Boston University
School of Education

The Tenth Annual Boston University Conference on Language Development

Meeting Handbook
October 25, 26 and 27, 1985
Science Center

Boston University
School of Education

The Tenth Annual Boston University Conference on Language Development

Meeting Handbook
October 25, 26 and 27, 1985
Science Center

Organized by the students of The Program in Applied Psycholinguistics
Boston University School of Education

Chaired by Kyle Miller

Science Center, 590 Commonwealth Avenue, Boston, Massachusetts 02215

New Titles in Language Development from Ablex

THE ACQUISITION OF LITERACY

edited by *Bambi Schieffelin* and *Perry Gilmore*

The ethnographic perspective is used to carry out research concerned with how children make sense out of and give meaning to their literacy-related activities.

1985/in preparation **$19.95 (tentative)**

CONVERSATIONAL STYLE

Deborah Tannen

This book provides a basic approach to the linguistic analysis of conversation, building toward a theory of the aesthetics of conversation. It analyzes spontaneous talk among friends, pacing, turn-taking, and humor.

1984 **$16.95**

PLAY, LANGUAGE AND STORIES

edited by *Lee Galda* and *Anthony Pellegrini*

This volume examines the relations among play, language, narrative, and children's early literacy from a variety of perspectives: anthropological, sociolinguistic, psycholinguistic, and developmental/educational psychology.

1985/in preparation **$29.50 (tentative)**

THE DISCOURSE OF MEDICINE

Elliot Mishler

This is the first full-length study devoted to the "talk" between physicians and patients in a medical interview. Methods are developed to describe, analyze, and interpret the discourse and a critique and review of previous research is also included.

1985 **$18.95**

THE DEVELOPMENT OF ORAL AND WRITTEN LANGUAGE IN SOCIAL CONTEXTS

edited by *Anthony D. Pellegrini* and *Thomas D. Yawkey*

This volume focuses on the inter-relations between language and the social context in which it is developed.

1984 **$19.95**

DISCOURSE AND INSTITUTIONAL AUTHORITY

edited by *Sue Fisher* and *Alexandra D. Todd*

Language as an organized, patterned social activity is explored in the discourse occurring in three institutional settings: medicine, education and law.

1985/in preparation **$19.95 (tentative)**

LANGUAGE LEARNING AND CONCEPT ACQUISITION

edited by *William Demopoulos* and *Ausonio Marras*

This volume brings together recent work on learning by researchers in various disciplines who share an interest in the systematic study of cognition and the formal and semantic aspects of language acquisition.

1985/in preparation **$29.50 (tentative)**

Ablex Publishing Corporation
355 Chestnut St.
Norwood, NJ 07648

Welcome to the tenth anniversary of the Boston University Conference on Language Development. I would first like to thank everyone for attending the Conference. While the format of this year's Conference remains relatively unchanged, some innovative additions have been made:

1. a CHILDES Teach-In, organized by Catherine Snow (Harvard Graduate School of Education)

2. a special symposium on Universal Grammar, lasting a day and a half.

3. a special symposium on Language and Blindness, organized by Elaine Anderson (USC) and

4. an extension of the Conference through Sunday afternoon, making an additional three sessions.

In addition to the above-mentioned special symposia, we will also hold a symposium with invited papers and a reviewed paper in Neurolinguistics and Language Disorders. The invited speakers for this symposium are Susan Curtiss from UCLA; Dorothy Aram from Rainbow Babies and Children's Hospital; and Rachel Stark fom the Kennedy Institute. I am also pleased to have Dan Slobin from the University of California, Berkeley as our keynote speaker.

This Conference is supported by the Boston University School of Education, the Applied Psycholinguistics Program, and the Language Behavior Program. The Conference is made possible through the efforts of students from these two programs. I would like to thank students and faculty of each program for their valued support and useful suggestions. In particular, Professor James Paul Gee, in his third year as Conference Advisor, was, as always, an invaluable source of support and advice. Cynthia Ballenger was also of inestimable help as my assistant, Program Committee Chairperson, and soft shoulder. Also, Dean Paul Warren and his staff have continued to give the Conference their support. Special thanks must be given to the students who contributed their precious time and energy: Linda Naimey, Toni Deser, and Robin Gaines, Program; Jennifer Johnston and Barbara Gerner de Garcia, Publicity; Peggy Hoyt, Advertising and Exhibits; Sara Gaar, Facililties; Silvia Martinez, Registration. I would also like to thank everyone who covered the office during the past year.

I hope everyone finds the weekend planned to be a rewarding and stimulating time. Again, welcome to the Conference!

The Conference wishes to thank the following members of the Review Committees for their aid in the selection of this year's papers:

Andy Barss (Massachusetts Institute of Technology)
Jean Berko Gleason (Boston University)
Janet Cohen Sherman (Massachusetts Institute of Technology)
Jill de Villiers (Smith College)
David Dickenson (Tufts University)
Melanie Fried-Oken (Portland State University)
James Paul Gee (Boston University)
Jane Grimshaw (Brandeis University)
Francois Grosjean (Northeastern University)
Robert Hoffmeister (Boston University)
Judy Kegl (Northeastern University)
Jacqueline Liebergott (Emerson College)
Elise Masur (Harvard Graduate School of Education)
Lise Menn (Boston University)
Paula Menyuk (Boston University)
Judy Mounty (Boston University)
Ellen Prince (University of Pennsylvania)
Maria Serpa (Lesley College)
William Stokes (Lesley College)
Denny Wolf (Harvard Graduate School of Education)
Jeni Yamada (Massachusetts General Hospital)

Contents

Foreword 3

General Information ... 7

Conference Program ... 10

Abstracts 19

Directory of Conference Speakers 57

Selected Titles From Cambridge

Language Development in the Preschool Years

Gordon Wells

A detailed account of the common trends in language development that were found in a large study of children one to five. Wells specifies the ages at which linguistic categories emerged and the frequencies with which they were used at successive ages. He considers possible explanations for the developmental sequence identified, including environmental factors and the influence of adults.

Language at Home and at School 2

Hardcover $59.50 Paperback $19.95

Foreign and Second Language Learning:

Language acquisition research and its implicatons for the classroom

William Littlewood

Littlewood examines the most important recent studies and ideas about how people acquire first languages, and what the implications of these are for teaching second languages. In this clearly written book, the author also considers earlier ideas of language theory, which enables the reader to evaluate the evidence and consider the relevance of research to teaching and learning languages.

Cambridge Language Teaching Library

Hardcover $22.95 Paperback $7.95

Sign Language

The Study of Deaf People and their Language

Jim Kyle, Bencie Woll

With Gloria Pullen and Frank Maddix

The authors discuss the rich language development of the deaf, the history of sign language use, its social aspects, the language acquisition of deaf children, and sign language learning from a psychological perspective. They conclude with an examination of how sign language research may be applied to education.

Hardcover $49.50

Functional Syntax and Universal Grammar

William A. Foley and Robert D. Van Valin, Jr.

An integration of the study of linguistic form with the study of language use and meaning. This book shifts attention from formal theories of the structure of language and develops a functional theory that considers the needs of human communication that all languages must satisfy. Includes examples from a wide range of languages.

Cambridge Studies in Linguistics 38

Hardcover $59.50 Paperback $19.95

The Units of Language Acquisition

Ann M. Peters

The author examines how children discover their first "words", or what she calls "units of speech", and what influence such factors as age, style of parental interaction, and language typology have on the discovery process. She argues that children's "words" may not always be congruent with adult expectations.

Cambridge Monographs and Texts in Applied Psycholinguistics 1

Paperback $12.95

At bookstores or from

CAMBRIDGE UNIVERSITY PRESS

32 East 57th Street, New York, NY 10022

800-431-1580 (outside New York State and Canada)

MasterCard and Visa accepted

General Information and Conference Program

GENERAL INFORMATION

REGISTRATION

Registration will be held Friday, October 25 from 1:30 to 5:00 p.m. in the School of Education lobby, and from 6:30 to 8:30 p.m. in the Science Center lobby; Saturday, October 26 from 8:30 a.m. to 12:30 p.m. in the Science Center Lobby; and Sunday, October 27 from 9:30 a.m. to 12:30 p.m. in the Science Center Lobby.

LOCATION

On Friday afternoon, all sessions will be held on the first floor of the School of Education at 605 Commonwealth Avenue. Between Friday evening and Sunday afternoon, all sessions will be held at the Science Center, 590 Commonwealth Avenue.

KEYNOTE ADDRESSES

Professor Dan Slobin, University of California, Berkeley, will deliver the keynote address at 8:30 p.m. on Friday, October 26 in Room 107 of the Science Center.

RECEPTION

A wine and cheese reception will be held in the Science Center Lobby following Professor Slobin's address.

NEW ENGLAND CHILD LANGUAGE ASSOCIATION (NECLA)

NECLA will convene its annual business meeting at 1:00 p.m. on Saturday in Room 111 of the Science Center. Please feel free to bring your lunch.

PUBLISHERS' EXHIBIT

There will be a publishers' exhibit of books and publications on Saturday and Sunday in the Lobby of the Science Center.

SIGN LANGUAGE INTERPRETERS

Sign language interpreters will be available for all sessions. Please inquire at the Registration Desk when you arrive.

ADDITIONAL HANDBOOKS

Additional handbooks may be purchased for $4.00 each (checks only!!!) at the Registration Desk. We are sorry, but we cannot replace lost handbooks free of charge. A limited number of the 1977, 1978, 1979, 1980, 1981, 1982, 1983, and 1984 handbooks are also available for purchase at $3.00 each. A complete set of handbooks is available for $20.00.

DAY AND TIME		SED 130	SED 140	
Friday	2:00		Second Lang Acq/Biling	
	2:30	Discourse		
		SC 107	SC 111	SC 113
Saturday A.M.	9:00	Symp on U.G.	First Lang Acq.:Theory	Symp on Lang And Blindness
	10:00			
Saturday P.M.	2:00	Symp on U.G. II	Symp on Neuro-ling and Lang Dis	First Lang Acq: Interaction
Sunday A.M.	10:00	Symp on U.G. III	Sign Lang and Deaf Ed	Reading
Sunday P.M.	2:00	First Lang Acq: Cross-Ling Studies	First Lang Acq: General	Language Disorders

TENTH ANNUAL BOSTON UNIVERSITY CONFERENCE ON LANGAUGE DEVELOPMENT

October 25, 26 and 27, 1985

FRIDAY AFTERNOON

Second Language Acquisition/Bilingualism

Chair: Maria Brisk, Boston University

2:00 p.m. Morphological maturation and the writing needs of Chicano college students. (Kathleen Ferrara, University of Texas at Austin)

2:30 p.m. Evaluation of minority-language children by native speakers. (Martha Crago and Betsy Annahatak, McGill University)

3:00 p.m. Second language learning strategies and related assessment issues. (Rebecca L. Oxford-Carpenter and Gnarity K. Penn, Center for Applied Linguistics)

3:30 p.m. Two styles of second language learning: child preference and adult input. (Myong K. Kim, Harvard University)

4:00 p.m. The interaction between native language and target language in the perception of a new phonemic contrast: a comparison of Japanese and Cantonese speakers learning English. (Elizabeth Henly and Amly Sheldon, University of Minnesota)

4:30 p.m. A comparative study of children's and adult's acquisition of tone accents in Swedish. (Beata Schmid, Brown University).

Discourse

Chair: Jim Gee

2:30 p.m. Linguistic encodings of temporal relationships in children's narratives. (Deborah Hicks, Harvard Graduate School of Education)

3:00 p.m. The development of verbal planning for narrative recall. (Carolyn Panofsky and Vera John-Steiner, University of New Mexico)

3:30 p.m. Contrastive use of tense marking in narration: "Aspect before tense." (Michael Bamberg, Free University of Berlin)

4:00 p.m. Sentence connectors and French children's monologue performance. (Harriet Jisa, University Lyon 2)

4:30 p.m. Potential Continquent Query Responses in stage I-V Children. (Dina Anselmi, Trinity College; Michael Tomaselli, Emory University; Jill Spencer, Trinity College).

FRIDAY EVENING

8:00 p.m. Welcoming Address
Opening Remarks
Introduction of Keynote Speaker

8:30 p.m. Keynote Address: **Developmental paths between form and meaning: Crosslinguistic and diacronic perspectives (Dan Slobin)**

SATURDAY MORNING

Symposium on Language and Blindness

Chair:

9:00 a.m. Speakers to be announced.

Symposium on Universal Grammar

Chair:

9:00 a.m. Why are there so few linguistic universals? (Michael Maratsos, University of Minnesota)

9:30 a.m. Acquisition and linguistic methodology. (Alec Marantz, Harvard)

10:00 a.m. The place of grammar in language acquisition. (Ruth Berman, Tel Aviv University)

10:30 a.m. The procedural solution to the projection problem. (Janet Dean Fodor, University of Connecticut)

11:00 a.m. Retreat routes. (Janet Randall, Northeastern University)

11:30 a.m. Bounding and grammar types in acquisition. (Helen Goodluck, University of Wisconsin, Madison)

12:00 p.m. Title to be announced. (Edwin Williams, U. Mass, Amherst)

First Language Acquisition: Theoretical

Chair: Andrew Barss, M.I.T.

9:00 a.m. Subject, topic and agency: Early passivization in Bantu. (Katherine A. Demuth, Boston University)

9:30 a.m. A problem about positive and negative evidence in language acquisition. (Virginia Valian, Wellesley College)

10:00 a.m. The contribution of core grammar to the acquisition of complex sentences. (Nina Hyams, University of California, Los Angeles)

10:30 a.m. Performance factors in children's sentence production. (Mineharu Nakayama and Stephen Crain, University of Connecticut)

(SATURDAY MORNING)

11:00 a.m. The acquisition of English case. (Anne Vainikka, University of Massachusetts, Amherst)

SATURDAY AFTERNOON

Symposium on Neurolinguistics and Language Disorders

Chair: Paula Menyuk, Boston University

2:00 p.m. Invited Paper: Title to be announced. (Susan Curtiss, University of California, Los Angeles)

2:45 p.m. Invited Paper: The effect of unilateral left or right brain lesions on children's language development. (Dorothy M. Aram, Case Western Reserve University)

3:30 p.m. Invited Paper: Title to be announced. (Rachel Stark, John F. Kennedy Institute)

4:15 p.m. Long-term linguistic consequences of traumatic head injury in childhood and adolescence. (J.H.V. Gilbert, G. Mitchell, L. Brown, and P. Chow, University of British Columbia)

Symposium on Universal Grammar II

Chair:

2:00 p.m. Semantics after syntax: The derivation of thematic roles. (Thomas Roeper, U. Mass, Amherst)

2:30 p.m. On the role of thematic relations in degree-0 learning. (Wendy Wilkins, Instituto Nacional de Antropologia e Historia)

3:00 p.m. Title to be announced. (Jane Grimshaw, Brandeis University)

3:30 p.m. On the acquisition of parametric values of grammar and lexical learning. (Kenneth Wexler, University of California at Irvine)

4:00 p.m. Parameters of case and theta assignment: Implications for acquisition. (Lydia White, McGill University).

4:30 p.m. Levels of affixation and the Lexical Learning Hypothesis. (Hagit Borer, University of California at Irvine)

First Language Acquisition: Parent-Child Interaction

Chair: Catherine Snow, Harvard Graduate School of Education

2:00 p.m. Mothers' strategies for eliciting child verbalizations. (Ann Rogers-Warren, Gillian Blair, and Louise Neilsen, Vanderbilt University)

2:30 p.m. Joint Attention and Early Language Development. (Michael Tomasello and Michael J. Farrar, Emory University)

(SATURDAY AFTERNOON)

3:00 p.m. Maternal speech to eight month-old infants: a study of adolescent and older mothers. (Lori Van Houten and Cynthia Garcia, Brown University)

3:30 p.m. Individual variation in how others and children talk about the past. (Susan Engel, City University of New York)

4:00 p.m. Clauses and perceptual units for prelinguistic infants. (Kathy Hirsh-Pasek, Haverford College, Deborah Kemler Nelson, Swarthmore College, Peter Juscyzk, University of Oegon, Kimberly Wright, Swarthmore College, and Benjamin Druss, Swarthmore College)

4:30 p.m. The acquisition order of particles in early language development Japanese children. (Keiko Koda, University of Illinois)

SUNDAY MORNING

Reading

Chair: David Dickinson, Tufts University

10:00 a.m. Repair in the speech of poor and normal readers. (Rose-Marie Weber, SUNY at Albany)

10:30 a.m. Speech shadowing skill in good and poor readers at three grade levels. (Nancy Jordan, University of N. Carolina at Chapel Hill)

11:00 a.m. Easy to read, Hard to read: The psycholinguistics of readability. (Alice S. Horning, Oakland University)

11:30 a.m. Sex differences in sixth grade children's letters in an electronic mail system. (Courtney Cazden, Harvard Graduate School of Education)

Symposium on Universal Grammar III

Chair:

10:00 a.m. Child Language vs. adult language: Parametric differences? (Howard Lasnik, University of Connecticut)

10:30 a.m. On the notion "parameter" in universal grammar: its definition and consequences. (Barbara Lust, Cornell University)

11:00 a.m. The acquisition of structural constraints on anaphora. (Stephen Crain and Cecile McKee, University of Connecticut)

11:30 a.m. Constrained productivity: A theory of the acquisition of subcategorizations. (Steven Pinker, MIT)

Sign Language and Deaf Education

Chair: Bob Hoffmeister, Boston University

10:00 a.m. Characteristics of the written English of deaf children and adults (Madeline Maxwell, Gregory Whittemore, Sharon Doss, Dana Kovarsky, and Helen McCaffrey, University of Texas)

ABSTRACTS

* * * * *

Adele Abrahamsen, Mary Ann Romski and Rose Sevcik, Georgia State University and Emory University, Atlanta

Effects of Symbol Training on Other Domains of Development

Nonspeech language intervention programs often provide the first suitable match of symbol acquisition environment to learner for severely and profoundly retarded persons. It is important to investigate the resulting developmental progress, which may involve other domains in addition to acquisition of the symbols themselves, and to compare this to the development that occurs when such a match is lacking. In the present study, five retarded adolescents participated in an intervention program using noniconic visual symbols at computer-linked keyboards. Three were successful. All five intervention subjects were videotaped interacting with a teacher and objects (no keyboard present) before training and a year later, as were five control subjects. Episode duration coding yielded measures of total time and number of occurrences for social vs. nonsocial action and attention. Both groups showed an increase in sociability, but only the three successful symbol learners increased their rate of attentional shift. These learners (and one control) also showed improvements in primitive intentional communication.

* * * * *

Dorothy M. Aram, Case Western Reserve University

The Effect of Unilateral Left or Right Brain Lesions on Children's Language Development

The language development of children with early unilateral left or right hemisphere lesions is the focus of a longitudinal study in which lesioned children's language is compared to matched controls. This presentation reports findings related to spoken syntax and lexical retrieval. Based on analyses of spontaneous language samples, left hemisphere lesioned subjects performed more poorly than did their controls on almost all measures of overall, simple and complex sentence structures. In contrast, right lesioned subjects performed similarly to their controls on most measures, except for a tendency to make more errors in simple sentence structures. On two measures of lexical retrieval, The Cued Word-Retrieval Test and the Rapid Automatized Naming Test, children with left hemisphere lesions were significantly poorer in lexical retrieval than their controls as evidenced by significantly longer latencies and more errors. These differences occurred across a range of semantic categories and when semantic or rhyming cues were provided but not in response to visual cues. Right hemisphere lesioned children performed comparably to matched controls except in response to rhyming cues, where they produced a significantly

greater percent of naming errors, although latency of response was not impaired. These findings will be discussed in relationship to early hemispheric specialization for language.

* * * * *

Michael Bamberg, Tong Ji University, Shanghai

Constrastive Use of Tense Marking in Narration: 'Tense before Aspect'

The present study reports on the function of tense contrasts in narratives. Narratives based on a picture-book were elicited from 25 German monolingual children of 3 age-groups (3 1/2, 5 & 9) as well as adults. The narrative productions were analyzed in terms of 1) tense forms, and 2) meanings according to 4 parameters: (a) temporal sequencing, (b) aspectual marking, (c) current relevance, and (d) linking propositions thematically. Findings indicate that while narrators of all ages contrasted between Perfect and Past tenses in their tellings, the function of the tense shifts differs.

The findings indicate that children break into the plurifunctional use of tense forms in narratives by making use of the aspectual value of the tense forms in order to relate events to one another. In a second phase, the temporal value gets "added on," so that ultimately the complex discourse function of tense marking can be employed. These findings will be related to other studies concerning the relation between grammatical forms and discourse functions.

* * * * *

Marjorie Beegnly, Bedonna Weiss, Dante Cicchetti, Harvard University

Structural Parallels Between Symbolic Play and Language in Children with Down Syndrome

The purpose of this study was to describe structural parallels observed between aspects of symbolic play and language in a cross-sectional sample of children with Down syndrome. These correspondances were then compared to those reported for normally-developing children in the play literature. 35 children with Down syndrome were videotaped with their mothers during a 30-minute free play situation with a standard set of toys. All children had normal vision and hearing; average CA = 48 mos., average MA = 30 mos. Instances of symbolic play were scored using McCune-Nicolich's 5-level system and assessed for density and complexity. Children's MLU, type-token ratios, utterance frequencey, and word position patterns (Braine, 1976) were also assessed. Results support prior reports of structural parallels between symbolic play and language at several devlopmental points; (1) single words/single schemes; (2) initial combinations in both

domains; and (3) the use of hierarchical symbolic structures in both domains. Findings have both theoretical and practical implications.

* * * * *

Ruth A. Berman, Tel Aviv University

The Place of Grammar in Language Acquisition

This title deliberately echoes that of a paper of Dan Slobin's of a few years ago called "The Place of Language in Language Acquisition." I will argue, basically, that initially the child starts out in a pre-grammatical phase which is much the same across languages and across children; then moves on to the phase of grammar acquisition which feeds on universal principles and properties of language in general combined with major features of the particular language which is to be the mother tongue; and that, finally, language aquisition and use become less and less universal as factors relating to the particular properties of the individual language, learner, and situation come to predominate.

* * * * *

John Neil Bohannon III, Virginia Polytechnic Institute and State University

Metalinguistic Awareness and Cognitive Development

The present study was performed to test the hypothesis that metalinguistic awareness is an independent ability that relates to both natural language processing and cognitive development. 27 Kindergarteners, 26 first graders, and 27 second graders were individually tested on four different tasks: the PPVT, sentence imitation, word order awareness, and Piagetian conservation of quantity. The word order awareness task required children to assign normal or scrambled sentences to one of two speakers, "Norman" or "Ralph" (Bohannon, 1976).

A multiple partial regression, removing the linear effects of both age and PPVT from the other measures, was performed to remove any spurious relationships among the dependent measures that may have been due to their age or PPVT related maturational components. The resultant partial correlation between Piagetian conservation and metalinguistic ability ($r = .359$, p .001), revealed that metalinguistic skills related to the development of conservation, independent of age and PPVT. The word order awareness task also related to the sentence imitation scores ($r = .370$, p .001), independent of age and PPVT. Further analysis removing alternatively, conservation, word order awareness, and sentence imitation revealed that conservation and sentence processing are only related through the mediating effects of metalinguistic

awareness. In summary, the development of concrete operational thinking seems linked to the development of metalinguistic awareness independent of age or vocabulary growth. Moreover, the awareness of word order was significantly related to language comprehension independent of the other measures.

* * * * *

Hagit Borer, University of California, Irvine

Levels of Affixation and the Lexical Learning Hypothesis

The purpose of this paper is to argue that all interlanguage variation, and thus all language learning, is lexical. This hypothesis, called The Lexical Learning Hypothesis, is given in (1):

1. Only lexical material is learned. So-called parametric variations are the result of the interaction of UG with an arbitrary set of (possible) lexical and morphological properties associated with lexical items.

An obvious example of what is intended by (1) is the array of facts associated with the English complementizer for, that is assumed to assign Case within the GB framework. Subsequently, we get overt infinitival subjects in English, but not in languages which do not have such a complementizer. Note that no principle of grammar is invoked, but rather, we have here a fixed UG, interacting with a lexical property. Yet another example is provided by (some) accounts of the so-called pro-drop parameter, where it is assumed that the availability of null-subjects is related to the "richness" of the inflection node, clearly a morphological fact.

Our view contrasts with a particular parametric view, which we will refer to as the "switch" view. According to the "switch" view UG is the disjunction of many grammars, in that it is an underdetermined mechanism. It contains options which need to be determined ("switched on"). In our view, there is a unique GB, and at best, some languages, depending on their lexical and morphological component, might be using a subpart of it.

Note that a-priori, if all burden of learning can be placed on the lexicon, leaving UG unchanged and one, it would be preferable, as the lexicon is clearly a learned component.

What are the (relevant) possible lexical and morphological properties, which might result in interlanguage variation? Consider some possibilities:

2. A language may miss the morphological instantiation of an inflectional feature. (e.g., a language without case (morphological), a language without agreement/aspect/tense/ morphemes, etc).

3. A language may select +/- anaphoric feature for some categories, while other language select different values for that same catefory (e.g., +/- anaphoric TNS, +/- anaphoric AGR).

4. An affix may select differect levels of affixation in different languages (e.g., affix hopping applies in different levels in different languages, or following Borer and Wexler (1985), passive affixes may attach at different levels).

In the paper we will investigate some language variation which are linked to these and other possibilities, lingering primarily on the predictions made by the one in (4). We will further show that child-data is compatible with the Lexical Learning Hyphothesis.

* * * * *

Courtney B. Cazden, Harvard Graduate School of Education

Sex Differences in Sixth Grade Children's Letters in an Electronic Mail System

When computers and word processing software were introduced into a sixth grade classroom of fourteen children in February, children took advantage of the electronic mailbag potentiality to write spontaneous personal letters to their classmates. The resulting set of 100 letters is an unusual corpus of pre-adolescent verbal expression in a classroom setting -- neither assigned nor evaluated by the classroom teacher, and yet not negatively sanctioned as "passing notes" would be; and available to researchers in its entirety in chronlogical order on the computer discs (with the full knowledge of the children). We have analysed the set of letters for thematic content and pragmatic function.

Boys wrote only to boys and girls to girls; there is not a single cross-sex letter in the corpus. Thus, over the course of the spring semester, the classroom divided into two separate speech communities (Maltz and Borker, 1982) with respect to the use of this medium. This separation may help to account for the striking sex-differences in letter content that will be reported.

* * * * *

Robin S. Chapman, Jon F. Miller, Marilyn Kertoy, and Elizabeth Crais, University of Wisconsin, Madison

Children's Comprehension of Motion Verbs: A Computer-Paradigm for Testing the Roles of Prototypes and Semantic Features

A new paradigm for testing children's recognition comprehension of

motion verb meaning was developed in which the computer presented pairs of animated events on a horizontal split screen, accompanied by computer-controlled recorded questions, in random order. Response choice and time were recorded by touch screen. The testing method was successful with children as young as two.

The computer test paradigm was used to study the role of featural contrasts (1, 2 or 3) and prototypicality of the referent in determining accuracy and speed of children's and adults' understanding of the motion verbs walk, run, roll, and skate combined with the directional particles up and down. Pairs of cartoon animations were presented with neutral backgrounds or in more prototypic versions with hills as ground lines. Each event was paired with every other as distractor and with itself in a prototypic vs neutral version. Nine subjects at each of ages 2, 4, 6, 8 and adulthood participated. Results indicated that only two year olds had difficulty understanding the items; but prototypic preferences developed far more slowly, suggesting that core meaning of motion verbs does not include prototypic elements of ground. The number or kind of semantic features distinguishing target and distractor did not affect accuracy or speed of choice.

* * * * *

Soonja Choi, State University of New York, Buffalo

Transparency and pragmatics in the Acquisition of Negation

Our cross-linguistic study on the acquisition of negation in English, French and Korean led us to examine two of the operating principles suggested by Slobin (1973): 1) transparency between form and meaning and 2) saliency of postposed markers. Results of the longitudinal studies of two English-speaking, two Korean, five French-speaking French children show that the degree of transparency and the rate of acquisition of negative markers are correlated. We compared MLUs and ages when children reached productivity. French-speaking children acquired the ubiquitous syntactic marker "pas" at MLU 1.6 (Age 2;1), Korean children acquired the preverbal "an" at MLU 2.2 (Age 2;3) and English-speaking children acquired "can't, don't and won't" as unanalyzed wholes during the early stage which suggest that the contracted negative marker [nt] is opaque.

Analysis of morpheme orders shows that all the children studied acquired the [neg + (N or V)] order first and overgeneralized the pattern in all negative utterances. We suggest that pragmatic factors such as focus and informativeness play a role in morpheme ordering and that one cannot generalize the operating principle of the saliency of postpositions to all grammatical markers.

* * * * *

Phil J. Connell, Northwestern University

Differences Between Normal and Language Disordered Children: A Comparison of Modelling and Imitation Teaching Procedures

The purpose of this study was to determine whether language disordered children have a preferred language learning style that is different from that of normal children. Forty normal and 40 language disordered children were taught an invented morpheme using either modelling or imitation teaching procedures. The two groups of children significantly differed in the amount of generalization that resulted from the two procedures. The normal children generalized more following modelling teaching while the disordered children generalized more following imitation teaching. The results indicate that language disordered children prefer to learn rules from procedures that are not very common in parent-child interaction. This suggests that effective teaching procedures need not emulate natural occurrences.

* * * * *

Martha B. Crago and Betsy Annahatak, McGill Univesity

Evaluation of Minority-Language Children by Native Speakers

Assessment of the skills of minority-language children in their native language has significant diagnostic, treatment and research implications. However, assessment in most of the minority languages used in North America is severely restricted by a lack of suitable testing material, narrative data and trained personnnel. In this study an untrained Inuit teacher rated Inuktitut language samples collected from 16 school-aged children. Her ratings were compared to grammmatical and lexical length - complexity measures made on the same samples. The ratings were highly correlated with certain length and grammatical complexity indices. Age was not significantly correlated with the ratings. Judgements of younger children were based on length, while those of older children were based on complexity. The implication of this study is that untrained native speakers have the potential to be valuable and useful adjuncts to professionals in assessing minority-language children.

* * * * *

Stephen Crain and Cecile McKee, University of Connecticut, Storrs

The Acquisition of Structural Constraints on Anaphora

The structural factors governing coreference have engendered much theoretical and experimental research. Our purpose is to show children's early mastery of the structural constraints on backwards anaphora. Specifically, we present evidence of their application of c-command (as in Condition C of Binding Theory), obtained in three experiments demonstrating that children accept backwards anaphora in sentences where a pronoun precedes but does not c-command a lexical NP (as in (1)), and also that they reject backwards anaphora in sentences where a pronoun precedes and c-commands a lexical NP (as in (2)).

(1) After it fell off the table, the ball rolled away.

(2) He ate the hamburger when the Smurf was in the fence.

Several researchers (e.g., Tavakolian (1978), Solan (1983)) have interpreted responses by children as old as 5-6 in act-out tasks as reflecting a purely linear restriction on anaphora. First, we shall argue that this interpretation of these children's responses is unwarranted and, second, we shall provide evidence that 3-5 year old children accept and reject anaphoric readings of sentences according to the same structural constraints that characterize the adult grammar.

* * * * *

Gary Cziko, University of Illinois, Urbana-Champaign

Testing the Language Bioprogram Hypothesis: A Review of Children's Acquisition of Articles

One component of Bickerton's language bioprogram hypothesis was evaluated empirically by reviewing studies of children's comprehension and production of definite and indefinite articles. Seven studies reporting naturalistic and experimental data in English and French were reviewed. It was found that two of these studies provide empirical support for the hypothesis that children are universally sensitive to the specific-nonspecific distinction of referential meaning. Furthermore, the findings of all studies were generally consistent with a four-stage hypothesis of the acquisition of English and French articles characterized by (a) the use of the indefinite and/or definite articles(s) for specific referents and zero article for both nonspecific referents and naming, (b) the use of the indefinite article for nonspecific referents and the definite article for specific referents whether or not they are presupposed, (c) an increase in the correct use of the indefinite article for specific, nonpresupposed referents with a concomitant decrease in the correct use of the definite article for specific, presupposed referents, and finally, (d) the correct use of the definite and indefinite articles.

* * * * *

Katherine A. Demuth, Boston University

Early Passivization in Bantu

Comprehension and production studies have repeatedly shown that passive constructions are understood and used spontaneously quite late in the development of language, around 4 - 5 1/2 years. It is with great interest, then, that we find a variety of passive constructions in the data from 4 Sesotho speaking children between 2 - 4 1/2 years. This can be explained by considering the use of passive constructions in adult speech, where there is a hierarchical preference of subjects/topics for features person human animacy. After an examination of the Sesotho acquisition data we conclude that the reported late use and comprehension of passive constructions in English may have little to do witn cognitive factors. Rather, it may be largely influenced by how a language encodes subjects and topics when they are not agents. Further research on such languages should provide evidence to test this hypothesis.

* * * * *

Susan Engel, CUNY Graduate Center

Individual Variation in How Mothers and Children Talk About the Past

This study examines the relationship between maternal style and children's ability in talking about the past. Four dyads were followed from the time the children were 19 - 24 months. Two maternal styles were identified in conversations about the past. Two of the mothers used a practical remembering style. This was characterized by past references that were brought up in the service of ongoing activitiy. Practical rememberers included few details, had short conversations, mentioned the past infrequently and did not integrate their children's contributions. Reminiscing mothers' past talk occurred more frequently and was characterized by a high degree of dialogic interacton, richness of detail and sequencing within the narrative. Children showed a corresponding difference in their ability to contribute new information to these conversations. Children of reminiscing mothers contributed an average of 2 items of information at 19 months and 9 items at 24 months, while children of practical rememberers contributed an average of less that 1 item at 19 months and about the same at 24 months. Overall these data provide support for the claim that maternal input is central to a child's ability to acquire this form of talk.

* * * * *

Kathleen Ferrara, University of Texas, Austin

Morphological Maturation and The Writing Needs of Chicano College Students

Analysis of the college compositions of 25 Chicano freshmen indicates that Spanish is a relatively minor cause of interference and that deviations from standard English seen in written Chicano English are due to developmental and dialectal sources, supporting Wald's (1981) claim that stages in the acquisition of English have become norms of English for some segments of the Mexican American population. Three categories of distinctive errors are identified: 1) syntactic subcategorization errors; 2) morphological errors involving violations of Level Ordering; 3) pronunication-based errrors.

Chicano writers often erroneously treat 2 synonymous words as allowing identical syntactic contexts, incorrectly observing subcategorization restrictions, incorrectly applying level 1 derivational affixes after level 2 affixes, violating the no-backtracking constraint of Level Ordering (Kiparsky, 1982, 1983), displaying oral-based nature of writing errors in 5 subareas of pronunciation. There are implications for morphological theory and assessing the writing needs of Hispanic students.

* * * * *

Paul Fletcher, Michael Garman, Michael Johnson, Christina Schelleter, Louisette Stodel, University of Reading

Indices of Normal Language Development and the Characteristics of Specific Language Impairment

The paper briefly outlines our methodology for a study of the language of 72 3, 5 and 7 year old British children which constitutes the first part of a large sample study to provide a normative base for an assessment procedure for use by speech-language pathology professionals. We then detail the (relatively few) grammatical and lexical indices which discriminate the age-groups, and address the issue of their utility in characterizing the language behaviour of a group of school-age children with specific language-impairment (as defined by criteria similar to those of Stark & Tallal). While it is true that the language-impaired children do evidence language behaviour like that of younger normal children (in terms of important categories like verb premodiciation and inflection, lexical verb type, and complex sentence formation) there are aspects of the discourse structure of these children that our approach may not be capturing. The implications of this for our analytical scheme are discussed, and modifications suggested.

* * * * *

Janet Dean Fodor, University of Connecticut

Why Learn Lexical Rules?

Baker (1979) argued against the existence of lexically governed transformations on the grounds that, in the absence of negative data, learners would formulate overgeneral rules that disregard special conditions and exceptions. Recently there has been a trend away from Baker's conclusion, because children do sometimes overgeneralize lexical phenomena, and because their eventual mastery of the adult language then indicates that they do have access to negative data or some substitute for it. I will draw a distinction between rules that predict the existence of constructions, and rules that predict the form they would have if they existed. (This may be what linguists have intended by the distinction between productive rules and redundancy rules, but the latter concept is dangerously unclear.) Children almost certainly acquire form-predicting lexical rules, at least in the case of widespread alternations, but there are several reasons for challenging the claim that they formulate existence-predicting lexical rules. It is not clearly supported by the frequency of their innovative productions. More importantly, the mental processing required for the construction of such rules (unlike form-predicting rules) is quite disproportionate to the benefits they would bring. Finally, the assumption that learners favor such rules makes it inexplicable that natural languages tend to favor very minimal lexical generalizations.

* * * * *

Susan H. Foster, Northern Arizona University

Formal and Functional Explanations for the Acquisition of Possesive Constructions: A Cross-linguistic Analysis

This paper presents a cross-linguistic analyisis of the acquisition of possessive constructions by children learning French, Spanish, German, Hebrew, and Japanese. The analysis suggests that the overly analytic nature of early possessive constructions can be explained in large part by a formal (GB) analysis wnich appeals to the idea that children's grammars avoid case filter violations. However, while the data can partly be explained in this way, the nature of the input, semantic explicitness, and pragmatic clarity must also be appealed to to explain the differences between the acquisition data from the different languages. The paper concludes that the insights from both formal and functional approaches should be combined in the context of a modular model of cognition.

* * * * *

J.H.V. Gilbert, G. Mitchell, L. Brown, and P. Chow, University of British Columbia

Long Term Linguistic Consequences of Traumatic Head Injury in Childhood and Adolescence

Considerable discussion surrounds the issue of recovery of language following traumatic head injury in childhood. Two questions at least are of interest: (1) do children recover linguistic abilities in faster and full viz-a-viz adults, and (2) in the event of incomplete language recovery is the disorder chiefly phonological, syntactic or lexical?

We have examined eight children from 6; 10 - 17; 0 who suffered traumatic head injury and who are in varying stages of recovery. A number of standardized language tests have been administered including the P.P.V.T., the C.E.L.F., the TOKEN test, and the Boston Naming Test, to test the notion of disordered lexical retrieval. Each child has been matched with a normal child of the same age. Despite reports of complete recovery data shows that these children have persistent word finding problems (analogous to those observed in adult aphasics) despite otherwise normal phonological and syntactic control. Although each child is idiosyncratic in his/her ability to retrieve, a certain number of common retrieval strategies appear to be used by all children. We shall discuss our data in the light of arguments concerning early recovery and organization of, and access to, the lexicon.

* * * * *

Roberta Michnick Golinkoff, April Lavallee and Carol Baduini, University of Delaware, and Kathryn Hirsh-Pasek, Haverford College

What's in a Word? The Young Child's Predisposition to Use Lexical Contrast

What is the process which enables children to acquire a mean of 9 new vocabulary items a day in the second year of life (Carey, 1978)? What factors predispose children to engage in the "fast mapping" (Carey & Bartlett, 1978) of lexical terms to referents? The present study examined whether 2 1/2 year old children operate with the principle of lexical contrast (Clark, 1983) by presenting children with novel objects in an object selection task. Results support our hypotheses in that S's overwhlemingly select the novel object when they hear a novel word. Since S's handle all objects before the test trials this result cannot be due to the salience of a new object. Second, S's readily generalize to a new exemplar of the same novel noun. Third, when given a choice, S's prefer not to pair another novel name with a novel object that has already been labeled. Instead, they assume that a new novel name refers to the unnamed novel object, even after only 2 exposures to a name--referent pair. These results demonstrate the child's predisposition to use lexical contrast.

* * * * *

Helen Goodluck, University of Wisconsin

Bounding and Grammar Types

A plausibility judgement task was used in two separate experiments with preschool and young school age children to evaluate children's knowledge of the bounding, the condition that requires an extraposed relative to refer to the head rather than complement of the subject in sentences such as, "A review of a book just came out that Piaget wrote." (Piaget wrote the review, not the book). In the first experiment, approximately one third of the subjects showed awareness of bounding. A further third relied on reference to the first NP in the sentence in making their responses; others relied on reference to the second NP. Children who made first NP responses were younger than children who made second NP responses; the ordering of erroneous response types replicates that found in experiments with other complex sentence types. (Goodluck and Roeper 1979; Hsu, Cairns and Fiengo 1985). In the second experiment (in progress) materials were constructed to more closely meet pragmatic conditons on extraposition in the adult grammar. Overall performance for five year olds tested shows no higher sensitivity to the bounding constraint than in the first experiment, but there is an absence of first-NP and second-NP response patterns.

The two experiments together argue: (i) Children who show sensitivity to bounding construct an NP-over-S structure for relatives at a level of abstraction distinct from the surface string; (ii) the age-ordered sequence of response types (first NP; second NP) is not confined to a single task or grammatical construction, although it is sensitive to the nature of the input. These response types plausibly do not reflect the child's current grammar for the constructions involved, contrary to the analysis in previous studies.

* * * * *

Stiliani Halkiadakis-Delidakis and Helen Tager-Flusberg, Univerity of Massachusetts, Boston

A Cross-linguistic Study of the Acquisition of Syntactic Coordination: A Comparison of Greek, English, and Japanese

This paper presents a study on the acquisition of Greek coordination in 54 three-, four-, and five-year-old children. The method used was an elicited production technique in which the children were asked to describe a series of 26 slides designed to elicit a variety of sentential and phrasal coordinations. The data obtained were compared to those published for English (Tager-Flusberg et al., 1982) and Japanese (Hakuta et al., 1982) children of similar ages. The findings obtained suggest that there is a universal constraint

on early coordination: that is, coordinations in young children can only be derived directly from phrase structure rules. Deletion rules for coordination are not available to pre-school aged children. There were some differences across the languages, for example a higher proportion of phrasals among the Greek and Japanese children that can be accounted for by the presence of case marking in these languages; and a significant number of verb gapped sentences in the Greek children in contrast to the virtual absence of such sentences in Japanese or English-speaking children. We suggest that this difference is accounted for by the more flexible word order of Greek that allowed for such sentences to be derived without deletion.

* * * * *

Elizabeth Henly and Amy Sheldon, University of Michigan

The Interaction Between Native Language and Target Language in the Perception of a New Phonemic Contrast: A Comparison of Japanese and Cantonese Speakers Learning English

The research that we will report on relates to two questions. The first is of general interest in second language acquisition. We will show how the acquisition of the perception of a new phonemic contrast, namely English /r/-/l/, is affected by the transfer of phonological properties from the learner's native language. We will compare speakers of different languages, Japanese and Cantonese, and show how the phonological differences in each language account for differences in their patterns of perceptual accuracy of /r/ and /l/. The second question deals with a more specific constuct in phonological acquisition, the role of the duration of the speech signal in facilitating speech perception in a second language.

Previous research with Japanese speakers by Dissosway-Huff, Port and Pisoni (1982) suggested that greater accuracy of perception of liquids in certain phonological environments may correlate with a greater duration of those liquid consonants compared to liquids in other environments in which the duration of the liquid is shorter. Our study is a test of this hypothesis. We will show that duration is not the only factor influencing perception of liquids but that the efffect of duration is mediated by native language constraints, which are different in Japanese and Cantonese. These native language constraints can override the effect of increased duration to interfere with the development of fully accurate perception in English.

* * * * *

Deborah Hicks, Harvard University

Linguistic Encodings of Temporal Relationships in Children's Narratives

Children's encoding of temporal relationships in narrative has generally been approached from the perspective of the sequential, script-like connections inherent in this unique discourse genre. The present study, however, is a linguistic analysis of temporal connections of a somewhat different order -- namely, those which may exist between two narrative events which overlap with one another. In the analysis, which is based upon a larger study of the film-based narratives of children age five-seven, we examine linguistic devices with which children may encode aspectual relationships of simultaneous and durative action. Our focus is on the English progressive form (be + V-ing) which -- when used in combination with temporal connectives like while, when, and until or inceptive/iterative verbs like start, went, and keep -- may encode precise relationships in which one narrative event punctuates the durative time frame of another event.

* * * * *

Kathy Hirsh-Pasek, Haverford College, Peter Juscyzk, University of Oregon, Deborah G. Kemler Nelson, Kimberly Wright and Benjamin Druss, Swarthmore College

Clauses Are Perceptual Units for Prelinguistic Infants

Prerequisite to learning syntax is the ability to parse the speech stream into clausal units. The current study demonstrates that ability in prelinguistic infants, 7 - 10 months old. From recorded natural samples of "motherese," two types of stimulus material were prepared. Natural versions began and ended at sentence boundaries and were transformed by interposing 1-sec gaps of silence at clausal boundaries within the passage. Otherwise matched Unnatural versions began and ended within clauses and were transformed by interposing 1-sec gaps of silence within clauses. Sixteen infants were shown to prefer the Natural samples, which preserved the clausal units, to the Unnatural samples, which did not. Preference was measured by making the Natural and Unnatural versions available through acoustic speakers placed to the right and left of the infant, with one passage consistently heard on one side. The infant controlled the onset of a passage by a head turn from center to one side and maintained the playing of the passage by continuing to orient to the side. Duration of maintained orientation was 15.5 secs for the Natural passages as opposed to 13.5 secs for the Unnatural passages, demonstrating the preference. This finding bears on issues from (1) speech perception--where it suggests that top-down, meaning based processing is not required for clausal analysis, to (2) language a

cquisition--where it suggests that infants can delimit the larger units within which grammatical rules apply, and where it permits the speculation that motherese may play a salient role in fostering clausal analysis.

* * * * *

Kathryn Hirsh-Pasek, Francois de Gaspe Beaubien and Anne Fletcher, Haverford College, and Roberta Michnick Golinkoff and Kathy Cauley, University of Delaware

In the Beginning: One-word Speakers Comprehend Word Order

Many studies indicate that children do not appear to use word order as a cue to semantic relationships until they are about 2-2 1/2 years of age and producing 2 and 3 word sentences. These findings have been used repeatedly to argue for a close (if not synchronous) link between language comprehension and language production. In contrast to the literature, the present study gives evidence of word order comprehension in 16-19 month old children who produce only single word speech. This result emerges in a new experimental paradigm which tests language comprehension by making only minimal demands on subjects (Golinkoff, Hirsh-Pasek, Cauley & Gordon, submitted). The principle behind the paradigm is that children will choose to look at 1 of 2 video screens which "matches" a central linguistic stimulus. Word order information was the only basis upon which subjects could decide which screen to watch since all other factors were equivalent. Results indicate that 12 infants ($\bar{x}$ age = 17.5 months) of whom 8 were at the one-word stage of production, were sensitive to word order cues in English, reversible active sentences.

* * * * *

Alice S. Horning, Oakland University

Easy to Read, Hard to Read: The Psycholinguistics of Readability

This empirical study of readability from a psycholinguistic perspective attempts to make use of both the prediction variables tapped by readability formulas and the production variables tapped by computerized text analyzers and discourse analyses. In the study, three passages were prepared in four versions, and were read as Cloze tests by first-year college students. In two out of three cases, modifications added to the passages significantly improved Cloze scores. In the third case, the modifications produced no significant changes in the Cloze scores. The texts have been analyzed further using computerized text analyzers and propostional and cohesion analyses, among other strategies. The results suggest that both prediction and production variables play a role in readability and that both people and computers can be taught to analyze these factors.

* * * * *

Nina Hyams, UCLA

The Contribution of "Core Grammar" to the Acquisition of Complex Sentences

It is argued that the acquisition of complex sentences proceeds as expected given the basic distinction between "core" and "peripheral" grammar proposed within the Government-Binding Theory of grammar (Chomsky, 1981). Based on various developmental patterns exhibited in the acquisition data, it is proposed that children first acquire the basic clausal (i.e., sentential) phrase structure associated with propositional complements; all complements, including infinitives, have a sentential structure. This constitutes the basic "core" property of complementation proposed within GB theory. Further "peripheral" aspects of complementation, including the choice of complementizer (that or for), and various lexically governed exceptional processes (e.g., exceptional Case-marking) are acquired later and in a piecemeal fashion. It is further proposed that the acquisition of the basic syntactic structure of complements can be derived from semantic principles and need not be learned per se. The analysis supports a "modular" approach to language and language acquisition by showing the interaction of distinct modules (syntactic, semantic, cognitive and lexical) in the development of complex sentences.

* * * * *

Harriet Jisa, Universite Lyon 2, France

Sentence Connectors and French Children's Monologue Performance

This study examines the role sentence connectors play in the French child's acquisition of performative competence in monologue. It was hypothesized that learning to use sentence connectors would play an important role in learning to produce coherent and cohesive monologue texts. The data consist of audiotape recordings of eight show and tell sessions from two different preschools. The children range in age from 2;5 to 5;2. For the analysis, the children are divided into three groups, irrespective of age: Non Users, Low Users and High Users.

The findings indicate that sentence connectors are important for producing monologue in this particular situation. Children who used connectors extensively produced longer, as well as, semantically and syntactically more complex monologues. The cohesive, but not necessarily coherent, use of connectors is argued as being important in facilitating monologue production. It is also shown that children use connectors to perform certain discourse tasks which adult French speakers accomplish using other morpho-syntactic strategies.

* * * * *

Nancy C. Jordan, The University of North Carolina at Chapel Hill

Speech Shadowing Skill In Good and Poor Readers At Three Grade Levels

The present investigation used two experimental speech shadowing tasks to explore on-line language processing facility in good and poor readers at three grade levels (second, fifth, and eighth). Speech shadowing requires listeners to repeat continuous spoken language, with their oral reproductions being as close to simultaneous as possible with the incoming speech signal. The first task required subjects to shadow language samples presented at three different speeds (slow, medium, fast); the second one required them to shadow sentences that were designed to exhibit different degrees of grammatical or syntactic correctness (normal, semantically anomalous, syntactically deviant). Analyses indicated that good readers were superior to poor readers in their ability to maintain accurate shadowing performance at faster rates of presentation. As language samples were presented to subjects at increasingly faster rates, the poor readers' performance was penalized significantly more heavily than the good readers' performance. In addition, good readers were better at shadowing when semantic constraints were violated in syntactically appropriate sentences. Compared to their baseline performance on the normal sentences, the poor readers were significantly more disadvantaged by semantically anomalous sentences than were the good readers. These findings support the hypothesis that reading difficulties often are tied closely to deficits in processing spoken language. In particular, they suggest reader skill differences in general speed of language processing ability as well as in the specific ability to exploit syntactic cues.

* * * * *

Keiko Koda, University of Illinois, Urbana-Champaign

The Acquisition Order of Particles in Early Language Development of Japanese Children

This study examined the validity of recent arguments claiming that communicative incentives facilitate language acquisition. The acquisition order of two Japanese morphemes--Case Particles (CPs) and Sentence Final Particles (SFPs)-- was investigated. These two morphemes are comparable except for function: whereas Case Particles have grammatical utility, Sentence Final Particles serve a discourse function. It was found that the communicative particles, SFPs, are acquired earlier than the grammatical particle, CPs. The results, thus, provide further support for the communicative approach to language acquisition, and also verify its universality.

* * * * *

Howard Lasnik, University of Connecticut

Child Language vs. Adult Language: Parametric Differences?

I will explore the question of what can and what cannot reasonably be expected from a parameter-setting model of language acquisition in accounting for properties of child language. To what extent can the observed differences between child and adult language be explained in parametric terms? Does the apparently staged character of acquisition follow from the parametric model? I willl suggest that certain empirical and conceptual problems arise when, unaided, this model is brought to bear on the actual course of acquisiton.

* * * * *

Barbara Lust, Cornell University

On the Notion "Parameter" in Universal Grammar: Its Definition and Consequences

Current linguistic theory proposes that one component of UG consists of 'parameters,' i.e., grammatically central dimensions of language organization along which languages may vary according to specified values. If this construct can be defended, it will provide a major advance in linguistic theory (since critical aspects of cross-language variance will be both described and explained). It will also provide a major advance in the theory of first language acquisition, since it has been proposed that UG characterizes the human competence for language. Once the value of a parameter is set by experience, a parameter would provide 'wide deductive consequences' for grammar acquisition. A wide array of otherwise diverse specific language facts would be immediately available to the child without independent induction, because they correlate with a parameter's value setting. If confirmed, such parameter-setting also predicts and explains different acquisiton patterns across languages with different values along a parameter.

Currently, several formulations of a parameter of cross-linguistic variance in configuration are under both linguistic and psycholinguistic investigation, e.g. 'head direction' (Chomsky, 1982), 'canonical government direction' (Kayne 1983), 'global harmony' (Koster, 1984), 'principal branching direction' (Lust, 1983, Lust and Chien, 1984; cf. Chomsky 1964). If supported, such a parameter (or set of them) would have deductive consequences for a wide array of basic dominance and linearity facts which vary across languages, and for the grammatical phenomena which depend on them, e.g. anaphora, both in linguistic theory and in acquisiton.

This paper argues that systematic experimental cross-linguistic studies of first language acquisition provide evidence for (1) early sensitivity to aspects of primary language data which are necessary to set such a configurational parameter; (2) deductive consequences for acquisition of grammatical anaphora in terms of linearity relations between antecedents and anaphors; (3) extended deductive consequences in terms of acquisition of complex sentence formation. (4) In addition, theoretical developments in parameter definition (e.g., Travis 1983) and current experimental results begin to converge in the proper formulation of such a parameter and of the nature of its theoretical and empirical consequences.

In conclusion, these results are argued to support the parameter-setting model in general, and to introduce a new research paradigm in the study of first language acquisition whereby a wide array of acquisition data are rendered tractable.

* * * * *

Madeline Maxwell, Gregory Whittemore, Sharon Doss, Dana Kovarsky, and Helen McCaffrey, University of Texas, Austin

Characteristics of the Written English of Deaf Children and Adults

In schools deaf children write compositions and exercises. As adults they frequently write to converse. How does the written language of deaf adults relate to children's writing in school? This paper outlines a multi-tiered analysis of linguistic structures, for both compositions and interactions. One hundred sixty compositions (two for each child) were collected from children at three grade levels (4th, 8th, and 10th-12th). Writers included a control group of normally hearing children and both signing and non-signing (oral) deaf children. Two hundred fifty typed telephone (TTY) conversations were collected from deaf adults. Quantitative and qualitative comparisons indicate important differences between children's composition performance and adults' written conversation performance that have implications for education. In addition, a picture of high and low quality writing and the characteristics of each is presented.

* * * * *

Reiko Mazuka, Barbara Lust and Mitch Harris, Cornell University

A Cross-Linguistic Test of the Main-Clause Effect in Young Children's Syntactic Processing: A Study of Japanese

This study analyzes the main-clause effect (MCE) in syntactic processing of complex sentences in young Japanese children. 96 children aged from 3;01 to 5;11 were tested on imitation of complex sentences with either unmarked left branching order, i.e.

subordinate clause (SC)-main clause (MC), or marked right branching, MC-SC order. The frequencey of correct imitation of each clause is analyzed in terms of a MC/SC factor and a linear order factor. The result replicated the MCE. This both suggests that the MCE may be universal and at the same time disambiguates MCE as independent of surface linearity or clause order.

The results are discussed in terms of general theoretical issues concerning the nature of the parser and its relation to grammar, in particular issues concerning the degree to which early syntactic processing involves universal principles of processing which are independent of parameters of the grammar of the language being acquired.

* * * * *

Dennis L. Molfese, Southern Illinois University

Word Discrimination in Young Infants: Electrophysiological Correlates

Parents and independent raters identified common words which were known and those which were not known to 16 infants. Brain responses recorded from over the left and right hemispheres of 16-month-old infants discriminated between words the infants did and did not know. One region of the auditory evoked brain response recorded from both hemispheres successfully discriminated between known and unknown words, while another portion unique to the left hemisphere also discriminated between known and unknown words. Sex effects were noted. After a two day familiarization procedure with sets of bisyllabic nonsense syllables, brain responses were recorded from a second group of infants while they listened to familiar and novel syllables. The discrimination of familiar from unfamiliar events occurred in a differnt area of the brain and at a different time than word related discriminations.

* * * * *

Mineharu Nakayama and Stephen Crain, University of Connecticut

Performance Factors in Children's Sentence Production

Crain and Nakayama (1984) present evidence against the "Basic Operatons Hypothesis" (BOH) (e.g., Mayer, Erreich, and Valian 1978), contending that children's utterances like (1) are performance errors and not the result of a non-adult grammar.

(1) *Is the boy who is watching Mickey Mouse is happy?

The present study confirms this account and extends it by showing what factors impede children's performance in Subject-Aux

Inversion. Employing the elicitation task used in Crain and Nakayama, 16 test sentences were given to sixteen 3- to 5-year-old children. The sentences varied in the syntactic complexity of the subject NP, length and the syntactic category of the main clause predicate.

More errors were produced: 1) when the subject NP contained a relative clause as compared to a prepositional phrase, 2) when the relative clause had an object gap as compared with a subject gap and 3) when the relative clause was long, versus short. These findings reconfirm a performance account of children's errors.

* * * * *

Yuriko Oshima-Takane, McGill University

Pronoun Reversals In a Normally Developing Child

The present study explored the nature and causes of pronoun reversals. In a longitudinal study, comprehension and production of the first and the second person pronouns in a normal child (from 19 to 34 months of age) who showed pronoun reversals were examined. The results showed that the child began using first and second person pronouns at about 20 months and mastered the correct use by 34 months of age. Consistent errors for the first and second person pronouns were observed from 23 to 28 months of age. The data clearly indicated that the child persistently showed the consistent errors because he entertained incorrect rules concerning the meaning of the pronouns: A first person pronoun referred to a person with whom he conversed and a second person pronoun referred to himself. Several hypotheses proposed to explain pronoun reversals were examined.

* * * * *

Rebecca L. Oxford-Carpenter and Gnarity K. Penn, Center for Applied Linguistics

Second Language Learning Strategies and Related Assessment Issues

Learning strategies are steps taken by a learner to facilitate the acquisition, storage, retrieval, or use of information. The authors review learning strategies for foreign or second language (L2) learning; draw implications for L2 learning strategies from research on general learning strategies and native language (L1) acquisition; explore assessment issues related to L2 learning strategies; and describe a new, theory-based inventory of L2 learning stategies. Results indicate that students use different cognitive and metacognitive learning strategies in various situations. Strategy use and success depend on motivation, cognitive maturity, cultural background, and L2 task demands. Successful L2 learners frequently

(but not always) use effective learning strategies. L2 teachers are often surprisingly unaware of their students' strategies but can be trained to recognize, teach, and reinforce useful stategies. Likewise, L2 learners can be trained in learning strategy use. Valid and reliable instruments, like the one described in this paper, are needed to assess L2 learning strategy use.

* * * * *

Jeanne Paccia, Frank Curcio, Deborah Hay and Josefina Contreras, Boston University

Contingency Relationships in the Speech of Adults and Autistic Children During Natural Conversation: Implications for Assessment and Intervention

The present study was undertaken to examine contingency relationships existing within three-turn, Child → Adult → Child sequences of natural conversation for each of six autistic children in interaction with a familiar adult. The children, all verbal and primarily non-echolalic, ranged in age from 6;11 to 12;0. Four conversations were recorded for each child during play on separate days, two each with teacher and mother. Analyses were restricted to sequences containing an adult question, and these were divided into two categories --Wh forms and Yes No or other highly structured forms. Antecedent and consequent child turns were classified as either Adequate or Inadequate, depending on whether they successfully met the conversational requirements of the eliciting adult turn. The pattern of discrepancies between each child's overall, unconditional probability (UCP) of adequate responding and conditional probabilities (CP's) following each of the four distinct Initial Child Turn (Adequate/Inadequate) → Adult Question (Wh/Yes-No) sequences suggested that adequate child responding on the subsequent turn was best characterized in terms of an interaction between the child's initial response and the question form posed by the adult. When a child was previously adequate and a Yes-No question was posed, CP was above UCP in 21 of the 24 conversations studied. When a child was previously inadequate and a Wh question was asked, CP was below UCP in all 24 conversations. Consistent effects were not observed for the other two types of sequences. These finding are discussed in terms of implications for assessment and intervention in this language disordered population.

* * * * *

Carolyn Panofsky and Vera John-Steiner, University of New Mexico

The Development of Verbal Planning for Narrative Recall

This research investigates children's ability to use a planning strategy for retelling a naturalistic story. Children at two ages

(average 8 and 10.5) and two ability levels (normal and high) participated. Dependent variables were approach to the planning activity, amount of story recall, and attributions in story recall. The younger high ability subjects approached the planning activity much differently from their normal-ability peers, and recalled significantly more, while older subjects of both ability levels approached planning in a similar way. Recalls of the older subjects reflected adult-like attributions not generally found in children's free recalls, possibly due to greater depth of processing afforded by the planning strategy, as well as development. The data are discussed in terms of verbal self-regulation and a functional theory of performance differences.

* * * * *

Steven Pinker, Massachusetts Institute of Technology

Constrained Productivity: A Theory of the Acquisition of the Verb Lexicon

Several years ago C. L. Baker posed a now-famous problem: given that children have no access to information about what is not a sentence, how do tney acquire domains of grammar which simultaneously support generalizatons and contain exceptions? For example, the dative alternation relates give a book to John and give John a book; a child who created a corresponding productive rule could then erroneously generalize from donate a book to the library to donate the library a book. Baker's solution was that the child learned verb subcategorizations conservatively, restricting the verb to those contexts she/he had heard them used in. Similar problems and solutions arise for other verb alternations such as passive, causative, and "figure-ground reversal." Unfortunately, there is experimental and naturalistic evidence that children in fact are not conservative in any of these domains. I propose an alternative solution, hinging on the fact that virtually all exceptions to verb alternations are ruled out by combinations of semantic and phonological constraints (e.g., for causativization, the manner of causation must be direct and stereotypic). The child first learns subcategorizations one-by-one, then becomes productive by coining productive rules based on patterns of related forms recorded in her/his lexicon. Then the child learns to rein in this productivity by looking for features that predict contrasts between related verb forms in the lexicon, and formulating the corresponding constraints. At that point overgeneralization ceases and the adult state is attained. Explicit learning mechanisms and developmental evidence relevant to the hypothesis will be discussed.

* * * * *

Judy Reilly, Marina McIntire and Ursula Bellugi, University of California, San Diego and the Salk Institute, La Jolla

The Relationship Between Language and Affect

The child's transition from pre-linguistic to linguistic communication offers insights into the relationship between language and communication, and deaf children acquiring American Sign Language as a first language provide a unique perspective on this relationship. Facial expressions in ASL perform two distinct functions: to identify several grammatical structures and to convey emotion. This dual role presents a natural opportunity to investigate how presumably innate behaviors -- affective displays -- come under voluntary control for linguistic purposes.

Analysis of naturalistic videotaped data indicates that deaf children (1;0-5;9) use their pre-existing communicative (affective and pragmatic) capabilities as a means of mastering those linguistic structures of ASL requiring specific facial behaviors, e.g. yes-no questions, wh-questions, and negation. Specifically, ASL lexical items denoting affective states include specified facial signals and these are the first to appear consistently in the child's facial grammar. These data suggest that these facial behaviors facilitate the increasing control over more abstract, linguistic facial signals.

* * * * *

Tom Roeper, University of Massachusetts, Amherst

Modularity and Stages

It is a fact that language is acquired in stages. Questions arise when we ask what causes the stages: performance factors, maturational factors, aspects of linguistic theory, or principles of acquisition? Cognitive and social maturation is an obvious factor which delays the acquisition of certain words. We cannot acquire the syntax of the word seems if we cannot consciously envision the "other worlds" that seems refers to.

We argue that the grammar is divided into modules (See Chomsky 1981) and that the modules reflect limitations on language acquisition. In principle, if the data is present and properly parsed, a child should be able to decide its lexical content and syntactic character simultaneously. However, we suggest that there are really three separate decisions (modules) to be made, from an acquisition perspective:

A. Fixation of environmental reference (meaning)
B. Fixation of syntactic domain (subcategorization)
C. Fixation of anaphoric indices (coreference)

These modules are subject to acquisition principles.

1. Acquisition decisions occur in one module at a time
2. Lexical reference must be fixed before syntactic domain
3. Syntactic domain is fixed before anaphoric reference

These principles do not logically require temporal differentiation because logically independent events can occur simultaneously, but temporal differentiation is a natural by-product. This hypothesis could be wrong and it is probably oversimplified. Specific predictions allow it to be falsified.

What predictions follow from this system?

1) Functional words must have a lexical meaning which is aquired first.

(a) In fact, children acquire for as a purpose preposition before they use it as complementizer (for John to cry is sad). See Nishigauchi and Roeper (1985).

(b) All expletives have a lexical value which is learned first. Children learn the bear is there before there is a bear where there latter has no referential value.

2) Anaphores are learned with referential meaning first. And their syntactic domain is fixed (they occur in NP positions) before their anaphoric indices are fixed (binding principles). Evidence from many sources (Lust (to appear), Otsu (1981), Manzini and Borer (to appear)) shows that children learn pronouns (it) as if they were demonstratives (this). Therefore they do not understand that coreference is impossible in John likes him. Evidence from Matthei (1981) suggests that children learn each other as if it were a pronoun (they) first. At a later point the children learn that an anaphor must be bound in a syntactic domain (*they saw the girls hit each other).

3) Adjectives precede adverbs. This prediction follows if adverbs assign thematic roles independent of verbs. In the sentence John was arrested voluntarily we find that John is the object of arrest and the subject of voluntarily. On the other hand, adjectives are assigned using inference and therefore no thematic grid is involved. The prediction is therefore that a child will be able to say I played a quick game before she says I played the game quickly. Gordon Wells (pc) reports that in his data true adverbs (not verb intensifiers) like the boy played the game angrily appears after five years.

In sum our system gives structure to an old intuition that language is composed of independent components and that acquisiton is linked to those components. Nonetheless, in our system, there are distinct priciples which lead to a specific deductive sequence for the acquisition of English.

* * * * *

Mordechai Rimor, Judy Kegl, Harlan Lane, Northeastern University

An Empirical Inquiry Into the Semantic Organization of the Mental Lexicon of English Verbs: The Case From American Sign Language

The aim of the investigation is to show that the mental lexicon of

English verbs is organized according to two components. One is MOVEMENT, which indicates whether the verb represents a translatory movement between locations (e.g., "to run") or a non-traslatory movement (e.g., "to eat"). The other is SEMANTIC CLASSIFIER, which represents the category of the entity which participates in the translatory or non-translatory movement (e.g., LEGS in "to run" and MOUTH in "to eat"). The two components are theoretically based on semantic analysis of ASL structure and of English sentences which use the spatial notions of FIGURE/THEME and PATH or LOCATION, corresponding respectively to our SEMANTIC CLASSIFIER and MOVEMENT components.

Two experiments are reported which show psychological reality of tne two components. In the first, all possible pairs of a list of 18 verbs were presented to eight Ss for similarity judgements. Multidimensional scaling of the judgements and ANOVA analysis showed the two components to underlie the grouping of verbs. In the second experiment, 20 other verbs were added to the previous list. Predictions were made as to the grouping of these verbs with the previous verbs, based upon intuition and upon signs realizations in ASL. Ten other Ss judged similiarities among all posssible pairs. Multidimensional scaling and ANOVA confirmed our predictions. All the verbs were grouped according to the two components.

Implications of the experiments bear directly upon the spatial bases of the mental lexicon and upon the priority and saliency of motion and object in child language.

* * * * *

Ann K. Rogers-Warren, Gillian Blair, and Louise Nielsen, Vanderbilt University

Mothers' Strategies for Eliciting Verbal Responses

Episodes consisting of mothers' sequenced attempts to elicit a particular verbalization from their children were analyzed in a longitudinal analysis. Nine mother-child dyads were observed in their homes when the children were 16, 21, 24, and 30 months of age. Mother utterances which elicited verbal responses (EVRs) were coded according to their syntactic form, type of cue for child response, and the complexity of expected child response. Episodes were identified and hierarchical sequences were identified. Across months, mothers increased the number of language eliciting episodes while mean length of episode remained stable. Similar patterns of mother episodes were seen across months. Child repsonsiveness to terminal EVRS increased with age. Content of mother episodes and complexity of expected child responses during each phase of the episode increased systematically with increases in child MLU.

* * * * *

Beata Schmid, Brown University

A Comparative Study of Children's and Adults' Acquisition of Tone Accents in Swedish

This comparative study investigates first and second language learner's acquisition of tone accents in Swedish. Tone accent distribution is governed by morphophonologial rules and the accents are manifested in characteristic pitch patterns. Both L1 and L2 learners acquire accents relatively late, but while all normally developing children acquire the accents, many adult L2 learners do not. The speech of monolingual Swedish children (1;11-2;5) recorded longitudinally over seven months was compared to that of American adults acquiring Swedish as L2. Both populations overgeneralized one pitch pattern to all bisyllabic words: children used Accent 2 (two-peaked) and adults Accent 1 (one-peaked), analogous to the prevailing pitch pattern of their L1. These results are discussed in terms of using children's acquisitional strategies with L2 learners. Furthermore, the children's early acquisition of a marked phenomenon (Accent 2) forces us to reconsider markedness criteria and whether Accent 2 is marked from a production point of view.

* * * * *

Joan A. Sereno and Philip Lieberman, Brown University

The Development of Anticipatory Labial Coarticulation in a Child: Acoustic and Psychoacoustic Data

The present study investigated the development of anticipatory labial coarticulation in the speech of a child. The results argue against the possibility that anticipatory coarticulation derives from innate, genetically transmitted motor control patterns. The data instead are consistent with a developmental process involving gradual acquisition and fine-tuning.

Although cues for coarticulation can be found in adult speech, significant variability in children's motor processes for speech suggest that these cues may not be present in their speech. In the present study, CV syllables, [s], [t], and [d] before [i] and [u], were produced by a female child speaker at age 3 years 6 months and at age 4 years 4 months. Each syllable was computer-edited to include only the noise-excited portion of fricative-vowel stimuli and only the aperiodic portion of stop-vowel stimuli. Acoustic analyses were conducted to determine the effect of the following vowel on the spectral peak associated with the second formant frequency and on the characteristic spectral prominence for each consonant. Perceptual data were obtained by presenting the aperiodic consonantal segments to subjects who were instructed to identify in a forced choice paradigm the following vowel [i] or

[u]. Both the acoustic and perceptual data show the absence of labial coarticulation in the speech stimuli of the child at the younger age. At the older age, however, the data show much stronger coarticulatory effects. These data are then compared to adult speech stimuli.

* * * * *

Michael Tomasello and Michael Jeffrey Farrer, Emory University

Joint Attention and Early Language Development

Bruner has emphasized the importance of mother-child "formats" for early language development. Formats are routinized interactions which help the dyad establish and maintain the joint attentional focus necessary for communication. Tomasello and Todd (1983) found that the amount of time 12-18 month old children spent in joint attentional focus with their mothers was related to their vocabulary size at 18 months. The current study analyzed the linguistic interactions that take place inside joint attentional episodes and how these affect the child's subsequent language development. Twenty-four children were videotaped in interaction with their mothers when they were 15 and 21 months of age. Results showed that inside, as opposed to outside, periods of joint attention: children produced more utterances, mothers used shorter sentences, and the dyad engaged in longer conversations. Various characteristics of maternal speech within these periods were correlated with the child's vocabulary size at 21 months, while none of these characteristics from outside joint attentional periods was correlated. The results are interpreted as support for Bruner's contention that episodes of joint atteniton provide scaffolding for the child's early linguistic interaction and thereby facilitate early language growth.

* * * * *

Anne Vainikka, University of Massachusetts at Amherst

First Language Acquisition

The goal of this paper is to try to explain why children use case marked forms such as 'my' incorrectly:
(1) 'I eat the string beans after my eat my lunch' (Eve 4-15-63)

To account for this, I will propose a close connection between syntactic argument positions (A-positions; e.g., 'Tom' and 'Bill' in 'Tom met Bill') and morphological case. This connection occurs very early in the acquisition process, and that it plays a crucial role in the acquisition of syntax.

At the stage at which (1) is uttered, nominative is not a

grammatical case. All NPs in A-postitions must get case, and since nominative is not yet available, the default case of genitive is assigned to the second subject in (1). Nominative NPs are treated as non-case-marked NPs, and may only occur in non-argument positions, sentence-peripherally (e.g., a topic position) - e.g., the first subject in (1). A possible trigger for learning that nominative is a 'real' case is learning the inflection of 'to be.' If an INFL node is created based on subject-verb agreement, then it looks like INFL is responsible for nominative assignment, since nominative (as a case) and agreement seem to occur at the same time in children's speech.

* * * * *

Virginia Valian, Wellesly College

A Problem About Positive and Negative Evidence in Language Acquisition

In this paper I question a common assumption in the linguistics literature about how the child might make use of "positive" evidence (sentences exemplifying a particular construction or principle) and "indirect negative" evidence (the absence of sentences exemplifying particular construction or principle). I analyze the theory of the language acquisition mechanism which is implied by usual treatments of evidence, and then try to show that whichever way certain parameters are initially set, they cannot be reset by "positive" or "indirect negative" evidence. In the former case, since the parser is parasitic on the grammer, it cannot recognize the positive evidence for what it is. In the latter case, there is no "indirect negative" evidence, because the principle is typically stated in optional form, and is confirmed whether or not it gets examples of every option.

I consider various ways round the difficulties, most of which are extra-grammatical principles. The possibility I consider most plausible and possessing the most independent motivation is that, in the case of parameters, all values of a parameter are initially available to the child, thus providing the parser with the information necessary for recognition of all relevant input. Implications about the best form of a language acquisition system are discussed in light of the above considerations and in light of what is known from the psychological literature about how the child makes use of adult input.

* * * * *

Lori J. Van Houten and Cynthia Garcia Coll, Brown University

Maternal Speech to Eight Month Old Infants: A Study of Adolescent and Older Mothers

This study tested the hypothesis that mothers' speech to 8 month olds differs as a function of maternal age. Subjects were 10 adolescent (mean age = 16.5) and 10 older mothers (mean age = 24.5). All were lower to middle class, primiparous, Caucasian women. Mother and child were videotaped in a laboratory setting in 3 minutes of face-to-face interaction, free play, and a teaching situation. The videotapes were transcribed and coded in terms of structural complexity, length of turn, discourse role of the utterance and number of utterances. Results from repeated measures ANOVAS demonstrate main effects for maternal age but no significant interactions between maternal age and situation. Adolescent mothers across all situations were less responsive to their infants and used fewer utterances. Given the importance accorded to maternal contingency in the acquisition process, these results are consistent with the hypothesis that children of adolescent mothers may be at risk for language development.

* * * * *

Jill de Villiers, Peter de Villiers, and Nancy Buonanno, Smith College

Production of Relative Clauses by Oral Deaf Adolescents

Thirty-six deaf adolescents acquiring English orally as their first language served as subjects in a referential communication task calling for the use of relative clause constructions, prepositional phrases and adjectives to specify a noun phrase for a listener who could not see the pictured stimuli. Their performance on the relative clause constructions was equivalent to that of 11 4-5-year-old hearing controls, and demonstrated the sme order of difficulty among the types: SS > OS > OO > SO. Error analyses revealed some differences between the groups, with the deaf subjects being less egocentric than the preschoolers, but producing more false statements due to their insufficient command of complex syntax. Results contradict the conclusion that oral deaf children have particular difficulty with embedded structures, since the embedded form SS was by far the easiest construction of the relative clause types. Instead, the deaf subjects are still in the process of acquiring some of the basic linguistic structures at a point beyond the postulated "critical period" for language development.

* * * * *

Rose-Marie Weber, State University of New York at Albany

Repair in the Speech of Poor and Normal Readers

This study examines dysfluencies and their repair in the speech of poor and normal readers. It is intended to further the study of linguistic ability, particularly syntactic and semantic processing, as a possible factor in reading difficulty by taking the perspective of speech error anaylsis. Fourth graders (N=32) from advantaged backgrounds, one group reading at the tenth percentile or below and the other reading at the fiftieth percentile or above on the Gilmore Oral Reading Test, were asked to tell the story for each of 14 sets of sequenced pictures. Their false starts, incomplete sentences, and syntactic and semantic repairs were analyzed with respect to syntactic complexity and to the task-specific strategy of topicalization. In general both groups of children produced about the same mean number of words per story. The poor readers, however, produced a larger proportion of false starts, incomplete sentences, and successful and unsuccessful lexical and syntactic repair. Results are discussed with respect to the processing capacity required for repair in free speech and in oral reading.

* * * * *

Kenneth Wexler, University of California at Irvine

On the Acquisition of Parametric values of Grammar and Lexical Learning a theory is presented of how parameters are set in language acquisition. The parameters are set on the basis of positive evidence, in a way which determines markedness hierarchies on the parametric values. Conditions are discussed under which the parameters may in fact be set in this way. The parameters are associated with lexical items, according to the Lexical Learning Hypothesis: Only lexical items have to be learned. We further discuss experimental research on the acquisition of lexical pronouns and anaphors which applies the theoretical ideas.

* * * * *

Myong K. Yim, Harvard Graduate School of Education

Two Styles of Second Language Learning: Child Preferences and Adult Input

This study deals with two different L2 learning styles-- analytic and gestalt-- and whether variations in input speech are reflected in observable variations in these speech styles.

Two Korean children, 2.8 years of age, were observed for a 9 month

period learning English as a second language. In the previous research, one has been identified displaying analytic and the other gestalt speech style in their first language. Each child's weekly 45-60 minute English conversations with the same American English speaking adult over a picture book were audiotaped and transcribed.

The development sequence of how "units" (as described by Peters 1983) of several words were learned was observed along with how the adult presented these words. Each child's different repetition strategy was studied along with how the adult presented each new word to the child. In addition, the adult's feedback to the child's utterances were measured to see if there were any differences in adult feedback to the analytic child and to the gestalt child. Chi-square analysis was done to see the different distribution of these categories in two children.

Directory of Conference Speakers

FIRST AUTHORS

Adele A. Abrahamsen
Dept. of Psychology
Georgia State University
Atlanta, GA 30303

Dina Anselmi
Dept. of Psychology
Trinity College
Hartford, CT 06106

Michael Bamberg
Tongji-University
Foreign Expert Building
Shanghai, P.R. China

Marjorie Beeghly
Harvard University
Dept. P&SR
33 Kirkland Street
Cambridge, MA 02138

Ruth A. Berman
Department of Linguistics
Tel Aviv University
Ramar Aviv, Israel 69978

John Neil Bohannon III
Dept of Psychology
Virginia Tech
Blacksburg, VA 24061

Hagit Borer
School of Social Science
University of California at Irvine
Irvine, CA 92717

Courney B. Cazden
Longfellow Hall
13 Appian Way
Harvard Graduate School of
Education
Cambridge, MA 02138

Robin S. Chapman
Dept. of Communicative Disorders
1975 Willow Drive
University of Wisconsin
Madison, WI 53706

Soonja Choi
195 Hedstrom Drive
Amherst, NY 14226

Phil J. Connell
Dept. of Communication Sciences
and Disorders
Northwestern University
Evanston, IL 60201

Martha B. Crago
SHCD
McGill University
1266 Pine Avenue West
Montreal, PQ H3G 1A8
Canada

Stephen Crain
Dept. of Linguistics
U-145
University of Connecticut
Storres, CT 06268

Gary A. Cziko
University of Illinois,
Urbana-Champaign
Bureau of Educational Research
1310 S. Sixtn Street, Room 188
Champaign, IL 61820

Katherine A. Demuth
African Studies Center
270 Bay State Road
Boston University
Boston, MA 02215

Jill de Villiers
Clark Science Center
Dept. of Psychology
Smith College
Northampton, MA 01063

Susan Engel
552 Broadway
New York, NY 10012

Kathleen Ferrara
Dept. of Linguistics
University of Texas at Austin
Austin, TX 78712

Paul Fletcher
Dept. of Linguistic Science
University of Reading
Whiteknights
Reading RG6 2AA
England

Janet Dean Fodor
Dept. of Lingusitics
U-145
University of Connecticut
Storres, CT 06268

Susan H. Foster
Dept. of English
Northern Arizona University
Flagstaff, AZ 86011

J.H.V. Gilbert
School of Audiology and Speech Sciences
University of British Columbia
5804 Fairview Cresent
Vancouver, B.C. V6T 1W5
Canada

Helen Goodluck
Dept. of Linguistics
Van Hise Hall
University of Wisconsin
Madison, WI 53706

Jane Grimshaw
Linguistics Program
Brandeis University
Waltham, MA 02254

Stiliani Halkiadakis-Delidakis
Psychology Department
University of Massachusetts
Boston, MA 02125

Elizabeth Henly
Department of Linguistics
University of Minnesota
320 16th Ave. S.E.
142 Kleaber Court
Minneapolis, MN 02144

Deborah Hicks
91 Orchard Street
Somerville, MA 02144

Kathy Hirsh-Pasek
Psychology Department
Haverford College
Haverford, PA 19041

Alice Horning
31739 Verona Circle
Birmingham, MI 48009

Nina Hyams
UCLA
Dept. of Linguistics
Los Angeles, CA 90024

Harriet Jisa
15 quai Gillet
69004 Lyon
France

Nancy Jordan
Division for Disorders of Development and Learning
Biological Sciences Building
220 H
University of North Carolina
Chapel Hill, NC 27514

Keiko Koda
Bureau of Educatonal Research
188 Education
University of Illinois
Champaign, IL 61820

Howard Lasnik
College of Liberal Arts and Sciences
Dept. of Linguistics
U-145
University of Connecticut
Storrs, CT 06268

Barbara Lust
Dept. of Human Development
Cornell University
M. Van Rensselaer Hall G6
Ithaca, NY 14853

Alec Marantz
Harvard University School of Fellows
78 Mt. Auburn Street
Cambridge, MA 02138

Michael Maratsos
Institute of Child Development
University of Minnesota
51 East River Road
Minneapolis, MN 55455

Madeline Maxwell
Dept. of Speech Communication
University of Texas at Austin
Austin, TX 78712

Reiko Mazuka
NG31 MVR Cornell University
Ithaca, NY 14853

Roberta Michnick-Golinkoff
College of Education
University of Deleware
Neward, DE 19716

Dennis L. Molfese
Dept. of Psychology
Southern Illinois University
Carbondale, IL 62901

Mineharu Nakayama
U-145
Dept. of Linguistics
University of Connecticut
Storrs, CT 06268

Yuriko Oshima-Takane
Dept. of Psychology
McGill University
1205 Dr. Penfield Ave.
Montreal, P.Q.
Canada H3A 1B1

Rebecca L. Oxford-Carpenter
2141 Colt's Neck Court
Reston, VA 22091

Jeanne Paccia
Boston University
Dept. of Psychology
64 Cummington Street
Boston, MA 02215

Carolyn Panofsky
1015 Third Street
Las Vegas, NM 87701

Laura Ann Petitto
Dept. of Psychology
McGill University
Stewart Biological Sciences Building
1205 Dr. Penfield Ave.
Montreal, Quebec
Canada H3A 1B1

Steven Pinker
Dept. of Psychology
E10 018
Massachusetts Institute of Techonology
Cambridge, MA 02139

Janet Randall
Dept. of English
Northeastern University
360 Huntington Avenue
Boston, MA 02115

Judy Reilly
684 Norwood Drive
Pasadena, CA 91105

Mordechai Rimor
Dept. of Psychology
Northeastern University
360 Huntington Ave.
Boston, MA 02115

Thomas Roeper
Dept. of Linguistics
South College
University of Massachusetts
Amherst, MA 01003

Ann K. Rogers-Warren
Dept. of Special Education
and Psychology
Box 328
Vanderbilt University
Nashville, TN 37203

Joan A. Sereno
Box E
Dept. of Linguistics
Brown University
Providence, R.I. 02912

Beata Schmid
Box E
Dept. of Linguistics
Brown University
Providence, R.I. 02912

Michael Tomasello
Dept. of Psychology
Emory Univsersity
Atlanta, GA 30322

Anne Vainikka
Dept. of Linguistics
South College
University of Massachusetts
Amherst, MA 01003

Virginia Valian
Wellesly College
Wellesly, MA

Lori J. Van Houten
Box E
Linguistics Dept.
Brown University
Providence, RI 02912

Rose-Marie Weber
Reading Dept.
State University of New York
1400 Washington Ave.
Albany, NY 12222

Kenneth Wexler
School of Social Science
University of California
Irvine, CA 92717

Wendy Wilkins
Dept. of LInguistics
University of Washington
Seattle, WA 98195

Edwin Williams
Dept. of Linguistics
South College
University of Massachusetts
Amherst, MA 01003

Myong K. Yim
717 Larson Hall
Harvard Graduate School of
Education
Appian Way
Cambridge, MA 02138

Boston University

School of Education
605 Commonwealth Avenue
Boston, Massachusetts 02215

Division of Counseling, Reading,
Language Development and Special Education

ERRATA

The following abstracts were accidentally omitted from the handbook:

Dina Anselmi, Trinity College; Michael Tomasello, Emory University; Jill Spencer, Trinity College

Potential contingent query responses in Stage I-V children

Requests for clarification or contingent queries play an important role in the development of discourse skills. There are several different types of contingent query requests, and most of the current research has focused on neutral and specific requests for clarification. The present study investigates "potential" queries, a rather different type of request which asks the speaker for information that is missing from the surface form of the sentence but is implied by the sentence's meaning. In order to respond appropriately, a speaker must provide the listener with a fuller elaboration of the previous utterance. Subjects for the study were 27 children classified as Language Stage I-V who interacted with an experimenter in a conversational play situation.

The results indicated a significant relationship between Language Stage and responding in which the proportion of appropriate responses increased with language development.

Phil J. Connell, Northwestern University

Differences between normal and language disordered children: A comparison of modelling and imitation teaching procedures

The purpose of this study was to determine whether language disordered children have a preferred language learning style that is different from that of normal children. Forty normal and 40 language disordered children were taught an invented morpheme using either modelling or imitation teaching procedures. The two groups of children significantly differed in the amount of generalization that resulted from the two procedures. The normal children generalized more following modelling teaching while the disordered children generalized more following imitation teaching. The results indicate that language disordered children prefer to learn rules from procedures that are not very common in parent-child interaction. This suggests that effective teaching procedures need not emulate natural occurrences.

Rachel Stark's title in the Symposium on Neurolinguistics and Language Disorders will be: Dispraxia of speech in children: A new approach.

We apologize for any inconvenience these omissions have caused.