ANALYZING THREE TYPES OF ERRORS IN BENGALI SPEAKING CHILDREN'S FIRST LANGUAGE ACQUISITION

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Abstract

Children go on to achieve remarkable cognitive feat in language acquisition. They demonstrate general knowledge and understanding of basic patterns in their language within the first few years of life. Children extend the meaning of words they hear by applying grammatical principles in new circumstances. Despite having this remarkable ability to learn and comprehend language at a young age, children make numerous errors and mistakes as their language knowledge and understanding grows. Overgeneralization, overextension and underextension are three common mistakes in early word use which are altogether mentioned as 'developmental errors' in psycholinguistics. In this paper these three types of errors will be presented through the analysis of data collected from young Bengali speaking children aged 1 to 2.5 years.

Key Words: *First language acquisition, Bengali, children, developmental errors.*

1. Introduction

Language acquisition is one of the major developmental features in children. During this process different strategies are adopted by the children to develop their vocabulary along with the meanings associated to them; lexical learning is one such step that includes learning vocabularies as well as knowing the proper use of the words with meanings. Children often use the majority of the words they learn correctly. However, enhancement of vocabulary accelerates the frequency of errors in word usage, and it decreases as vocabulary improves (Stowe, 2001).

Scholars debate the causes and reasons that underly these mistakes. Semantic feature hypothesis (Clark,1973) indicates that children acquire the basic features of word meanings before knowing the more specific aspects and this is the major reason behind their errors. For example,

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children may overextend any word's meaning (like calling all round object including fruits as ball) until they learn the more specific aspects of this word's meaning. Some other theories indicate that errors in early word use are the result of a failure on the part of the child to retrieve the correct words (Huttenlocher, 1974; Stowe, 2001).

The three types of errors in word use that are usually found in children are the subject matter of this paper. They are: overgeneralization/ overregularity, overextension and underextension. Data are collected via observation, documentation, interviewing and audio-visual recordings of young Bengali speaking children. Thus, this research is exploratory, contextual and descriptive in nature in that the aim is to find out something new, being specific culturally and trying to produce accurate data and clear picture of the enquiry.

2. Language Acquisition

Language acquisition is one of the essential human traits. The way children learn their native language is referred to as 'First Language Acquisition'. This process enables children to perceive and comprehend language, produce and use words as well as sentences to communicate. According to Rice (1989), language acquisition needs three skills: (a) the language to be acquired, (b) the child and their abilities, (c) environmental settings or the language they hear and the speaking contexts. Researchers thought about the process that helps children to communicate and express themselves in the world. This area of interest has been taken into account from as early as the fourth century. Saint Augustine (397 AD) entitled the chapter of his 'Confessions' (autobiography) 'That When a Boy He Learned to Speak, Not by Any Set Method, But from the Acts and Words of His Parents' (Schaff, 1890). This reveals the fact that 'child language development' has been an area of interest for centuries.

2.1 Historical background of language acquisition

The above discussion indicates that the field of child language studies has its place preset long back in the history. Modern theories of child development were developed by English philosopher John Locke (1632-1704) and French philosopher Jean Jacques Rousseau (1712-1778). Locke believed that children take birth with an empty mind which he named 'tabula rasa' (blank slate) and these slates start being written on after getting experienced from the environment and by interacting with other people

(Eng, 1980). Locke emphasized the importance of relationship between old and new knowledge (principles of association) and of imitation and repetition, believing in 'external forces' or 'nurture' as the driving force in development (Gianoutos, 2006). On the other hand, Rousseau emphasized the role of 'internal forces' or 'nature' on child development. According to him, children are born with a natural sense of right and wrong, so they are regarded as 'novel savages'. Moreover, two more vital issues related to this area, 'maturation' and 'stages of development', were also first introduced by Rousseau. Another name worth mentioning in child language study is G. Stanley Hall (1844- 1924). He was the first psychologist to focus on studying child development. In 1890's he founded the 'Child Study Movement' (White, 2002). Hall was greatly influenced by Charles Darwin's view on studying child development as the vital issue to understand the origins and nature of human beings. Consequently, it can be mentioned that, Darwin (1877) started a baby journal in which he recorded his son's developmental changes since his birth, named as 'A biographical sketch of an infant'. Later, Hall was highly influential to his contemporaries and because of his strong influence child study became a discipline in its own right (Gupta, 1995).

2.2. Early stages of child language development

Research on language development shows that children cannot acquire all the developmental goals at a time; they go through sequences of recognizable stages as they master their native language. For example, meaningless sounds precede single word utterances; joining two words and associating meanings comes to them much later. Thus, it is easy to think of stagewise child language development. Although a certain stage can differ from child to child, the sequence of stage appears to be the same for all children who acquire same language (Moskowitz, 1978).

Usually stages of language acquisition are mainly formed on the basis of a progression that gradually sprouts out by semantically and perceptually identifying the language. According to Wood, children at a very early age (around from 3 to 6 months) start to use the language to fulfill their needs (Wood, 2010). This very early period of speech production is called the prelinguistic or pre- speech stage. At this stage, a child learns to control the sounds he produces and tries to put them together in vocal play; but they are only sound manipulations not proper words. Cooing, crying, burping and laughter are the vocalizations made at this level of the child to

express feelings. After these, children start stringing the sounds together and through babbling gradually the child develops to produce single words or holophrases (a single word to express the whole semantic function).

At around the age of one year and half (18 months) toddlers produce two-word combinations (proto sentences). With the use of previously learned vocabularies and new words, children produce their very early sentences. At this stage vocabulary develops faster. One of the major features of this word combination stage is the omission of 'function words,' such as articles, auxiliary verbs, inflections, prepositions, and the copula 'is' (Brown, 1973). These sentences are the combinations of a noun or a verb with a modifier. This helps the child produce sentences like-declarative, interrogative, imperative or negative.

The last level of utterance included in this category is the earliest form of sentence use. As discussed in the former segment, we can see that the pre-sentence use of a child already takes the form of word combinations. At this stage sentences increase in length, but still, small connective words like 'and' or 'the' are left out and bigger words are simplified. Thus this stage is also named-'telegraphic stage', as the language used here seem to take the form of a telegram, containing just enough information to make sense.

2.2 Different Areas of Language Development

During the stages of language development a few vital linguistic abilities like, phonological, morphological, semantic, syntactic and morphosyntactic fields grow in children. Though these areas have individual characteristics as well as developmental rates; they are interrelated and influence child's language acquisition with equal importance.

According to Clark (2001), word is the major domain of morphological acquisition, where inflectional affixes are added to words or stems to form new words; in addition, some meanings are assigned to each one of them. Between twelve months to twenty months of age, children usually begin to say their first words, and systematic morphological modulations of these words occur within the first year of interaction (Clark, 2001). As they move towards complex, meaningful expression of their meanings, they include grammatical manifestations such as inflections (prefixes, suffixes), prepositions, postpositions and clitics. For example, on nouns they start adding morphemes to make distinctions such as gender, number, and case;

verbs, markers are added for aspect, tense, gender, number, and person. Although children appear to begin with inflections as modulations of the word meaning, at the end of the day attention is required to both lexical meaning and syntax, as they need to learn which words belong to which paradigms that use regular or irregular plurals (Clark, 2001).

The objective of this research is to identify the three above mentioned 'developmental errors' in children and it is primarily related to children's 'morphological' progression and semantics is very much influential on children's morphological development. In the following segment the above mentioned three specific types of language errors that are made subconsciously by the children during the morphological acquisition stage will be discussed with reference to collected data.

3. Developmental Errors

It has been mentioned above that the three types of errors which occur during the early language development stages are-overgeneralizations, overextensions and underextensions. These are common all over the world in all the children who are following natural pace in first language acquisition; only the rate might vary. During this research it was observed that these errors are common as I had heard children making them before. But now, as a research issue, I tried to observe and analyze the phenomenon in a systematic way and contextually. It was feasible for me to collect the data in their natural settings only as the context was known and understood to me. Thus, I could collect sufficient data and present them in the form of the following findings.

3.1. Overgeneralizations/ Overregularizations

Human languages are unique in that they offer speakers the possibility to produce new meanings, (e.g., combining words, making novel sentences). During this productive period, young children continue to use a term past the field of its particular connotation; this habit of language formation is called 'overgeneralization'. Overregularization is defined as the "application of a principle of regular change to a word that changes irregularly" (Marcus et al., 1992). For example, using the word 'tooths', 'mouses'. The error is frequently seen in children after they have acquired the language rules; because children apply learnt rules to irregular words.

Usually, overregularization rule is applied to grammatical categories

like tense (verb forms) and numbers. These two categories are discussed in linguistics under inflectional morphology. During the data collection period, I found the following forms that are overregularized; it is worth mentioning that informant children used both Bengali and English irregularized mistakes as a few of them studied in English medium schools too.

C:/amar nak**gula** bæt^{h}a/ (I have pain on my 'nos**es**')

C:/amrao **ïeccilam** oder **S**at^{h}e/ (we were also going with them, mistake in the past continuous form of 'go' in Bengali).

C:/mai ticer tude helped me **Sud**/ (My teacher today helped me put on my shoes; putting on shoes is mentioned as 'shoed' here.)

C:/amar **dui** muk^{h}ei betha/ (the child hurt her lips, so she wanted to express the pain on both of her lips).

On the basis of the above examples, it is possible to say that overregularization is usually found in complete utterances or in sentences. When children begin to use sentences like adults, they go through this process of overregularization. And such errors are clearly recognizable in sentences rather than in individual words. But children in their holophrastic and word combination stage show noticeable number of overgeneralized linguistic items. Like-

- mouse-mous**es**, tooth-tooth**s**, foot-foot**s**,
- children-childrens
- /gan **gecchilo**/(singing song).
- /tumi **khabo**/ (the verb 'eat' in first person form but the pronoun 'you' in third person)
- /briSti**gula** porc^{h}e/(many rains raining) etc.

Another interesting feature is like making past form of words that are already in past forms, like 'slepted', 'ated' etc. These are exceptional use of overgeneralizations as children here already know the past forms of 'eat' and 'sleep'.

Moreover, children also made past tense and plural forms of Bengali words using English past tense and number formation rules. For example,

/ma rannar jonno khunti**s** kineche (khunti is a utensil made of metal to

stirr curries/food. Mother bought more than one of this utensil, so the child made plural forms).

/amar payer angul**s** bQt^{h}a korc^{h}e/ (my toes are in pain).

Children made plural of the Bengali word 'angul' with English plural marker 's' as they had momentary gap of the word form). Use of English plurals in Bengali words are not only examples of overgeneralizations, they are also patterns that results from filling up 'lexical gaps' ('lexical gap' in this sense is the term used to describe the absence of a word in a particular language where it is present in another) in early language development. Momentary gap is a part of lexical gap where a child cannot remember the intended word form instantly. Children here tried to complete the sentence or express the complete meaning with the words they already know even if it results in code switching.

The process of overgeneralization of words can be summarized as the combination of preexisting activation from earlier retrievals and activation prompted by the assessed item's resemblance to instances of the target category. Thus, overgeneralization can be summarized as a common mechanism of activation and retrieval. This may explain not only momentary delays in the accurate selection of words, but other types of naming errors traditionally thought to reflect differences in children's knowledge of words. Most important thing is, error like overregularization occurs usually after children finish learning regular language rules.

3.2 Overextensions

There has been considerable empirical and theoretical interest in the topic of 'overextension' in children's early use of words. Over extension is the use of a word for a broader range of referents than is conventional in adult usage (Bloom 1973, Clark 1973). Over extension often occurs in children when they are initially acquiring and developing the first language; for instance, referring to all four-legged animals as 'doggie', all liquid items as 'water' ('mum' by Bengali children) are examples of overextensions. Gradually children refine their overextended usage to conform to conventional adult language. Overextension would occur while children are learning the language.

3.2.1 Types of overextension

Overextensions were classified into three different types (Rescorla, 1980)-

a) categorical overinclusions
b) analogical overextension and
c) predicate statements.

a) Categorical overinclusions

It is also known as Semantic feature hypothesis. Words indicating 'relationships' covers the largest number of categorical overinclusion. Words with generalization -across sex (/d5ad5u/ for all elderly persons),

-across age (/beibi/ for children), and

-across family boundaries (/aNkel/ for men generally, /apu/ for all girls).

Animals and vehicles were categorized with many categorical overinclusions;

-/gari/ for all cars including train also,

-/gou/ or /goru/ for domestic animals

-/kap/ to all water holders like mug, glass etc.

Children sometimes even categorized cold objects as hot. A participant child held a bowl of ice cream, felt the cold, and told to his mother-/uf g om, g om/ (Urgh! it is hot).

In general, categorical overextension can be referred to as extension of one member of a category to all members of the same category.

b) Analogical overextensions

Analogical overextensions involve inferring a similarity between a word's standard referent and its labeled referent in the absence of any actual relationship (Rescorla,1980). For example, calling all white round objects 'egg'.

When a child comments on an analogy between a word's usual referent and the categorized referent without having any conventional relationship among them, the child is said to be analogically overextending the item. Generally, the inferred analogy is perceptual in character. Like, referring

to /tip tip/ as the sound of rain, identifying noodle as /Sut5a/ (thread) etc. There are two more types of analogy –

- functional analogy: /t lowar/= taking an ice cream stick and calling it a /t lowar/ (sword, while playing) and
- affective analogy: /bQt^{h}a/= referring to sharp prohibited objects like 'knives' as /bQt^{h}a/ (pain).
  Some children seemed to involve genuine perceptual errors, others seemed to be more clearly analogical in character, e.g., child selected an 'Orange' and called it /k mla b l/ 'Orange ball'.

c) Predicate Statement

An overextension is classified as a predicate statement when the child tries to convey some information about the relationship between an immediate referent and some absent person, object, property, or state, rather than labelling the referent itself (Rescorla,1980).

If statements are classified, predicate statements will be 'relational utterances' as categorical and analogical overextensions are typologically classificatory. Leopold (1939) characterized such utterances as 'transfers of reference', indicating that they are different from but nevertheless related to referential extensions. Like, if the child is asked to get the doll, she might look at an empty place on top of a shelf indicating that the doll is usually kept there and saying /put5ul nai/ (Doll is missing).

Possessive use of 'people words' is a major type of predicate statements. Like pointing at a rocking chair and calling it /d5ad5u/ (grandfather), putting on a pair of high heeled sandals and calling it /mamma/ (mother). Some more predicate statements include 'make believe'; like-

- closing the eyes and lying down pretending to be sleeping,

- making 'choo choo' type sounds to mean drinking something,

-moving eyes rapidly on newspaper or a book to indicate reading etc.

Some predicate statements reveal the child's anticipations about how events are organized in time, like saying 'key' when the mother is about to unlock a door but she has not taken out the keys yet.

Some more examples of over-extensions produced by the participant children are presented below-

C:/d5ad5u baïar theke ekta b l enec^{h}e/= (Grandfather brought a ball from the bazar; actually, it was a pumpkin.)

C:/orenï kalarer b l/= (His father brought 'Orange' for him.)

C:/piN briSti hocce/= (It's raining Pink.)

C:/piN c kket d55ao/= (Give me pink chocolate.)

C:/hamba/= (Call of a cow, showing Zebra from an animal book and calling it a Cow.)

C: /mam/ = (Baby talk for the word water, the child calls all drinks 'mum' including juice and water.)

This process of meaning extension is visible in children since the age of 12 months to 2 years (sometimes up to 2.5 years also). Overextension is a cognitive process resulting from contextual reasoning and figuring out a solution. It is done by young children when they lack in producing or presenting new vocabulary or more specifically names of things.

3.3 Underextensions:

Underextension can be taken as the opposite process of overextension that takes place during the morphological acquisition period of a child's first language acquisition period. It occurs when a child acquires a particular word for a particular object but later fails to extend its use to other objects of the same category (Fernandez, 2011). The child uses that word in a constrained and idiosyncratic way. For example, a child may learn the word fruit in connection with an apple but fail to extend its meaning to other types of fruits.

In comparison to overextension, underextension is less common or may be less noticeable. According to Harris (1993), children make two different types of underextensions in their early word learning stage.

They are-

a) Context bound

b) Context flexible

a) Context Bound Underextension

In this situation children simply identify one particular event in the context of which it is appropriate to use that word, but do not realize its more abstract coverage. Like, a participant child called /b l/ 'ball' only to indicate the specific green ball he owns; but in other cases, mother has to tell him that those are also balls of different sizes and colours. They even do not identify the picture of a ball as a 'ball' at this developmental stage. This also happens when children talk about their family pet 'cat', 'dog' or 'car'.

b) Context flexible underextensions:

Restricting a word to a particular referent instead of a particular situation is known as context flexible underextension (Harris, 1993). This kind of underextension is not context-bound and suggests that children use words in a genuinely implicational way. Harris mentions examples of this type of underextension from her own research, such as the use of the word 'clock' only to refer to 'wall clocks' and 'light' only to refers to 'ceiling lights' with a shade.

I have seen the participant children saying 'fan' only to refer to the bedside 'stand fan' because that room did not have another fan and 'bag' for a particular coloured 'school bag' only. And using 'no' only when pushing away a drink.

Research more commonly addresses the underextension of nouns, but this can also be applied to verbs and modifiers, like numbers (Fernandez, 2011). For example, a child underextended the verb '/jawa/' (to go) only with reference to the father going outside of the house but to no one else's. Few more uses of underextension are like-

C:/ekta pani d5ao/= (Give me 'one water'.)

C:/ekta d5ud5u d5ao/= (Give me 'one milk').

C:/oi ïe d5ui ta kap/= (There are two cups), actually there were more than four cups. The child somehow focused on the number 'two' only and used it to count anything. In the same way she said '/d5uita biskit/' (two biscuits) and '/d5uita bQt^{h}a/' (two pains) etc.

Researchers have speculated that the reason why underextension develops or why prolonged underextension exists is probably due to

parents' involuntary contribution (White,1982). Underextension occurs if the parents do not suggest all the illustrations of a category of objects, particularly in cases of unusual word situations while talking to the children. Thus, contextual clues are very much significant for attaching meaning in this stage. An adult might need to observe what the child is doing in order to determine the meaning of the utterance or follow the child's gaze or indication in order to define the exact meaning of the utterance. Likewise, to make sense of the adult's speech, a child in this stage requires to use the context also.

As with overgeneralization and overextension, underextension seems to decline as children grow and their vocabulary and grasp on the rules of a language grow along with them. That is, as children grow, they tend to learn the general uses of a term and apply them appropriately in a more general manner than in a selective manner.

4. Conclusion

Children, on the whole, choose too broad a category, overextending the adult meaning; alternatively, they may choose a category that is too narrow, limiting the adult meaning. Overgeneralization occurs when children set the boundaries wrongly in their early word use. Children may pick out incorrect category by mismatching the conventional meaning of the word. The goal of this study of the three major relationships between child and adult meanings, namely overgeneralizations, overextensions, and underextensions, is to show what can happen when children try to learn word meanings in their first language developmental stage. This method is supposed to shed light on the nature of children's early conceptual categories and how they come to associate these categories with words in their first language.

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