CD 708
LANGUAGE THEORIES, ACQUISITION, AND ANALYSIS
FALL, 1994

INSTRUCTOR: LAURA B. BECKER

LANGUAGE ANALYSIS PROJECT

GAIL THURSBY
JOSEPH RUVOLO
JILANI WARSI

1. Introduction

In the process of conducting a language analysis, we collected a fifty-utterance language sample from a larger videotaped interaction between a subject and two examiners. The subject, Sarah, was a two and a half year old female child with apparently normal language abilities. She appeared to be at ease throughout the entire interaction.

1.1 Setting

The interaction between the child and the examiners took place in a clinical setting, which included various stimuli materials. These included a playhouse, jack in the box, and Sesame Street characters among others. Considering the artificial nature of the environment, the examiners were able to elicit a wide range of utterances.

1.2 Types of Elicitations

The most frequently used type of elicitation was interrogatives. To induce responses form the child, the examiner used wh-questions, such as "What's that," "Who's that in there," "Why don't you let them in the house," "Who's in there," etc. (see transcript).

Another type of interrogative used was auxiliary fronting, such as "Is it stuck," "Should we open the door," etc. As the child answered the questions, the examiner reiterated the response in an interrogative manner to elicit confirmation of the original response. For example,

T: Who's that on the chair?

Cookie monster and little bear and big bird.

T: Cookie monster and little bear and big bird.

Yeah.

In order to further the interaction, the examiner initiated new topics to invoke varied responses from the child. Topic initiation was frequently used as an effective strategy to maintain the child's interest during their prolonged interaction. At one point the adult picked up the jack in the box and showed it to the child:

T: Do you want to see if there is a cookie in there?

Sure.

The examiner also used imperatives to engage the child in the interactive process. To exemplify this point, we present the following T utterances:

T: Turn the handle.

(child tries to turn the handle)

T: Turn it once more and see what happens.

No.

(child tries to open the box but doesn't succeed)

T: Try again.

Another strategy used to elicit the child's utterances included suggestions. The examiner made references to new ideas to help the child explore other possibilities of problem-solving. For example,

(child points to a toy)

What is it?

T: Maybe if you lift this up, we can see what's inside.

Yeah.

It is apparent that the child responded to the suggestion.

2. Syntactic Analysis

2.1 LARSP Analysis

Despite the limited speech sample obtained, the LARSP analysis revealed a wide range of syntactic features. The analysis indicated the child's linguistic ability to be age appropriate; this is shown by her ability to produce both clausal and phrasal structures as specified by Brown's stages of development.

Question structure was a prominent feature at the clausal level. However, the frequency of occurrence decreased as the complexity of syntactic structure increased. For example, QX type (question structure) appeared 14 times yet QXY only appeared 4 times and QVS only appeared 3 times. This outcome is predicted by Brown's stage's hierarchy as the less complex and more frequently used QX structure is a feature of stage 2. The QXY structure is a feature of stage 3 and indicated an age-appropriate development of language complexity. Stage 3 level is normally attained between 2 years and 2 years 6 months. More complex QVS structure is representative of stage 4 development and the appearance of this structure in the language sample indicated an advanced language ability for the range of age in stage 4 is expected to be between 2 years 6 months and 3 years.

Also appearing at the clausal level were 4 SVA constructions which are a feature of Brown's stage 3 and indicated age-appropriate linguistic ability. The more complex SVOA type structure was used less frequently (2 times) yet considering the limited language sample obtained, this still may have indicated a transition into stage 4.

Determiners and AdjN appeared 4 and 3 times respectively. These stage 2 language features were present and used in a few of the language sample utterances.

Neg X and XCX appeared 8 and 10 times respectively and are features of Brown's stage 4. In conjunction with evidence of the other stage 4 elements used it is apparent that the child exhibits a fair degree of language production at this level. This clearly marks a transition from stage 3 to stage 4 which is implied by these results.

Taking into account the phrase level analysis results, we find that the most frequently tallied elements are Pron-P which appeared 26 times and the use of copula which appeared 15 times. These are also elements representative of stage 3 and the appearance of the Aux-M one time and Pron-O 6 times seems to represent a mastery of these features of language production.

2.2 MLU

MLU has been calculated to be 2.82. This represents stage 3 of development with an expected age ranging from 31-34 months. Considering the 30 month age of the child who is the subject of this analysis, the findings represent a slightly advanced level of language development being attained.

2.3 Brown's 14 Morphemes

The subject's utterances contained most of Brown's 14 morphemes; only the "on," "possessive -s," "reg 3-s," "irregular 3rd," and "contracted auxiliary" were not found in this language sample. However, there were 2 instances where use of contracted auxiliary was obligatory but the child didn't use this form. According to Brown (as cited in Owen, 1993), this indicates that the child has not acquired this particular morpheme.

Given the limited speech sample and non-occurrence of the other three forms, we cannot say that the child hasn't acquired them. It is reasonable to assume that the child may produce "on," "possessive-s," and "reg 3-s" in a reasonably natural speech situation.

3. Semantic Analysis

In the semantic analysis, semantic role and prevalent semantic relations were analyzed. Due to the limited amount of utterance observed, the interpretation of these utterances should be only loosely considered. Also, a rich interpretation has been employed due to the subject's young age.

Concerning the analysis of semantic roles, the total use of semantic categories was tallied, and the incidence of individual role usage was accounted for, as its frequency was noted.. As can be seen from the enclosed semantic analysis worksheet, the subject's use of the semantic categories totaled 104. Of this number, entities account for fourteen per cent of the subject's total semantic usage. This indicates a transitional phase between Brown's stage 1 and stages 2 and 3, but because the subject's other categorical uses lean towards stage 2 or stage 3 development- negations are low, and object, agent, demonstrative usage is high- the semantic role usage is considered more compatible with stage 2 or 3.

The analysis of the subject's ability to arrange semantic relations was accomplished by looking at Brown's 8 prevalent semantic relations in three types of expansion most likely to occur in the productions of children from stages 1 to 3. The number of prevalent semantic relations (and their extensions) found in the subject's utterances, are indicative of the language development stage (according to Brown). Fourteen prevalent semantic relations and nine expansions were found in the subject's total 51 semantically coded utterances. Therefore, 28 per cent of the subject's semantically coded utterances were examples of Brown's prevalent semantic relations, and 18 per cent were examples of extensions of Brown's prevalent semantic relations.

Based on these findings, the subject's semantic language development seems to be in a transitional phase as she approaches stage 2.

4. Conclusions

Results of the analysis revealed the subject's use of semantic relations to be indicative of stage 1. Additionally, the results of the semantic relation analysis showed the subject to be in a transitional phase approaching stage 2. This can be attributed to the paucity of observed utterances. That is to say, a larger language sample of the same subject may reveal a higher stage of development.

In contrast, syntactically, the subject's performance strongly places her in Brown's stage 3 progressing towards stage 4 based on her Mean Length of Utterance and LARSP analysis. Upon examination of Brown's 14 morphemes, it was noticed that the subject failed to use the obligatory contracted auxiliary. Some expected morphemes didn't occur, but as it has been mentioned previously, it would be misleading to presume that the subject is incapable of producing these morphemes. Based on the findings of the language analysis, we conclude that the subject appears to be developmentally age-appropriate.

WORKS CITED

Brown, R. 1973. *A First Language: The early stages.* Cambridge: Harvard University Press.

Owens, Robert E. 1993. *Language Development: An Introduction.* New York: Macmillan Publishing Company.