ABSTRACT
                This collection of abstracts is part of a continuing
series providing information on recent doctoral dissertations. The 20
titles deal with the following topics: the role of crib talk in
language acquisition: syntactic parsing strategies: a case study of
the first use of words: how two modes of literature presentation
affect oral language development: children's cognition and
acquisition of selected syntactic structures: language use in
constructing/testing social scientific theories: the functions of
language in discussions: visual literacy as a factor in language
development: form and function as a basis for referential development
in children: discriminating synthetic speech sounds: assessing
secondary school students' knowledge of prefixes: language within
power relationships: a flexible child-talk code: developing spatial
and syntactic transformations: the acquisition of five syntactic
structures by elementary school children: the developmental
relationship between comprehension and production of grammatical
morphemes in preschool children: how preschool children sequence
narrative events: classifying preschool children's uses of meaningful
language on selected conceptual tasks: maternal self-repetition and
child feedback: and the mastery of specific conjunctions by
elementary school children. (RL)

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This bibliography has been compiled as part of a continuing series designed to make information on relevant dissertations available to users of the ERIC system. Monthly issues of <u>Dissertation Abstracts International</u> are reviewed in order to compile abstracts of dissertations on related topics, which thus become accessible in searches of the ERIC data base. Ordering information for the dissertations themselves is included at the end of the bibliography.

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CRIB TALK: ITS RÔLE IN LANGUAGE ACQUISITION
Order No. 7927908

BLACK, Ruth Wallace, Ed.D. Harvard University, 1979. 278pp.

Solitary crib monologues during the third year of life yield a corpus of child speech isolated from social interaction, with fewer attentional constraints on the speaker (e.g., distraction), and with only self-reinforcement. Previous investigators of the phenomenon focus on one child's grammatical practice with linguistic features (Weir 1962) or with rules for social discourse between twins (Keenan 1974) but do not compare the child's language production to that used in dialogue (mother-child interaction (MCI)), the usual setting for measurement of acquisition (Brown 1973). Some researchers (Miller, Jakobson 1962) call for replication studies of crib talk and suggest a connection between the grammatical play/practice (the metalingual function) of crib talk and increased production with linguistic forms later. Others (Cazden 1973) suggest that language play in the crib (and in other settings) may facilitate learning to read and write.

The crib talk reported here of my 2:2–2:4-year-old son Carlisle (MLU Stage IV+, Brown 1973), an early reader later at four years, replicates the phenomenon and tests one aspect of the first hypothesis. Three phonologically identical morphemes (the -s of noun possession, regular plurals, and contractible copula), charted in two settings (solitary crib monologues and MCI), yield differences of accuracy in obligatory contexts (Cazden 1968, Brown 1973), frequencies, and variety of forms produced before point of acquisition.

Monologue samples, audiotaped biweekly by concealed microphone in four time frames--post-sleep (early morning), pre-and post-nap (afternoon), and pre-sleep (night)--, total 5122 utterances. MCI samples (biweekly, usually afternoon) total 831 consecutive child utterances. Monologues vary in number of utterances (1–333 with a mean sample length of 107) and length (3–57 minutes) as do MCI samples (mean sample length: 83; time from 4–37 minutes). Transcriptions (made using headphones and checked later for accuracy) were scored (for the three morphemes) by Brown's (1973) and Cazden's (1968) criteria and in categories of metalinguistic awareness taken from other researchers (de Villiers & de Villiers 1978; Garvey 1977).

Questions of the study (summarized) include: What are the specific differences between monologues and dialogues (and between pre- and post-sleep monologues) in terms of accuracy of features in obligatory contexts, frequencies of forms produced, variety of functions (particularly the metalingual or language play)? Does the order of acquisition of the three morphemes traced here replicate that of other children studied (Brown 1973)? At what point in the process of acquisition do overgeneralizations and language "play" begin?

Monologues show greater proportions of accuracy in obligatory contexts in Week I than do MCI samples: for noun possessives, the difference is significant at the .01 level; for plurals and contractible copula the difference approaches significance. Frequencies of obligatory contexts produced in monologues peak at Week I (before point of acquisition) for noun possessives and plurals. Contractible copula 's, not acquired in these data, shows the reverse: frequencies produced in MCI exceed those in monologues at the .01 level. Order of acquisition, consonant with that of other children studied, showed plural -s first, then possessive 's, then contractible copula 's. Overgeneralizations of possessive and plural -s to the child's real and nonsense morphemes in monologues occurred both before and after point of acquisition.

Metalinguistic awareness in the monologues (play/practice with particular forms) occurs at all levels: phonological, semantic, syntactic, functional, "literary", conversational. It appears to serve the acquisition of two morphemes traced to criterion in this study and suggests that some aspects of crib talk may be precursors to the analytic metalinguistic awareness required of school-age children.

ON COMPREHENDING SENTENCES: SYNTACTIC PARSING STRATEGIES
Order No. 7914180

FRAZIER, Lyn, Ph.D. The University of Connecticut, 1979. 243pp.

A variety of different syntactic and semantic parsing strategies have been proposed in the linguistic and psycholinguistic literature. An attempt to generalize across these strategies indicates that many of them are merely special cases of two syntactic strategies: Late Closure and Minimal Attachment. These two strategies are not only more general than previously proposed strategies but are also non-arbitrary, since they serve to reduce the computation and memory load of the parser.

The role that semantic information plays in the sentence comprehension process is also discussed. The hypothesis that syntactic processing is entirely unaffected by the semantic properties of a sentence, and the hypothesis that lexical semantic constraints can be used to by-pass the syntactic analysis of a sentence entirely, are both argued to be too extreme. A Weak Semantic Principle (WSP) is proposed in their place.

A series of grammaticality-judgment experiments provide empirical support both for the WSP and for Late Closure and Minimal Attachment. These strategies are set into the context of a two-stage model of the human sentence parsing mechanism which is motivated by well attested properties of human memory. Late Closure and Minimal Attachment then emerge as natural or automatic consequences of limitations on processing time together with the two-stage structure of the parsing device.

Finally, an examination of a variety of examples suggests that this model of the parser may contribute to an explanation of certain structural properties of natural languages, and of aspects of language acquisition and language change.

HANNAH: A STUDY OF THE FIRST USE OF WORDS
Order No. 7915361

HANSON, Bette Ann, Ph.D. University of Illinois at Urbana-Champaign, 1978. 221pp.

This interpretative observation study is concerned with the development of semanticity in early single-word speech. Aspects of the development of semanticity are described within a framework of congenitally organized patterns of speech-sound production, imitative behaviors, the development of object representation, and the notion of 'context.' The main feature of this descriptive-interpretative analysis is the attempt to describe both interrelated patterns of change in early language behaviors and the development of semantic content in a set of word-utterances as the interrelated use of the words develop.

Chapter I provides an overview of the development of single-word communication by reviewing the literature which has focused on the production of speech-sounds and vocal imitation. I also suggest cognitive development as an indicator of semantic development during the one-word stage. Finally, the importance of the context of utterance is examined.

Chapter II sets forth the methodology for the weekly observation of one child, Hannah, from age 12 months 5 days until 17 months 22 days. The search for significant developmental patterns in the use of words is described. A model of levels of semantic development in early single-word speech is presented. This model is based on congenitally organized behaviors which provide constraints on early language learning. The interaction of these behaviors is seen as underdetermined with principles of learning providing an explanation for the organization of these behaviors at the level of a rule-governed system, Language.

Chapter III describes the observed populations of spontaneous and imitative utterances, observed landmarks in object representation, and the development of semantic content in a set of related word-utterances. An analysis of 108 word-types observed to occur as utterances reveals a set of ten words in which semantic content can be described as developing during the stage which is studied. The ten words are: here, ball, uhoh, allgone, what's that, comeon, byebye, outside, more, and cookie. The utterances of ball are described up to a period of

cognitive development presented as individuation and the concurrent use of the word 'ball' to refer to an object 'ball.' The development of the use of ball is also described with reference to an internal structure of the concept 'ball.' The observed order of preferred dimensions in Hannah's use of ball (shape, size, texture, color, weight, hardness, design) occurs with correct and incorrect objects as she learns to use ball to refer to an appropriate object.

Chapter IV investigates a matrix of interdependent aspects of language behavior which depicts the situation within which meaning develops. There are seven categories in the matrix: context, spontaneous word-utterances, form, speech-sound production and perception, imitative behaviors, cognitive development, and intention. Each category identifies an observed pattern of language behavior or identifies an aspect of language use discovered in the present study to be significant in the development of semanticity during the period of the first use of words. In conclusion, I discuss the integration of patterns of behaviors in the development of semanticity. For Hannah, this integration at 17 months 22 days of age primarily consists of a functional core of language use in which a set of ten words shows development of semantic content.

A STUDY OF THE EFFECTS OF TWO MODES OF LITERATURE PRESENTATION ON THE ORAL LANGUAGE DEVELOPMENT OF FOUR- AND FIVE-YEAR-OLD CHILDREN
Order No. 7927038

ISBELL, Rebecca Gail Temple, Ed.D. The University of Tennessee, 1979. 127pp. Major Professor: Dr. Lester Knight

The purpose of this study was to determine the effects of two modes of literary presentation, storyreading and storytelling, on the oral language development of four- and five-year-old children as measured by syntactic maturity, vocabulary diversity and the complexity of story retelling. The two experimental programs were designed to contrast the different modes of presentation using the same twenty-one books as the literary base. In the Read-Aloud Program the literature was read to the children in the exact vocabulary and phrasing of the author. In the Storytelling Program the literature was interpreted by a storyteller who varied the vocabulary and pace of the story to the interest and developmental level of the children in the program. Both programs posed the same questions and follow-up activities. The treatment period lasted eight weeks with three contacts per week.

The twelve subjects were randomly selected from the total enrollment of children attending a preschool program. The subjects were white, middle class, and within the chronological age of 4.9 to 5.11. Three boys and three girls were selected for each program.

Oral language samples were obtained in individual interviews conducted at the beginning and conclusion of the programs. The two narrative samples were compared to determine if growth in oral language had occurred using the measures of syntactic maturity and vocabulary diversity. Additional language samples were obtained by asking the subjects to retell a story they had been read or told. These two retellings were compared to determine any change in the complexity of the story retelling (as measured by number of words and mean length of T-unit) or change in the use of formal elements (as measured by beginning, ending, unity, incidents and conversational quotations).

Differences were found between the narrative language samples of the subjects in the two programs in the measures of mean number of words used, number of T-units, mean length of T-unit and vocabulary. The subjects in the Storytelling Program made the largest gains in all four measures. In the retelling sample the subjects in the Storytelling Program used longer T-units, and more words, number of incidents, endings, and conversational quotations than those subjects in the Read-Aloud Program.

Girls in the Storytelling Program made larger gains than boys in either program in the measurements of length of T-unit, vocabulary diversity in the narrative sample, and length of retelling. No sex differences were found in mean length of T-unit, number of characters, unity of story, or incidents included in the retelling samples.

COGNITION AND THE ACQUISITION OF SELECTED SYNTACTIC STRUCTURES IN CHILDREN FROM SIX TO TEN
Order No. 7921704

JONES, Linda Denbeston, Ph.D. Loyola University of Chicago, 1979. 132pp.

Children's comprehension of selected syntactic structures was compared with their performance on three Piagetian tasks. The syntactic structures were taken from the work of C. Chomsky (1971) and included easy to see, ask, promise, and and. The Piagetian tasks included conservation, seriation, and class inclusion. Included in the study were 79 boys and girls between the ages of six and ten.

The comparisons were made on the basis of three competing models derived from a review of the literature. These were: Model I, language influences cognition, based on the writings of Vygotsky and Bruner; Model II, cognition influences language, developed from the research of Piaget and his Genevan School; and Model III, language and cognition are independently influenced by development, taken from the writings of N. Chomsky. In order to compare the three models, path analysis was used to isolate possible paths of influence between language and cognition skills.

It was found that class inclusion and syntax are independently influenced by development and the same thing is true for seriation and syntax. Conservation, however, appears to be influenced by syntax. Thus Models I and III were supported by the study, but Model II (that derived from the writings of Piaget) was not. In further investigations using path analysis, an additional path of influence was found which suggested that class inclusion may influence conservation.

Syntax appeared to be influenced by sex differences. Girls performed significantly better than boys on the syntactic tasks. This was not true for the Piagetian tasks.

Socioeconomic status was found to be unrelated to performance on either the cognitive or language tasks. It was felt that this reflected the homogeneous upper-middle class population which was used in the study.

Discussion followed on the need for further study to validate these findings using path analysis. Empirical support which would confirm or disconfirm the use of path analysis in a study such as this is needed before these statistical techniques can be generalized to other areas of psychological or educational inquiry.

THE ROLE OF LANGUAGE IN THE CONSTRUCTION AND TESTING OF SOCIAL SCIENTIFIC THEORIES
Order No. 7921166

LARKIN, Thomas James, Ph.D. Michigan State University, 1979. 125pp.

This dissertation will examine some aspects of the relationship between language and knowledge. Central to the dissertation will be the argument that it is through our language that we come to make sense of our world.

The dissertation will suggest that knowledge claims are primarily an attempt to take events from the "real" or experienced world and capture them in symbolic expression. The problem here rests in the fact that while our symbol systems are a product of mankind, the experienced world of reality is not. And it is due to this divergence (between a humanly constructed language and an independently existing world) that we can never be certain of the extent to which our knowledge is an accurate representation of a "real" world event. It seems that we cannot extract from our knowledge those parts which are primarily an artifact of the language system which houses it.

The above argument, however, does not lead to a position of skepticism or relativism. Instead, the dissertation suggests that the test of a knowledge claim is not dependent on its correspondence with a "real" world event, but rather is assessed by the impact or effect it has on its audience.

THE FUNCTIONS OF LANGUAGE IN DISCUSSIONS: A STRUCTURALIST APPROACH   Order No. 7917248

LASWELL, Barbara Ann Stuart, Ph.D. Stanford University, 1979. 180pp.

Dialogue between a teacher and pupil has constituted a fundamental teaching and learning device since Classical times. Despite this, our understanding about the function dialogue performs as a tool for formulating knowledge has not been fully explored. The dissertation attempts to place current research on classroom language and discourse analysis within a larger theoretical framework by considering the relation between dialogue and knowledge formulating in light of relevant work in linguistics and semiotics.

The argument presented contends that dialogue performs two broad functions,--a means of communication and a structured device for organizing thought. The inquiry hence proceeds as an attempt to describe the structural transformations information undergoes during conversations, to analyze the influence of context on speaker interaction patterns; and to identify the conversational strategies speakers employ in transmitting information.

Chapter I briefly reviews the literature on language in the classroom (e.g., Smith, 1962; Bellack et al., 1966; Barnes, 1969, 1976, 1977; Sinclair and Coulthard, 1975; Cazden and Mehan, 1976) and discusses the relations among language, the curriculum, and classroom context. Chapter II constructs a theoretical framework for analyzing the interactions of speaker-hearer; the curriculum materials, and the classroom context. The work of three natural language philosophers, Austin, 1962; Grice, 1975; and Searle, 1969, 1975, on speech act theory provides a starting point for investigating how a speaker and hearer convey and interpret meaning. The approach involves describing the underlying assumptions and inferences a speaker and hearer make in understanding one another. From speech act theory the premise is adopted that interpreting utterances in conversation requires reliance on the conventional meaning of words as well as upon a variety of assumptions concerning one's general knowledge about human experience, language, and specific contextual information arising from the social situation in which the conversation occurs. Following a description of Grice's (1975) Cooperative Principle and its maxims, the same are applied on a conceptual level to the classroom situation as a means of providing one explanation for the conventions speaker and hearer tacitly follow or violate in order to convey and interpret information as true, relevant, and sufficient. This chapter also explores the impact of dialogue upon our cognitive processes (Vygotsky, 1962; Bruner, 1962) and upon the design of educational activities (Britton, 1970).

Chapter III develops a method for analyzing connected discourse by treating transcribed conversations as text and then adapting for the discourse analysis several principles used by the French structuralist Roland Barthes in literary criticism. The textual analysis in Chapter IV shows how the speakers in five videotaped discussion contexts used very specific strategies to convey information and how speakers applied these strategies regardless of context. As each conversation unfolded, the hearer was required to integrate the information established as true, relevant, and sufficient in previous speaker turns with the information he wished to convey in order for the information in his turn to be recognized by the other participants as legitimate. The analysis demonstrates how speakers omitted a great deal of information in their turns and required the hearers to draw complex inferences based on the assumptions made in prior turns. Analysis of the speaker interaction patterns also indicates that group size and teacher presence influenced the size and frequency of turns taken by speakers.

Thus, although dialogue is a complex, dynamic process dependent upon contextual variables and shifting linguistic interpretations, it is possible, at least in part, to describe how speakers use the mechanism of alternating turns in dialogue to transmit and decode highly condensed utterances and how they integrate new information with knowledge structures formulated during the conversation. Chapter V discusses the implications of these conclusions for two audiences--those interested in curriculum development and evaluation and those pursuing further language research.

VISUAL LITERACY: LEARNER-CREATED PHOTOVISUALS AS A FACTOR IN LANGUAGE AND CONCEPT DEVELOPMENT AMONG EARLY PRIMARY AGE CHILDREN   Order No. 7918743

LUBKE, Leo Henry, Jr., Ed.D. State University of New York at Buffalo, 1978. 148pp.

This study sought to determine the effectiveness of various types of photovisual materials in relation to a child's ability in concept and language development skills. In order to examine this effectiveness, a Pretest-Posttest Control Group Design was utilized. The independent variable was the type of photovisual the children were to use and the dependent variable was the achievement score in various categories of concept and language development skills. Included in these categories were the concepts of colors, shapes, body-self image, spatial relationship, temporal relationship and numbers.

Three groups of kindergarten children were each given a specific treatment. After the pre-test was administered to all project children, one group of children was given instruction for using a simple instant-type camera. The children in this group created their own learning materials with their camera. The children in one other group were given copies of the photovisual information that the other children had created. Since this study was to determine the effect that the photovisual information had on concept and language skill development, a placebo camera was introduced to the children in this group. They used the peer-produced materials in nearly the same way as the children in the group that had created them. The control group was not allowed to use child-produced (either self- or peer-produced) photovisuals in any way during the treatment period. The children in this control group did, however, have access to commercially-available photovisuals as well as the placebo cameras.

After a treatment period of approximately three months, a post-test was administered to the children in each of the three groups. The analyses of the findings of this study suggest certain tentative conclusions regarding the use of various types of photovisuals in a lower primary program. Test results indicated that there was not a significant difference between the various groups overall. In only one concept category (i.e., numbers) the peer-produced photovisual group appeared to make significant progress in comparison to the commercial photovisual group. Of interest, however insignificant, is that the children using child-produced photovisuals nearly always showed a trend of greater achievement over the children using commercial materials. Sex and chronological age factors were not significant in predicting achievement. The children in all three groups did not significantly differ in their performance in the learning levels of the evaluative instrument including visual cue/psychomotor identification, audio cue/psychomotor identification, and visual cue/language (spoken) response. Informal observations in this study indicated that the children in the self-produced photovisual group had an active interest in working with and sharing their materials with others in this group. The youngsters in the peer-produced photovisual group were interested to a certain extent in the photovisuals that had been introduced to them. Their interest generally waned and certain photovisuals were not understood, evidently carrying little meaning for these children. The children in the control group appeared to have a positive attitude toward the commercial materials introduced to this group. The children in this group appeared to have greater interest and involvement than the children in the peer-produced photovisual group but less interest and involvement than the children in the self-produced photovisual group.

This study provided an attempt to determine the effect that three types of photovisuals have as an early primary age child attempts to learn various concepts and language development skills. A strong plea was made to further research in visual literacy so that the present and future school curricula may better provide for visually oriented children.

FORM AND FUNCTION AS A BASIS FOR REFERENTIAL DEVELOPMENT IN CHILDREN   Order No. 7916205

MENZEL, Ferol Schricker, Ph.D. Iowa State University, 1979. 101pp. Supervisor: Sam Clark

The purpose of this study was to compare the theories of Clark and Nelson concerning referential development. Clark's theory suggests that children rely on perceptual cues within objects when learning the object's name. Nelson's theory suggests children use the object's function as a cue to word meaning. Children between 24 and 36 months of age were assigned to one of two treatment groups and were given a learning task to determine whether they were using form or function cues to help identify objects. Three standard stimuli were presented to the subjects. Half of the subjects were allowed only to look at the standard objects while the other half of the subjects handled the standard stimuli. Subjects were then asked to identify transformations of the standard. These transformations varied from the standard on either form or function. Subjects were also asked to group the stimuli. Finally, overextensions produced by the subjects during the course of the experiment were recorded and analyzed. Findings indicate no significant differences between subjects in the sensory-motor group and the visual-perceptual group on identification of the standard stimuli. Likewise there were no significant differences between treatment groups on identification of the form and function transformations. During the classification task there was some evidence to suggest that older subjects were more likely to use form as a cue when grouping the stimuli.

DECISION PROCESSES IN LISTENERS' DISCRIMINATION OF SYNTHETIC SPEECH SOUNDS   Order No. 7914933

MILLER, Creighton John, Ph.D. Purdue University, 1978. 159pp. Major Professor: Lawrence Feth

3 Experiments were conducted to investigate the organization for perceptual processes in speech discrimination tasks. The experiments were specifically concerned with dual analysis interpretations of speech discrimination, which assume that separate auditory and phonetic analyses are employed in this task. The first experiment investigated reaction times for listeners in experimental contexts intended to isolate auditory and phonetic analyses for speech discrimination. The second and third experiments considered effects upon discrimination performance as available response times were progressively reduced. Reaction times for isolated auditory and classificatory (phonetic) discrimination of stimuli differing in voice-onset-time were found to cover comparable time intervals, which were in addition statistically undifferentiable from those for tasks where both analyses could contribute. Trends did indicate slightly shorter RT for low- and somewhat longer RT for high-uncertainty dual analysis tasks. Discrimination performance was also found to be largely unchanged as context varied across the tested conditions. The results suggested that separate auditory and phonetic analyses in the speech discrimination tasks were applied in parallel organization.

Since listeners' performance and response latencies were undifferentiable in Experiment I, it was speculated that listeners might have reviewed all relevant information at all times. To investigate this possibility, two additional experiments were designed, such that listeners did not have control of the response time. These experiments employed reaction time deadline procedures, wherein listeners were trained to respond within specified time intervals.

Results for the two experiments using deadline procedures indicated that auditory and classificatory analyses occurred over largely overlapping time intervals for both types of stimulus. Close similarities were seen for discrimination with the two stimulus continua. Inasmuch as the cues which were investigated in the two studies were quite different from one another, the results were felt to indicate the presence of higher-level decision processes rather than peripheral, quasi-automatic analyses.

The time interval over which response deadlines degraded performance covered about 1-sec. This interval compares well with reported retention times for information in the so-called precategorical acoustic store (PAS), which has been proposed as an intermediate, non-linguistic stage in auditory perception by Crowder (1971, 1973). It was speculated that PAS might provide the information upon which classificatory and auditory analyses are applied in speech discrimination.

ASSESSING SECONDARY STUDENTS' KNOWLEDGE OF PREFIXES   Order No. 7918374

MOORE, Frances Elouise, Ph.D. University of Minnesota, 1979. 168pp.

The purpose of this study was to assess secondary students' knowledge of 32 specific prefixes. The study involved 72 seventh grade students, 72 ninth grade students, and 72 eleventh grade students for a total of 216 subjects. All students involved in the study were from schools in Hopkins, Minnesota. The seventh and ninth grade students were from North Junior High School, and the eleventh grade students were from Eisenhower High School. Within each grade level, 24 students were considered high ability performers, 24 students were considered middle ability performers, and 24 students were considered low ability performers. Students were selected and placed into these groupings based upon teacher ratings of the students' overall verbal ability.

The total of 216 students were tested in their English classrooms, by their English teachers, and only on one day during the regular school hours. All students were administered a two-part multiple-choice prefix test with four alternatives. The students were asked to select one of the four alternatives and indicate their response on a separate answer sheet. Part I of the prefix test was designed to determine students' knowledge of the 32 prefixes in isolation. Part II of the prefix test was designed to determine students' knowledge of the 32 prefixes in context, that is, attached to a nonsense root and within a sentence structure.

A six-way Analysis of Variance procedure was used to examine the main effects and the significant interactions of the between subjects factors grade (7th, 9th, and 11th) and ability (high, middle, and low) and the within-subjects factors prefix frequency (frequent, infrequent), meaning consistency (invariant, variant), spelling consistency (invariant, variant), and prefix context (in context, isolation).

While results of this study do not show that prefix frequency, meaning consistency, and spelling consistency are good predictors of students' knowledge of prefixes, or even that they would be good predictors if another study were done, results of this study indicated that students know more prefixes in context than out of context as expected. Additionally, this study indicated which specific prefixes students at grades seven, nine, and eleven do know and which prefixes they do not know. Furthermore, results from this study indicated which prefixes high, middle, and low ability students do know and which prefixes they do not know. From these results, teachers can determine those prefixes that should be emphasized at each of the three grade levels and at each of the three ability levels employed in this study.

CONDITIONAL REGULATIVE RULES: AN EMPIRICAL
STUDY OF LANGUAGE WITHIN POWER RELATIONSHIPS
Order No. 7924512

MURDOCK, Johnny Irvin, Ph.D. The University of Iowa, 1979.
396pp. Supervisor: Associate Professor James J. Bradac

An original theory of how language functions within power
relationships provided the basis for this study. Research on
the importance of power expected values was combined with
new analyses of explicit threats, promises, and thromises, and
"behavioral X utterances" as implicit threats, promises, and
thromises. This combination, when linked to a rule-governed
analysis, was used to construct new communication rules, con-
ditional regulative rules, for explaining and predicting how lan-
guage functions within power relationships. Two rules were
proposed:

1. Within a power relationship, one assumes an archer's
   use of a threat functions as a threat, a promise func-
   tions as a promise, and a thromise functions as a thro-
   mise if the archer and target perceive that the archer
   controls the sanctions necessary to implement the ut-
   terance's prediction and is willing to do so.

2. Within a power relationship, one assumes an archer's
   behavioral X utterance functions as a threat, promise,
   or thromise if the archer and target perceive that (a) the
   archer controls the necessary positive and/or negative
   sanctions which he can use in relation to the target and
   is willing to use them, and (b) the target's willingness
   to engage in the behavior requested by the utterance is
   in doubt.

A new methodology was devised which required subjects to
role play the position of target in nine different power rela-
tionships where the archer's power expected values were ma-
nipulated, and respond on eight dependent measures to eight or
ten archer utterances within each power condition. This within
subjects method had each target respond to eighty-four archer
utterances. The eighty-four cell design was replicated using
business and education inductions. Then each replication was
partitioned into eleven factorial designs for statistical anal-
yses.

Indirect tests of the two conditional regulative rules were
conducted through thirteen general hypotheses involving 28
multivariate and 224 univariate F-tests. Results generally
supported both conditional regulative rules. Significant effects
were obtained on all dependent measures for increases in the
archer power expected values. The utterance forms functioned,
with some qualifications, in the predicted manner. However,
numerous unexpected utterance form effects were obtained and
suggested a lack of precision in current theories of language
and power.

Although the results generally supported the conditional
regulative rules, the unexpected utterance form effects re-
quired a theoretical explanation. All results were incorporated
into a view of communication competence as a rule-based the-
ory involving rules at four levels of abstraction: (1) rules to
predict how the effects of specific utterance forms would vary
within a type of utterance (e.g., how the effects of threat
form A would vary in relation to threat form B), (2) condi-
tional regulative rules to predict how the effects of a type of
utterance (e.g., promises) would vary due to changes in ex-
ternal variables such as power expected values, (3) constitu-
tive rules to distinguish one type of utterance from other types
of utterances, and (4) regulative rules to cover all intentional
utterances.

While manipulating power variables, this study began a sys-
tematic exploration of language as an independent variable in
the areas of threats, promises, and thromises. Future re-
search should continue this exploration.

A FLEXIBLE CHILD-TALK CODE   Order No. 7920582

O'GARA, Chloe, Ed.D. The University of Rochester, 1979.
127pp.

Relations between syntactic and lexical variables in adult-
child and child-adult speech were investigated in two day care
centers using protocols of routine adult-child speech interac-
tions (except instructional sequences). One center served a
middle socio-economic population, the other served a low
socio-economic population. Ten adults and 13 children be-
tween 18 and 36 months were observed in a total of 38 inter-
acting dyads. The range of language acquisition for both males
and females extended from stage I to IV (Brown, 1973).

Variables examined were: length of utterance; presence
of simple verbs; incidence of third-person pronouns; incidence
of modifiers; yes/no questions; wh- questions; sentence com-
plexity; incidence of utterances without verbs; incidence of
single-word utterances; type/token ratios and preverb length.

The use of a restricted "child-talk" code by adults when
conversing with young children was confirmed. Adult speech
modifications were consistently more pronounced in interac-
tion with less proficient children for all syntactic variables
except one-word utterances. Type/token ratio -- the only
lexical variable under study -- was constant in adult speech,
i.e., variety and range of vocabulary in adult speech did not
change with speech proficiency of child addressee. Although
type/token ratios were different for children at different stages
of language acquisition, the vocabulary differences were not
related to adult speech modifications. It was concluded that
within the limited range of child proficiency studied, type/
token ratios are an inflexible feature of the child-talk code in
adult speech, and in child speech do not function as a cue for
adult speech simplification.

Length of utterance and variables related to verb use in
child speech correlated most consistently across all child pro-
ficiency levels with simplified adult speech. Analyses sug-
gested that the syntactic characteristics of child speech which
covary with adult speech modifications at one stage will not
necessarily do so at a different stage. Changes in the patterns
of relationships between variables in child and adult speech
are discussed with regard to all variables studied for each
proficiency level. Neither sex of child nor center appeared
to affect these relationships.

Flexibility in code use -- the extent to which adults ad-
justed their speech to child speech characteristics -- was not
consistent across child proficiency levels. Syntactic measures
of adult speech were more strongly related with syntactic mea-
sures of speech of high and low proficiency children than of
middle proficiency children. Contextual features of verbal
interactions appeared to preclude flexible modification of
speech by adults in some situations and such situations arose
more frequently in interactions with middle proficiency chil-
dren. Flexible adjustment of code use to child proficiency did
not appear to result in more proficient speech by children.
Within the limits of the child-talk code, more complex speech
by adults was accompanied by more complex child speech.
There is a suggestion that adult speech may affect child
speech, although not to the extent that child speech affects
adult speech.

THE RELATIONS BETWEEN THE DEVELOPMENT OF SPATIAL AND SYNTACTIC TRANSFORMATIONS

Order No. 7920745

PAPAGEORGIOU, Mary Rollefson, Ph.D. University of Maryland, 1978. 149pp. Supervisor: John Eliot

The purpose of this study is to contrast the cognitive-umbrella and task-specific hypotheses about the development of language vis à vis the development of logical operations in young children. The question of interest is whether or not there exists a relation between linguistic and operational developments aside from that which is due to common maturational-intellectual factors. A finding of no relation between linguistic and logical abilities would support the task-specific hypothesis. A finding of such a relation would support the cognitive-umbrella hypothesis at one or two levels, determined by whether: (1) the relation is one of general correlation, but not causation (a weak cognitive hypothesis), or (2) one in which logical achievements serve as the necessary conditions for linguistic achievements (a strong cognitive hypothesis).

Measurement of two linguistic and two operational abilities, as proxies for general language developments and logical developments, provide the data to test these hypotheses. The abilities representing operational development are the spatial tasks of (1) mental rotation and (2) perspective-taking. The abilities representing linguistic development are the syntactic tasks of (3) active-passive voice transformations in third person, using proper nouns, and (4) active-passive voice transformations with shifts in first, second, and third person pronouns. The Fodor, Bever, and Garrett analogous mental rule criterion was used to select these tasks. Specifically, the solution to rotation is formally analogous to the solution to active-passive changes with third person proper nouns because both involve rotation of an object (sentence) around its own axis (verb) while the observer remains stationary. And, the solution to perspective-taking is formally analogous to active-passive changes with shifts in first, second, and third person pronouns because, in addition to the rotation of the object or sentence, both require the observer to mentally assume different points of view.

This study improves methodologically upon past studies of the cognitive-umbrella hypothesis by: (1) controlling statistically for extraneous effects, and (2) using a probabilistic method of latent class analysis, which is more appropriate to inferences about conditional relations than the deterministic methods used in previous studies.

This study was conducted with 161 randomly selected first through fourth grade subjects. Data were analyzed by two methods. Correlation analysis supported the weak cognitive-umbrella hypothesis. After partialling out the effects of age and IQ, the correlations between rotation and third person passives, and perspective and 1-2-3rd person passives were still significantly greater than zero. The amount of common variance, however, was only 3 and 7%, respectively. Latent structure analysis revealed three conditional relations supporting a strong cognitive model: (1) that rotation is necessary for third person passives, (2) that rotation is necessary for 1-2-3rd person passives, and (3) that perspective-taking is necessary for third person passives. Models specifying task-specific conditional relations were not supported.

The interpretation of the results is that the strong cognitive-umbrella hypothesis is supported, that spatial transformations are necessary for the acquisition of syntactic transformations. This interpretation is subject to cross validation on different subjects and different operational and linguistic tasks.

THE ACQUISITION OF FIVE SYNTACTIC STRUCTURES BY CHILDREN IN KINDERGARTEN THROUGH THE SIXTH GRADE AT TWO SOCIOECONOMIC LEVELS

Order No. 7916085

PARRISH, Katherine Eugenia, Ph.D. Southern Illinois University at Carbondale, 1978. 160pp. Major Professors: Dr. Nancy Quisenberry, Dr. Bruce Appleby

Purpose

The purpose of the study was to determine whether or not a sample of children from two different socioeconomic backgrounds in Cape Girardeau, Missouri, exhibit the same rate and level of acquisition of five syntactic structures (easy to see, promise, ask, and, although) as those studied by Carol Chomsky in Massachusetts. In addition, this study examined the relationship of socioeconomic status and sex to the acquisition of these five structures in children from ages five to twelve. The problem posed was whether or not research of this type might lead us one step closer to resolving the question, "At what age do children exhibit mastery of their target language?"

Methodology

The sample was selected from two public elementary schools in Cape Girardeau, Missouri, one located in a low socioeconomic area and the other in a middle socioeconomic section. Seventy Caucasians were chosen from each school, ten from each grade level (kindergarten through grade six), five males and five females from each grade. The children from the low socioeconomic group were selected and then matched by sex and age with seventy children from the high SES group. The parents' occupations were used to determine the socioeconomic status of the sample. The interviews, which were taped, were conducted during the spring of 1978. The questions used in the interview were composed by C. Chomsky (1969, 1972).

Order and Rate of Acquisition

When the results of this study were compared with those of Chomsky, no differences were found except in the acquisition of the connective and. Otherwise, the results support Chomsky's finding on the order and rate of the following constructions: easy to see, promise, ask, although.

Acquisition of structures by fifth and sixth grade children

Since neither of Chomsky's two studies extended beyond fourth grade children, this investigation was extended to the fifth and sixth grades to determine if there is an elementary grade at which all children in the sample appear to have mastered these five structures. The results show that all children in the Missouri sample in the fifth and sixth grades have not mastered the structures tested.

The relationship of socioeconomic status to acquisition

An analysis of the data shows that there is a significant difference between the low and high socioeconomic groups in their acquisition of the structures.

The relationship of sex to acquisition

An analysis of the data shows that there is not a significant difference between the males and females.

Conclusions

The conclusions and discussion focus on the reasons those particular syntactic constructions are considered targets for late acquisition and procedures that might be followed in future research to improve the testing instrument.

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THE DEVELOPMENTAL RELATIONSHIP BETWEEN COM-
PREHENSION AND PRODUCTION OF GRAMMATICAL MOR-
PHEMES IN THREE, FOUR AND FIVE-YEAR-OLD NORMAL
CHILDREN   Order No. 7921576

RIDER, Larry Paul, Ph.D. The University of Wisconsin-Madi-
son, 1979. 108pp. Supervisor: Associate Professor John F.
Miller

The present study investigated the relationships between the
comprehension and production of grammatical morphemes by
English speaking, three, four and five-year-old normal children.
A significant main effect for the comprehension and production
tasks was found. Subsequent analysis revealed linguistic per-
formance of children was found to be morpheme/task specific.
There was also a significant effect for the order which tasks
were presented to children (comprehension preceding/following
production). Children in all age groups consistently scored
lower on the production task when it was first task presented.
Comprehension scores were affected less by presentation order.
Only the youngest and oldest groups of subjects obtained higher
comprehension task scores when it was the second task pre-
sented.

There was an invariant order of responding to morphemes
across all developmental levels in both the comprehension and
production tasks. These two orders were not the same. Rank
order data appear to be dependent upon the methodology used to
generate them rather than reflective of general developmental
sequences expected of all children.

Growth curves of individual morphemes were found to be
unequal. The most significant differences were found for verb
forms which tended to show protracted growth patterns, as com-
pared to plural noun markers and prepositions which have more
accelerated growth curves.

THE DEVELOPMENT OF THE ABILITY TO SEQUENCE
NARRATIVE EVENTS AMONG PRESCHOOL CHILDREN
                                            Order No. 7923617

SALVADOR, Clotilde Licup, Ed.D. Columbia University Teach-
ers College, 1979. 150pp. Sponsor: Professor Patrick C. Lee

The present study purported to investigate two factors in
the development of sequential ordering of narrative events
among 3- and 4-year-old children: (1) the subskills necessary
to arrange story events sequentially, and (2) the influence of
training to develop these subskills.

The 144 subjects (72 boys and 72 girls divided evenly into
two age groups: 3.5 to 4 and 4.4 to 4.11 years) were selected
from eight publicly-funded day care centers and eight private
preschools in Manhattan and the Bronx. They were selected by
the respective teacher and/or director of each preschool in-
volved, based on their ability to speak English. The sample
was representative of lower, middle, and high socio-economic
communities. They were randomly assigned to "opinion" and
"sequence" groups and to one of six sequence patterns of the
animal stories.

Three sets of retention tasks, patterned after Brown's (1975b)
memory tasks (recognition, reconstruction, and recall), were
designed by the investigator and used to assess the individual
subject's ability to sequence narrative events. The training and
testing instruments were comprised of three animal stories
illustrated thus: the main character, the three objects that
interacted with the main character, and the three correspond-
ing interaction pictures.

The retention tasks demanded the following abilities: the
recognition of the correct sequence between two alternatives--
the correct and the incorrect; the reconstruction of the cor-
rect sequence of the object pictures presented in disarray; and
the recall of the correct sequence through retelling what hap-
pened first, next, and last in the story.

The sequence group was given two kinds of comprehension
questions--literal comprehension and interpretation ques-
tions--which stressed the correct sequence of the narratives.
The question-and-answer session that followed the listening
also was considered the training part of the study. The opin-

ion group, after listening to the story, was given two different
kinds of comprehension questions--the critical and creative
reading questions--which did not focus the subject's attention
on narrative sequence, but amounted to a time equal to that
given to the sequence group for the training session.

Analysis of data showed significantly greater retention by
the 4-year-olds as compared to the 3-year-old subjects.
A marginally significant difference in performance, favoring
the sequence over the opinion group, was found in reconstruc-
tion while a significant difference was evident in the recall
task. However, in recognition there was no significant differ-
ence between the two treatment groups, nor was there any sig-
nificant difference between the sexes in any of the retention
tasks. There was a significant positive correlation between
answering the literal comprehension and interpretation ques-
tions correctly and responding correctly to the retention tasks.
Finally, an analysis of the retention tasks indicated signifi-
cantly different difficulty levels among the tasks--recognition
was the easiest, reconstruction was the most difficult, and
recall was of intermediate difficulty.

The results indicated that the ability to sequence narrative
events among preschool children not only can be taught and
improved through training but also can be detected and de-
scribed in its early form.

Reference

Brown, A. L., Recognition, reconstruction and recall of nar-
   rative sequences by preoperational children. Child De-
   velopment, 1975b, 46, 156-166.

A CLASSIFICATION OF PRESCHOOL CHILDREN'S USES
OF MEANINGFUL LANGUAGE ON SELECTED CONCEP-
TUAL TASKS

UYEDA, Haruko Heddle, Ed.D. University of Southern Cali-
fornia, 1979. Chairperson: Professor Margaret E. Smart

Problem. Specific questions were formulated to determine
if there would be differences between groups across tasks and
for each conceptual task in: (1) percentage of total number of
utterances eight words or more; (2) mean utterance length of
five longest utterances; and percentage of utterances on
(3) "directive" function and "self-directing," "other-directing"
uses of language; (4) "interpretative" function and "reporting,"
"reasoning" uses; (5) "projective" function and "predicting,"
"empathetic," and "imaginating" uses; and (6) "relational"
function and "self-maintaining," "interactional" uses.

Procedure. Stratified random sampling technique was used
to select 20 subjects ranging in ages from 3.2 to 5.9 years and
their mothers from two economically different preschools. The
setting was arranged for 20 minute videotaping during which
each mother was instructed to focus a five-minute verbal inter-
action with her child on each of four differing tasks, ranging
from concrete to abstract. Transcriptions were made of video-
tapes to analyze children's meaningful functions and uses of
language. Each utterance was defined as a unit for analysis
and assigned to one classification of the coding system. Num-
ber of utterances eight words or more and mean length of five
longest utterances produced by each child were measured for
each task and across tasks for the groups. Similar compari-
sons were made for frequency of functions and uses of lan-
guage. Raw frequency counts for subjects were converted into
percentages of total utterances across tasks and per task to
compare the two preschools.

Selected Findings. (1) Total number of utterances eight
words or more and mean length of five longest utterances were
greater for the private preschool across tasks and for the more
concrete conceptual tasks. State preschool subjects produced
more utterances on the most abstract task. (2) State preschool
children's language was more "directive" in all tasks with
"other-directing" accounting for the greatest percentage for
both groups. (3) Greatest percentage of utterances produced
by both groups across tasks was found in the interpretative
function. State preschool subjects showed higher percentages

for the function and the "reporting" use of language with the highest frequency occurring in the most abstract tasks. (4) Little variation appeared between the groups across tasks and per task in the projective category which was the least frequently used. (5) Private preschool subjects used the relational function 50% more than the state preschool across tasks and per task with "self-maintaining" used more frequently.

Conclusions. (1) Conceptual difficulty of the tasks evoked differences in the functions and uses of language of children from two economically different preschools (2) Private preschool subjects used more and longer utterances in the more concrete tasks. (3) State preschool children used more "reporting" language as the conceptual tasks became more abstract. (4) The frequent use of directive and interpretative language is supported by research studies concerned with the relationship between egocentric thought and language. (5) The infrequent use of language denoting predicting, empathetic, interactional, and other higher levels of thinking may be accounted for by similar studies.

Recommendations. (1) Conceptual tasks such as the four in this study should be implemented to assist preschool and primary grade teachers to enhance their skills in appraising and fostering language development. (2) A wide range of tasks should be developed for stimulating adult-child dialogue and for encouraging a variety of uses of language. (3) From the present study, hypotheses should be generated to test the significance of the findings.

MATERNAL SELF-REPETITION AS A FUNCTION OF CHILD FEEDBACK   Order No. 7923907

WATSON, Linda Ritchie, Ed.D. Boston University School of Education, 1979. 133pp. Major Professor: Paula Menyuk

Despite the large body of research documenting the special prosodic, phonological, syntactic and pragmatic characteristics of language addressed to children, relatively little investigation has been directed to the question of why adults talk to children in the manner that they do. One hypothesis, the feedback model, attributes the features of input language to ongoing modifications made by a speaker to cues of inattention or noncomprehension from the listener. It is suggested that features such as high fundamental frequency, short utterance length and avoidance of pro-forms are strategies that may be invoked in conversations with listeners of any age to elicit attention or facilitate comprehension. The frequency with which babies and young children fail to attend or comprehend would presumably result in an elevated use of these strategies by adults interacting with them, thus explaining at least some of the observed characteristics of language input to children.

This study tests the validity of the feedback model. The data were drawn from a longitudinal series of videotapes of four mothers engaged in unstructured play with their toddlers. Six half-hour tapes, made during the child's one-word stage of development, were analyzed for each dyad. The interaction episodes of interest in this study were, specifically, those occasions on which the mothers repeated messages they had previously uttered to their children. These episodes of maternal self-repetition were examined for evidence regarding two predictions derived from the feedback model:

(1) At any given point in time, the modifications that mothers make in their self-repetitions are a function of differential feedback cues the children exhibit following their mother's original messages.

(2) The relation between child feedback and maternal modification of self-repetition remains constant across time.

The above predictions were tested for the maternal variables of pitch level, final pitch contour, utterance length, explicitness of semantic arguments, and gesture. A coding system was devised whereby maternal modifications of each of these variables could be described. The child's verbal and nonverbal feedback in each episode was coded as to whether it provided cues of child attention or inattention to each semantic constituent (verbs and arguments) contained in the mother's

original message. In addition, a composite variable of child attention was derived to indicate whether the child attended fully, partially, or not at all to the original maternal utterance.

Cross-tabulations of each of the variables measuring maternal modification of utterances with the variables measuring child feedback provide little evidence to support the feedback model. Two of the mothers appear to utilize rising contours to respond to cues of child inattention. However, similar strategies are not apparent in the data from the other two dyads.

Cross-tabulations of all other coded variables of maternal modification with child feedback do not support the predictions being tested. Qualitative evaluation of the episodes reveals that the mothers do take child feedback into account in modifying their self-repetitions, but the various strategies employed in responding to child feedback do not affect the variables of maternal speech studied here in a predictable direction. For instance, some strategies for responding to child cues of inattention or noncomprehension result in self-repetitions which are shorter than the original maternal utterance, while other strategies for responding to inattention or noncomprehension result in self-repetitions which are longer than the original utterance.

The results of this study suggest two routes to follow in future investigations. The first is in the direction of methodological alternatives to the present research. The second involves the exploration of alternative hypotheses to account for the characteristics of language input to children.

THE DEVELOPMENT OF PRAGMATIC COMPETENCE LEADING TO MASTERY OF BECAUSE, ALTHOUGH, IF, AND UNLESS BY FIRST, THIRD, AND FIFTH GRADE CHILDREN   Order No. 7917391

WING, Clara Stewart, Ph.D. University of Maryland, 1978. 126pp. Supervisor: Ellin K. Scholnick

Sentences convey not only information but also the speaker's evaluation of information. The conjunctions, because, although, if, and unless convey the speaker's beliefs about the association between two clauses (entailment) and about the truth of each clause (factivity). Understanding of these beliefs is a form of pragmatic competence.

Positive entailment implies a usual association between the events described in two clauses as:
(1) This is a kangaroo because it has a pouch.
(2) These would be kangaroos if they all had pouches.
(3) This is a kangaroo if it has a pouch.
Negative entailment implies an exception as:
(4) This is a kangaroo although it has long horns.
(5) This is a kangaroo unless it has long horns.
Factivity is positive when the speaker believes both propositions are true (1), (4). Counterfactivity (2) is the belief that both propositions are false, and nonfactivity (3), (5), is the belief that the truth of both is indeterminate. It was predicted that positive entailment would be mastered before negative entailment, and positive factivity before counterfactivity, with nonfactivity mastered last.

Subjects were 90 first, third, and fifth grade children, all of whom were given the same two tasks. The stimulus sentences for both the comprehension and the production tasks were of the same form as those above. For each task 25 sentences were used, each concerning a different animal. Five sentences tested each of the five target structures, because, if + subjunctive, if + indicative, although, and unless. On the comprehension task subjects heard prerecorded sentences and had to answer questions about the speaker's beliefs about entailment and factivity for each sentence. On the selection task subjects were given the beliefs about entailment and factivity and the necessary vocabulary. They had to select the correct conjunction-verb combination to complete a sentence expressing the given beliefs about entailment and factivity.

The data were analyzed in two ways. Analyses of variance were performed on correct responses, and both correct and incorrect responses were analyzed in terms of the kind of competence with entailment and/or factivity each reflected. Results from both tasks supported the prediction that conjunction-verb combinations expressing positive entailment would be easier

than those expressing negative entailment. On the comprehension task structures expressing positive factivity were easier than those expressing counterfactivity, which were easier than those expressing nonfactivity, as predicted. On the selection task nonfactivity was the most difficult concept, but positive factivity and counterfactivity were unexpectedly of equal difficulty.

Examination of the conjunction x grade interaction and of the types of both correct and incorrect responses made it each grade level showed gradual mastery of the pragmatics of entailment and factivity with the components of each concept mastered in the predicted order. Results from the comprehension task, on which children evaluated someone else's statements, showed more internal consistency in the order of difficulty of the conjunctions.

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