

**UNDERSTANDING THE RULES OF LANGUAGE ACQUISITION IN
CHILDREN BASED ON “NATURAL GRAMMAR” THEORY BY
CHOMSKY: A REVIEW OF LITERATURE**

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ABSTRACT

Rules of language acquisition in children based on "Natural Grammar" theory by Chomsky discuss about how real the language acquisition in children happens, how the real mastery and production of language happens in order to determine the comprehension of children processing of sound into a message. Finally, the children be able to obtain the messages themselves into the language. It is based on the approach of Chomsky's theory that is a theory of Natural Grammar (a grammar truth of God). The results in child's language acquisition has been conditioned in the memory so that the child is ready to learn the rules of the language.

KEY WORDS: Rules, Understanding, speech and language, Production

ABSTRAK

Aturan pemerolehan bahasa anak-anak yang didasarkan pada teori " Natural Grammar " oleh Chomsky membahas tentang bagaimana real bahasa akuisisi pada anak-anak terjadi, bagaimana nyata penguasaan dan produksi bahasa terjadi untuk menentukan pemahaman anak dalam memproses suara ke dalam sebuah pesan. Akhirnya, anak-anak dapat memperoleh pesan itu sendiri ke dalam bahasa. Hal ini didasarkan pada pendekatan teori Chomsky Natural Grammar (a grammar truth of God). Hasil dalam pemerolehan bahasa anak telah dikondisikan dalam memori sehingga si anak sudah siap untuk mempelajari aturan bahasa.

KATA KUNCI: *Aturan-aturan, Pemahaman, Ujaran dan Bahasa, Produksi*

A. INTRODUCTION

Human growth and development requires a long time and a long and consists of the phases that have their own characteristics. Among the phases, the initial growth phase or the growth rate of children is a phase that need a great attention because it has significance for human growth and development in the next period, especially in the aspects of language acquisition. Considering that language acquisition is an important aspect that marks the phase of growth and development of a child, Dardjowidjojo (1996) conducted a research of language acquisition in his own grandson named Echa. Echa language acquisition research starts from the age of 0-5 years.

Talk about language acquisition in children is more interesting to be discussed considering not many people observe (especially the ordinary people including parents who raise their children). How the actual language acquisition in children occurred. We just know suddenly when a child is able to speak. Never previously imagined how utterances were acquired and ultimately used by a child as a tool to communicate.

B. NATURAL GRAMMAR: A GRAMMAR TRUTH OF GOD

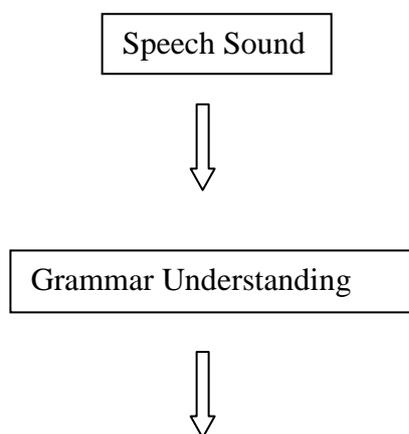
Linguists' Truth of God tries to explain the language in relation to psychology. This is in contrast with the Hocus Pocus-game approach or 'math ', this approach using artificial intelligence theories therefore the theory demonstrated the ability of the speaker is not in human terms (as a creature who uses feeling) but the term computer process (operation).

A calculator can solve math problems that humans do, without wanting to overcome that artificial intelligence theory is of no use. According to this theory the child's linguistic ability is done through a process of competence i.e. mastery of grammatical competence unconsciously. These competencies include three language proficiency i.e., phonology, syntax, and semantic. The performance process is divided into two, namely understanding and generating sentences. Natural grammar theories depart from the principles of grammar developed in the

absence of sound production and comprehension of the language first developed from the speech production.

There are many children who are born mute. People like this are born with crippled (due to brain injuries) or on some other abnormalities found in the organs of articulation as the tool said. A child who silent but heard can develop the ability to produce speech, however, how the child can understand a sentence? Well, they can understand a sentence that reflects the main characteristics of the language, i.e. the understanding of a number of sentence grammar is not limited. Comprehension and production process that always tries to follow the understanding because the children acquire a language aspect in understanding, then the children can try to figure out how to use it in production. Therefore, the children try to harmonize the language production with linking system which has been developed to be understood (Clark and Hecht in Steinberg, 2001:37).

Huttenlocher (Steinberg, 2001:37) conducted a research of four children aged 10-13 months and above the six-month period. He found that children can understand the sound at a level beyond that which they have developed in the production. It can be concluded that for normal children, such as children who are mute, speech understanding is the basis for the formation of grammar in mind, this is not to say that the production is not a sound that is not important. Clearly, however, the production is the process of optional and this is possibly derived from the grammar based on the principal process of speech understanding. Understanding of the grammatical truth of God-the next basic natural grammar performance will look like a speech understanding of the schemes below:



C. CHILD LANGUAGE ACQUISITION BASED ON NATURAL GRAMMAR

Chomsky (1986) stated that language does not exist in world (in any scientific sense) but resides in the heads of individual users. Hence there is no external target of learning, and hence no “learnability” in the traditional sense. Based on Natural Grammar by Chomsky, child language acquisition has been conditioned in the memory so that the child is ready to learn the rules of the language. Furthermore, the rules of speech comprehension developed in language and ultimately capable of producing speech language. On the basis of these rules, the principles of natural language is as follows:

Children Trying to Understand Their Own Worlds

Newborn child found himself (entities) in the external and internal physical world, each trying to be understood. Babies know the physical world through their feelings and understand some basic unity, objects, events, and circumstances. Through the implementation of psychology, infant complete and assess an entity. The entity is known generally. The task is understanding the psychology of babies by seeking the understanding of mental understanding about hunger, thirst, pain, formulate encouragement, etc. This proposition as predicates, arguments, bookmark, and relationships with other arguments that others become the essence of a system of regular and can be modified in different ways. The rule applies in general (universal) for all human beings. After the baby has a perception about various aspects of the world, they begin to learn the language. Children start when learning through hearing speech in the form of objects, situations, and the introduction of environment. In turn, the motivation of children to the proposition and the structure of the grammar in understanding the meaning of the other speech be better.

The Basic Mental Existence Comes from the Physical World

Let's think about some basic mental unity which relates to the physical world that will be studied. These are some examples of each use of attached terms in quotation marks, the single thing that shows the idea: (1) objects: *mother, father, hand, dog, blanket, ball, bananas*; (2) the supplementary object (bookmark properties): *large, black, small, soft, stinking*; (3) event that shows objects involved in an action or movement: *mother is running, barking dog, spinning ball*; (4) circumstances indicate the object involved in the relationship are static (not active): *banana on the table, dogs were in the back seat, mom was standing near the door*, (5) attribute words to determine the nature and the evaluation of the events and circumstances, so many variety of attributes, modifications and evaluation, such as ' *good for me* ' and ' *bad for me* ' can be determined by events and circumstances.

Understanding the child against physical world reality to build basic mental form, like ' *a dog barking* ', ' *that's banana on the table* ', so the idea of involving the object as the argument developed in the child accompanied by the child's attitude, evaluation, and others from words that help a knowledge network which covers many things, Steinberg (2001:37).

Children be Aware of and Understand Their Mental World.

At the same time, child trying to make sense of the outside world, they are also trying to understand and organize the subjective world as a part of mental experience and thought. They learn to distinguish certain ideas concerning certain experience such as heat, cold, itching, sores, taste, comfortable. They also formulate the mind (not to be confused with the sentence, which reflects their thinking) by using these ideas or any other they could pick from the experience of their world.

Children Combining and Organizing the Knowledge of the Physical and Mental World

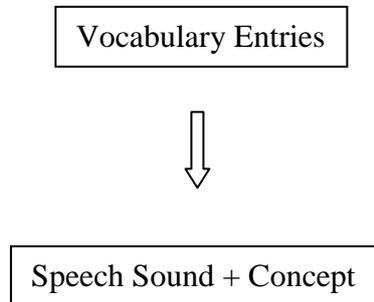
As time passed and the longer children experience more and more, children combine a lot of knowledge about the physical world. Children learn to recognize the diversity of objects, attributes and how they describe into events and circumstances. This further ideas and thoughts are relating to the child experiences. Like animals, children can learn a lot about the environment even in the absence of language. However, as time goes on, a unique overview of the environment that drew the attention of the child was the sound of speech. Children pay attention to objects, events and conditions in their environment, interpret the sound of speech as a danger or the sound of speech as a challenge to look out.

D. THE DEVELOPMENT OF GRAMMAR

The Formation of Vocabulary

In observing the environment, the children basically wonder why people make speech sounds they do and they are looking to make sense of this phenomenon. They look for uniformity and in the end they notice that certain speech sounds occur in close relation to certain objects, events or circumstances that is foreign to them. For example, they noticed that the sound of the ' banana ' is uttered by a person when the bananas given to them, then the sound of ' mama ' is created when a certain woman walked into the room, the children especially learn words whose meaning is already there in his mind as an example, the concept; the cat. A child who has no idea about ' cat ' or other ideas could not be expected to gain meaning. The sound of the voice of the ' cat ' it doesn't matter how many times it is said to them without an object (cat) or the some instructions to them. Even on the idea of belonging to the child, such as ' cat ' idea of what can be shown. Children need some relationship towards the sound of the voice that is observed from before the child can begin to connect the sense at the sound of it. When children learn to understand the meaning of spoken words such as ' dog ', ' run ', and ' jump ' their store of knowledge of the language in a ' mental lexicon includes not only words but phrases and sentences, such as ' bread and butter ', ' good boy, ' don't touch ', and 'come here'. At first, the child is a recipient of the

passive voice that sounds, such as ' cats ', with one way, from the sound of the concept. So, on the vocabulary in the children minds are basically of the form:



Consequently, when a child hears a strange sign in the physical world, children can discover the concept in a way shows the sound of a voice that has he keeps in his mind. In this way, not only the meaning of words but of the whole phrases and sentences can be understood by directly without grammatical process. For foreign things and objects, an analysis of the language is required.

The Development of Morphology

At the time of sound through the experience and analysis of children against physical environment dam soul, children learn to understand the meaning of common words, children learn the parts and understand the variety section of the word constantly, phrase and morpheme, related to words. This lesson is based on the analysis of input of speech sound. Children make a hypothesis relating to the sound he heard and by using hypothesis related to the sound he heard and by using hypothesis on the origin of the sound, form the origin of the meaning of the morpheme. These are the basic rules that are used when the child then tried to speak. Once the child begins to speak, the error often indicates the child understanding statement regarding morphology. Therefore, if a child says something like '*breaked*', '*goed*', '*mouses*', and '*sheeps*', it shows the mental children against the rules that underlie the rules of tense (past tense) and plural (plural and singular). Therefore, when we use production data to demonstrate knowledge of understanding, it must always be present in memory that the sound

production data is a reflection of the best of the knowledge of abstract language that has been previously acquired by children through understanding.

The Development of Syntax

In his memory, children have thoughts and insights on the environment and themselves. Children forever thinking about their own world, objects, and life in it. Therefore what should be done with the child in learning to understand the syntactic structure of utterances, it is recognized: (1) the predicate-verb, adjective and pleases with prepositions and conjunctions; (2) the argument-noun and noun phrases with the semantic role, (3) hypothesis, the syntax for these elements, the elements of a sentence is expressed.

Knowledge of the meaning of noun before is very important because without knowledge that the child will have little chance in guessing the predicate relations expressed in sound preposition.

Nouns, Structure Words and Preposition as Indicators of Roles and Argument.

As a language, English is generally rely on the meaning of nouns (clause sentences) to signify an argument and structure of words and prepositions to indicate the nature of a particular argument. Example in the sentence: '*John gives candy to the bear*'; *John*, *candies* and *bear* is a noun or object phrase with meaning that indicates the status of argument.

Each (phrases objects) present role Distinct verb predicate 'give', a description structure of the child that the object phrase come first before the verb, '*John*' is an argument, the object phrase directly follow the verb and the prepositions , *candy*, is an object of argument, whereas the noun phrase follows the verb and the preposition '*to*' bear is the argument receiver. At first, the child can only interpret some of the syntactic sign and rely on the meaning of a noun and a verb, so with a common sentence structure i.e. verb + noun phrase + (noun phrase). , for example, '*the dog is jumping*' , '*cat*' *hunting dogs*, as well as for the

argument of self identification name, the meaning of the preposition as well as order of noun phrase must be learned.

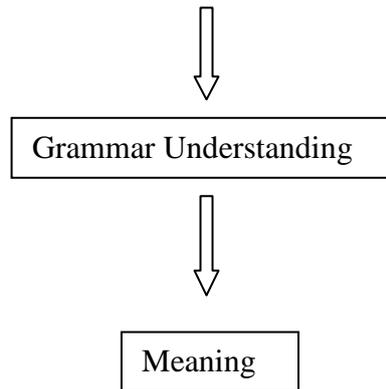
E. OTHER FUNCTION WORDS AND INFLECTIONS

This context tries to understand the phrases and sentences that vary with the function of other prepositions. The introduction of something with the event or situation that is felt in the environment, children have to guess the meaning and function words. This includes the auxiliary verb (will, can), factor (the, a, this), said auxiliary (do, be, have) and conjunctions (and, but, if). It has long to be understood. Speech that does not have the intended effect, it could make a child make another hypothesis. Getting to know the language and intent of others. In this sense, the production, the secondary (second) may have a good effect / result in a better understanding of the second process.

F. THE DEVELOPMENT OF COMPLEX STRUCTURES

Children learn to understand the underlying complexity of a negative sentence, phrase questions, sentences with relative clauses, passive, and others. Then the process of guessing the meaning of unknown sound arrangement, only then the child can record how meaning is expressed in speech. This is a sentence structure that relation to the relevant objects, events, and circumstances in an environment that gives the child a sense. At the time of the child hypotheses regarding principles and rules of sound events. In this case knowledge of the structure of syntactic complexity were formed into the grammar in the child's memory. It must be noted that the grammar is equipped with understanding. there is no hint in which the sound is given as input to the grammar so that meaning in conjunction with the framework of a proposition can be given as output. Once children understand the many negative form, the picture will appear in the production. Because children advance in knowledge understanding of syntax, then progress will be reflected in the quality of its negative speech. Then, the process of understanding the process of formation in basic natural grammar is as follows:

Speech



G. SPEECH PRODUCTION

Vocabulary

As I have previously written for vocabulary comprehension, vocabulary was originally the inclusion in the speech and ends with meaning, namely: sound-meaning. Vocabulary should be prepared based on the voice to sound a clear purpose. Sound sequences that are similar or different from the other and the other will be registered on a base. To understand speech spoken in a normal value, which is quite right, people should have spoken in the normal value, people should have access speech or it would be unlikely to be found. Instead, a vocabulary that is prepared for the purpose of production should give a sense-arrangement basis. People who would like to say a sentence would have the vocabulary associated with it means that speech can be seen clearly similar to the production.

For production purposes, we will access using proportional framework, as a guide. We know what we think into revealed but we have to find a way to pronounce the sound. We want our vocabulary for listing on the basis of meaning, namely: sense - sound. Actually, we need all kinds of mental or soul. We can say that the inclusion of vocabulary related to sound and meaning, and it's not a clue what to wear. In fact we heard more noise than the sound we make sense of the relationship.

However, in order to produce the sound of a voice, a sense - sound, we need to access the same vocabulary. However, the meaning must be arranged with respect to a variety of communication and semantic field. That means that the network must be able to accept the notion of meaning and it gained a voice that was imported by the meaning.

The Development of Articulation and Sound Development Stages

There are many variables such as when the children began to utter the words. A child could possibly say his first words at the age of 5 months while others can not say his first word until about 2 years. This fact is not the way that shows the children who possess delayed a little conceptual arrangement of the world or to understand a few words.

Without a doubt, some of the variables should be made with the physical development with regard to the pronunciation of the sound and its relationship should be formed in the brain (Bates et al .., 1992) which states that it is not easy to make the sound of a particular sound. The brain child should establish relations to select a series of words and to pronounce it in a stage. Understanding speech sound is not difficult because the stage itself is given as input. A child entering a level word or a number of single words is separated (Scolion 1976, Bloom, 1973)

Production of Understanding: Development of a Word Production

An auxiliary verb as a syntax that is based on the understanding of wear due to allow the production of sound is important for children to produce many sentences. This is not a subject of reversal functions, operations, and this rule (function / operation / principles) that will not provide the intended results.

This is a production to the understanding of grammar and interactions that allow the child to produce a sound sentence syntactically. Because knowledge of the science of language in children in increasing the understanding of grammar, children tried to use that knowledge in production.

G. CONCLUSION

Based on Chomsky's natural grammar theory, child language acquisition has been conditioned in memory so it's ready to learn the rules of the language further developed in language and speech understanding could ultimately produce the speech language. There are some way in children to learn the language rules (1) the child trying to understand the "world" them; (2) form the basis of mental derived from the physical world; (3) children be aware and understand his own mental world (4) children combine and organize the knowledge of the physical and mental world. The development of children's grammar develops through; (1) formation of vocabulary; (2) the development of morphology; (3) development of syntax; and (4) noun, wording, prepositions as indicators and the role of the phrase objects and arguments. While the development of children's language develops speech production through: (1) vocabulary; (2) the development of articulation and developmentally sound; and (3) the production of understanding the development of a production auxiliary verb.

REFERENCES

- Anit, Dubey. 2013. *The Influence of Discourse on Syntax a Psycholinguistics Model of Sentence Processing*. Cambridge: MIT Press
- Bates, Elizabeth et al. 2001. *Psycholinguistics: A Cross Language-Perspective*. California: Center for Research in Language
- Benjamin, Aaron. 2007. *Skill and Strategy in Memory Use*. Oxford: Jordan Hill
- Cleland, Alexandra. 2012. *Spoken Word Processing Creates a Lexical Bottleneck*. University of York: UK
- Dell, Gary. 2012. *Insights for Speech Production Planning from Errors in Inner Speech*. University of Illinois: Urbana-Champaign
- Diessel, Holger. 2004. *The Acquisition of Complex Sentence*. UK: Cambridge University Press
- Dornyei, Zoltan. 2005. *The Psychology of the Language Learner*. New Jersey: London
- Duppoux, Emmanuel. 2010. *Language, Brain and Cognitive Development*. Spain
- Franck, Julie. 2011. *Abstract Knowledge of Word Order by 19 Months: An Eye Tracking Study*. University of Geneva: Switzerland
- Franck, Julie. 2012. *Revisiting Evidence for Lexicalized Word Order in Young Children*. University of Geneva: Switzerland
- Forrester, Michael. A.. 1996. *Psychology of Language*. California. Thousand Oaks
- Gagarina, Natalia et al. 2006. *The Acquisition of Verb and Their Grammar*. Berlin: Germany
- Green, Melanie. 2004. *Cognitive Linguistics*. Edinburg: Edinburg University Press

- Goldrick, Mathew et al. 2012. *Linking Speech Errors and Phonological Grammars: Insights from Harmonic Grammar Networks*. Northwestern University: Northwestern
- Haynes, Judie. 2007. *Getting Started with English Language Learners*. Alexandria: Virginia USA
- Kornai, Andras. 2010. *Natural Languages and Chomsky Hierarchy*. Hungary: Budapest
- Kowal, Sabine. 2008. *Communicating with One Another: Toward a Psychology of Spontaneous Spoken Discourse*. Georgetown University: USA
- Lassotta, Romy. 2011. *Early Word Order Representations: Novel Argument against Old Contradictions*. England: London
- Latash, Mark. 2005. *Motor Control and Learning*. New York: Springer Science Inc
- Loritz, Donald. 1998. *How the Brain Evolved Language*. London: Oxford University Press
- Luisa, Maria. 2003. *Age and the Acquisition of English as a Foreign Language*. Australia: Footprint Books
- Matychuk, Paul. 2014. *The Role of Child Directed Speech in Language Acquisition*. USA: Nethery Hall
- Painter, Clare. 2012. *Learning through Language in Early Childhood*. England: London
- Saffran, Jenny R. Et al. 2014. *The Acquisition of Language by Children*. Bernard College of Columbia University: New York
- Scolion. 1976. *A Cognitive View of Language*. New York: Holt
- Singleton, David et al. 2012. *Language Acquisition*. Dublin: Ireland

- Tamminen, Jakken et al. 2015. *From Specific Examples to General Knowledge in Language Learning*. Cambridge: United Kingdom
- Tellier, Isabelle. 2012. *Towards a Semantic-based Theory of Language Learning*. USA: Cambridge University Press
- Torikul, Mohammad. 2013. *First Language Acquisition Theories and Transition to SLA*. Osaka: Japan
- Turnbull, William. 2003. *Language in Action: Psychological Model of Conversation*. New York: Psychological Press

