### Abstract

This paper sheds light on the acquisition of Indonesian phonemes of a 2-year-old toddler in a natural setting. Data was obtained through qualitative approaches with the aim of investigating communication that occur in language acquisition (phonemes) for toddlers. The findings of the study revealed that in children aging 2 years, all vocal sounds can be pronounced precisely both in the initial, middle and end positions of the word, while consonant sounds there were still some that were not perfectly spoken. For example, phoneme /s/ if it is at the beginning and middle of a word, was pronounced /c/, and at the end position was pronounced /s/. Similar with consonant /l/. This sound can be pronounced perfectly if it is in the starting and final position of a word, in contrast to the middle position where the phoneme was not visible. The phoneme /r/ cannot be pronounced precisely at either the initial, middle or end position of the word.

**Keywords:** Language Acquisition, Phoneme, Toddlers

### INTRODUCTION

Language is an arbitrary system of oral symbols used by members of a language society to communicate between them, based on the culture they shared. As a means of communication, language is a means of formulating intentions, giving birth to feelings and enabling us to create activities of our fellow human beings, to disrupt various community activities, to plan and direct our future. Language as a means of communication is obtained by humans from birth to the age of five years, known as language acquisition.

The study of language acquisition in children is an interesting study. Interesting because with it can be known the process and development of children's language in producing speech, understanding and intelligence. In addition, because language is human behavior communicates using sounds, thoughts and actions. According to Soenjono, a baby will grow along with the growth of his language; one to one and a half years of age a baby begins to make sounds called language (Dardjowidjojo, 2000). 2 – 3 year-old toddler have been talking using certain lexical and syntactic phonemes. At that time the child has been able to recite words that are vocal phonemes and consonants, have been able to produce sentences of question, greeting, and. From the Ministry of Health it is known that children 2 and 3 years old have been able to speak with sentences and can say all phonemes, say question sentences and answer simple questions. There has been competence and language performance, namely the activity of understanding and using communication cues called language.

The stages in the process of obtaining language in a child are interesting. According to Chomsky (1991) that every human being has what is called the faculty of the mind, which is a kind of intellectual in the human mind or brain. One of these minds is rationed for the use and acquisition of language. A normal child will get a mother tongue in no time. This is not because the child gets stimulation, then the child responds, but because every child born has been equipped with a set of equipment that allows him to get the mother tongue. This set of tools is called Language Acquisition Devise (LAD), by Dadjowdjojo interpreted as Language Acquisition Tool (LAT).

It is further explained that this LAT receives a corpus from outside the environment in the form of sentences. Although sentences are a seminalization of a person's competence, still corpus like this is often in the form of ambiguous sentences. With LAT owned by children who can absorb the true essence which is then developed into a form of slick language. Thus, the acquisition of language is what happens to children. The views of the above experts encourage writers to explore by conducting literature studies and observing the acquisition of children's language, especially the acquisition of Indonesian phonemes. In essence the underlying goal in this study was to qualitatively describe the ability of phonemes in toddlers and analyze them with theories of language acquisition.

### **Language Acquisition**

Language acquisition is a very common term used to describe the process by which children become speakers of their native languages. According to Dardjwidjojo (2000) the term acquisition is used for the equivalent of the English term *acquisition*, which is the process of mastering the language carried out by the child naturally when he learns his mother tongue. Halliday saw the acquisition of language as a lesson in how to give meaning. Gleason and Ratner define language acquisition as how people learn *language* (Halliday, 1973). Language acquisition is very closely related to cognitive and social development of children. The system of thought in children is built little by little when there is stimulation from the surrounding world as input, namely what is seen, heard, or touched by the child. Over time his mind will be perfectly formed.

Traditionally according to Ingram<sup>1</sup> the acquisition of languages is divided into four periods. *First*, the development of pralinguistics, which begins the child is born until the end of the first year. *Second*, one word from the age of one year to about a year and a half. *Third*, the first word combination is from the age of about one and a half years until the child is two years old. *Fourth*, simple and complex sentences that start at the age of three years.

Furthermore, Ingram and Stern divide the language acquisition into five stages, namely (1) the preliminary stage. At this stage is characterized by three types of behavior, namely copying, imitating, and understanding (early), (2) the first period (1-1.6 years). At this stage the child obtains a number of sounds with special meanings that express the idea of a sentence thoroughly, but there is no evidence that the child understands grammar. At this stage the child has realized that everything has meaning, (4) the third period (2.0---2.6 years). In this period sentences began to form well, there were already words for the main

grammatical such as subjects and objects, and (5) the fourth period (2.6 years to artas). At this stage the acquisition of some grammatical morphemes continues, the child's question at this stage concerns the issue of time and quality.

### Phonology

Phonology is a component of language that studies the sounds of language used by humans to convey their purpose or communicate. Other components of language are the study words, phrases, and sentences and semantic components that discuss meaning (Ingram, 1989).

There are several theories that developed in the acquisition of phonology, among them are the universal structural theory, universal structural generative theory, natural phonological process theory, acoustic prosodi theory, contrast theory and process (Khaer, 2003).

### Universal Structural Theory

This Universal Structural Theory was proposed and developed by Jakobson (1968). This theory essentially explains the acquisition of the structural phonology that governs each sound universally. According to Jakobson, there are two stages of acquisition of pediatric phonology, namely (1) the pre-language stage, and (2) the acquisition of pure language. At the prelinguistic level, the sounds produced by the baby do not indicate a particular developmental sequence and have absolutely no relationship with the subsequent language acquisition time. At this stage, the baby only trains his vocal tools by making sounds without a specific purpose or not to communicate. On the other hand, at the pure language acquisition stage, the baby follows a relatively universal and unchanging sound acquisition.

In relation to phonological acquisition, Jakobson (1968) in Dardjowidjojo<sup>2</sup> proposed a universality in the sounds of the language itself as well as the order of its acquisition. According to him, the acquisition of sound goes in harmony with the nature of the sound itself and the child obtains the sounds in a consistent way. To corroborate his theory, Jakobson proposed a law called *the Law of Irreversible Solidarity* whose essence is formulated as twitching:

- 1) If a language has a velar bland consonant sound, it must have dental and bilabial bland consonants. For example, A has sounds /k/ and /g/, the language must have sounds /t/-/d/ and /p/ - /b/.
- 2) If a language has a fricative consonant, it must have a bland consonant. For example, A has the sounds /f/ and /v/, it must have /p/-/b/, /t/-/d/, /k/-/g/.
- 3) If a language has an Affricative consonant, it has a phactative consonant and a bland consonant. For example, A has /c/ and /j/, it must have /f-v/, /t-d/, /k-g/.

Jkobson's law also foresaw the order of each difficulty. In general, the sound located at the front of the mouth is easier than the one on the back. Thus, phonemes /p/ and /b/ are easier than phonemes /k/ and /g/. Phonemes /m/ are bilabial and therefore easy, and because

the sound of /a/ is also easy, then the sounds /m/ and /a/ come out early. Same with the sound of /p/. That is why the initial word that comes out of the child is mama or papa.

### **Universal Structural Generative Theory**

The universal structural theory proposed by Jakobson above was expanded by Moskowitz (1970, 1971) by applying the generative phonological elements introduced by Chomsky and Halle (1968). According to this theory, the acquisition of phonology cannot be ascertained whether children can master phonological formulas or not. Therefore, children have created their own phonological formulas and are different from adult phonological formulas. Since the beginning of the baby has been aware of the difference in the sounds of human language with other sounds. This makes the baby more able to know himself as a member of the surrounding human community.

### **Theory of Natural Phonological Processes**

This theory was introduced by David Stamp (1972, 1973). According to him, the phonological process of children is a conscience that must experience oppression (*suppression*), restrictions and arrangements in accordance with *the internalization of adult phonemic representations*. This means that a phonological process consists of conflicting unions. For example, there is a process that renders all sound silent in all contexts because its oral obstruction blocks the air currents needed to produce these sounds. However, however the sounds will become heard by other processes by means of certain assimilation. If these two processes occur simultaneously, then the two will be crushing and contradicting each other. In other words, a sound cannot be simultaneously voiced and silent in the same environment. Therefore, it can be solved by suppressing one of the two conflicting processes, limiting the number of segments or contexts involved in the process, and regulating the occurrence of the process of sound removal and the process of procuring sequential sounds.

### **Acoustic Prosody Theory**

This theory was introduced by Waterson (1976). He was not satisfied with the segmental phonemic approach which states that children acquire phoneme-based phonology so many related phonetics have been ruled out. This theory according to Waterson does not describe the acquisition of phonology. Therefore, Waterson uses a non-segmental approach, which is a prosodi approach that he considers more successful and reinforced by acoustic exposure. According to Waterson, language acquisition is a social process so the study is more accurately done at home in an actual social context than the study of experimental data, let alone in the study of phonological acquisition.

In the process of obtaining phonology, children pay attention to their environment, observing similarities and differences in their environment. According to Waterson, the phonology of children is the same. In general, children begin to speak by using a single syllable. When he utters two syllables, what is spoken is a repetition of that single syllable. If he meets words consisting of two syllables, then it is easier to pronounce syllables that get pressured. Thus, the acquisition of language by children begins with semantic acquisition and phonology, then new semantic acquisition.

Waterson (1971) also found an acoustic relationship between children's speech forms and features of adult speech forms. Although acoustically it is difficult to know why a child can pronounce a plate that sounds pleit into a beip. Why can't the child distinguish phonemes correctly?, this is because the child cannot distinguish the place of articulation or because it is easier to pronounce it or because of others. However, according to Waterson, this refers to adults. More adults "make mistakes" innature placing articulation when talking to their children. Then the mistake was followed by the children.

### **Contrast theory and process**

This theory was introduced by Ingram (1974, 1979), which combines important parts of Jakobson's theory and important parts of Stamp, then harmonizes the results of the merger with piaget's theory of cognitive development (1962). According to him, the acquisition of children's phonology occurs through several processes involving all classes of sound, namely (a) the substitution process, namely the exchange of one segment to another segment, (b) the process of assimilation is the tendency to assimilate one segment to another segment in one word, and (c) the process of syllable structure, namely the tendency of children to simplify the structure of syllables.

### **METHOD**

The approach used in this research is a qualitative approach. Shortata like this aims to describe the facts of language that occur in the acquisition of language (fontem) in children as is. The study was conducted in the city of Cirebon on June 22-28, 2019. The source of the data in this study is a 2 and half year-old child named Qanita Aulia Rizki residing in the city of Cirebon. Data collection in this study was done by direct observation method and questioning to the child and his parents, the method of listening and recording is done when the child plays with his brother. The analysis applied in this study is the theoretical analysis of the phonological polishing of the child. The data analyzed is then presented descriptively, which describes the phoneme ability of children aged 2.7 years as is without considering the frequency of appearance.

### **FINDINGS AND DISCUSSION**

#### **Phoneme acquisition**

Based on the observed data found phonemes that can be pronounced by Qanita at the age of 2.7 years as follows:

##### **a. Vocal Phonemes**

Based on the author's observations, all words with vocal phonemes have been able to be spoken by Qanita both at the beginning, middle, and end of the word, such as

- 1) vowel /a/ in the word Ail(water), play, ceana
- 2) vocal /i/ on the word come, car, pelgi
- 3) vowel /u/ in the word ulal (snake), kasul (mattress), capu (broom)
- 4) vowel /e/ in the words ee (defecate), jeluk (orange), tate (aunt)
- 5) vocal /o/ on the word drug, watch, shop

##### **b. Consonant Phonemes**

Consonant phonemes can also be pronounced by Qanita which we can see in the following example:

- 1) Konsonan/p/ in the words pelih (pain), butterfly, roof
- 2) Consonant /b/ pada said bottle, take,
- 3) Consonants /t/ on the word tidul (sleep), nonton (watch), ceimut (blanket)
- 4) Consonant /m/ on the word mama, cemangka (watermelon), drink
- 5) Consonant /n/ in the word crying, cendal, play
- 6) Consonant /j/ in the word jangan (don't), pinjam (borrow),
- 7) Consonant /s/ in the word crying, good
- 8) Consonants /y/ in the word cayul (vegetable), ba'aya (danger),
- 9) Consonant /l/ in other words, jeluk (orange), gambal (pictured)
- 10) Consonant /g/ in gambar (picture), kaka anggi
- 11) Consonants /c/ in the word cium (kiss), cakit (sick), grandson (milk), ceana (pants)
- 12) Consonant /d/ on the word duduk (sitting), cendal (sandal),
- 13) Consonants /k/ on the word foot, butterfly, feeding, jeluk
- 14) consonants /h/ in the word danger, evil,
- 15) consonants /r / -- → / l / in the word orange --> jeluk

## Discussion

From the example of the data above shows that Qanita (2-3 years old) had been able to pronounce vocal phonemes perfectly both in the initial, middle, and at the end of a word. This is in accordance with Jakobson's claim that all vowels have appeared in the acquisition of phonology. The sound of language that comes out when the child starts speaking is the contrast between consonants and vocals. In the case of vowels only the sounds /a/, /i/ and /u/ appear early. Of the three sounds /a/ first came out than the sound of /i/ or /u/ because all three formed a minimal vocal system.

Regarding consonants, Jakobson says that the first contrast that appears is the opposition between the oral sound and the nasal sounds /p-b/ and m-n/ and then followed by the contrast between bilabial and dental /p/ and /t/. This contrast system is called the minimal consonant system. Thus, it is seen that the performance of phonemes performed by Qanita is in accordance with the growing theory of phoneme acquisition.

The data above also illustrates that the bland sound /t/ has appeared there was in the beginning, middle, and end of the word. For example, in the words tidul (sleep), nonton (watch), and ceimut (blanket). Likewise, the sound of bland / d / can be spoken by Qanita. For example, the word duduk (*sitting*), *cendal* (sandal) (sound /s/ pronounced /c/). But in the data there is no sound / d / at the final position of the word.

Nasal noises /n/, /m/, /ng/ for Qanita have no difficulty in communicating. For example, the word *crying*, *eating*, guessing sounds that are quite smoothly spoken by Qanita except in the word aunt by eliminating the sound of /n/ into tate. Actually Qanita can say the word *aunt* if told to repeat the word, tetepi when calling her aunt, the word *tateis* said.

The data above also shows that there is inconsistency in Qanita's speech that is when he pronounces the sound /s/ in the initial and middle positions of the word he pronounces with the sound / c /, for example the word *grandson* for milk, *cendal* for the

word sendal, but if the sound / s / is at the end of the word, he said it perfectly, for example in the word crying, peeing. The same goes for the sound of /l/. If the position is at the beginning and end of the word, Qanita pronounces it clearly, take the word *example, forget*. However, when it is in the middle position of the word, the sound of /l/ will disappear. For example the word *ceimut* (blanket), *ambiin*. For phonemes /r/ for Qanita can not be said. He always replaced it with phonemes /l/. This is due to the same articulation. From this it is seen that the acquisition of phonemes in toddlers has to do with language preformation, which is the effort of a child to use, display or use language. According to Gleason and Ratner performance is our attempt to understand someone's language (Barko, 1998). While according to Chaer, performance is the implementation of language, namely speaking or understanding speech.

In language performance, children get language through imitation and the courage to speak it. Pateda (1990) said that children are able to gather as much knowledge as possible that is nonlinguistic through their environment, vision, hearing, intermingling, pronunciation and sprinkling which he then manipulated in the form of language sounds in the first years of his life.

The above exposure illustrates that in order for the child to be able to pronounce language phonemes properly and correctly it takes effort or the process of habituation from people who are close to the child, such as father and mother, his brother and so on, because in the acquisition of language, at first the toddler was rather slow in acquiring new words. Around the age of two, they added new words daily and identified the meaning carried by each passage. Thus, a child's language acquisition is influenced by the use of ambient language (Lowenthal in Pateda, 1990). Therefore, the development of children's language performance has to do with environmental factors. If the environment is productive in listening to the language, the child's language performance will develop at a faster stage, or vice versa.

## CONCLUSION

Based on the above exposure it can be concluded that some aspects of the world's languages may be universal, but there are many other aspects of the language that are unique to the language itself. The same goes for the acquisition of phonemes in children. There are some sounds that are universally obtained by the toddler, but the order of acquisition can be influenced by many other factors that make the acquisition of a child's phoneme unique to him. There are some sounds still not correctly said by the toddler. This seems to have something to do with rudimentary child speech tools and child neurology.

The sound of language with vocal phonemes can be spoken perfectly by toddler aged 2-3 years because the phoneme is on an articulation that is easy to make sounds. Furthermore, the sound that has consonant phonemes in general can be said even though there are still exchanges or mis-words.

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