



The Development of Communication

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various aspects of child language, offering an overall survey of new developments and issues in this field. The study of child language has in recent years progressed towards the examination of language acquisition within the social context, taking account of the wide and varying influences of a child's early environment. Changes in child language research have broadened the scope of studies and, although the emphasis is no longer on syntactic acquisition, these earlier studies can now be better understood in the new context of social interaction, cognitive development and semantic-pragmatic acquisition. Language is no longer seen as an object of knowledge for the child, but rather as one of many ways of interacting with other human beings.

The book is based on selected and revised papers that were presented at the Third International Child Language Symposium of the International Association for the Study of Child Language.

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Foreword

This book contains selected papers from the Third International Child Language Symposium, chaired by Natalie Waterson at the School of Oriental and African Studies, University of London, in London, September 3-5, 1975. At this Symposium the International Association for the Study of Child Language was incorporated with statutes and its officers were elected:

Els Oksaar, University of Hamburg, Germany: President.

Walburga von Raffler-Engel, Vanderbilt University, Nashville, U.S.A.: Vice-President.

Fred C.C. Peng, International Christian University, Tokyo, Japan: Secretary.

Terry Myers, University of Edinburgh, Scotland: Treasurer.

A further fifteen members were elected to serve on the Executive Committee.

The International Association for the Study of Child Language originated during a first meeting at the University of Brno, Czechoslovakia, October 14-16, 1970, under the chairmanship of Karel Ohnesorg, who also edited the Proceedings (Colloquium Paedolinguisticum, Mouton, 1972). At a second meeting, the International Association for the Study of Child Language was officially organized with Charles A. Ferguson, Stanford University, U.S.A., as President, Walburga von Raffler-Engel as Secretary, and Els Oksaar as Treasurer. It also elected an international committee of vice-presidents: F. Antinucci (Italy), M. Bullowa (U.S.A.), D. Crystal (Great Britain), S.H. Herzka (Switzerland), M. Mikeš (Yugoslavia), T. Slama-Cazacu (Romania) and D.I. Slobin (U.S.A.). This second meeting, the International Symposium on First Language Acquisition, took place at the Tuscan Academy of Sciences in Florence, Italy, in September, 4-6, 1972, and was chaired by W. von Raffler-Engel. The Proceedings were edited by W. von Raffler-Engel and Yvan Lebrun (Baby Talk and Infant Speech, Swets and Zeitlinger, Amsterdam, 1976).

The Association has encouraged international contact and communication by, for example, initiating the establishment of the Journal of Child Language (under the editorship of David Crystal, University of Reading, published by Cambridge University Press) and the Child Language Newsletter (edited by David Ingram, University of British Columbia, published in conjunction with the Linguistics Reporter); also by contributing to the establishment of such projects as the cross-cultural Project in Developmental Kinesics, directed by W. von Raffler-Engel, with its first operating branch chaired by Fred C.C. Peng and sponsored by the Japanese Ministry of Education.

The Symposia of the Association have brought together scholars of child language from Linguistics, Psychology, Paediatrics, Neurology, Speech and Hearing, Early Child Education, Anthropology, and Sociology - from Europe, the Americas, Asia and Africa. From the papers and discussions of this cross-cultural and interdisciplinary group, a strong trend emerged in Florence to see language as a social phenomenon, with explicit attention drawn for the first time to input factors and to non-verbal communication. That conference signalled the end of the study of language acquisition as if it were a linear development of innate grammatical rules. The full importance of the interactional and pragmatic aspects of language development emerged at the London conference which also saw the first separate sections on pre-speech, kinesics and language disabilities.

The first three gatherings of the Association were mainly invitational. The next meeting will more likely be a congress. It is planned to be held in 1978 in Tokyo, Japan, under the chairmanship of Fred C.C. Peng. This coming conference promises new developments and contributions in all these fields. It may very well be that the trend of the future lies in a pluri-modal approach to language acquisition, how children acquire understanding and production of the auditory as well as the visual rules of conversational interaction. Another trend of the future seems to be the linguist's concern with language pathologies. Interest in pragmatics is not only limited to extra-linguistic factors but includes the observation of natural cases where language has broken down. The co-operation between practitioners and theoreticians may be one of the most fruitful trends of the future in child language studies.

Walburga von Raffler-Engel.

Preface

This volume is based on selected papers, revised and expanded, that were presented at the Third International Child Language Symposium, 3-5 September, 1975, in London. The Symposium was sponsored by the International Association for the Study of Child Language. The Organizing Committee consisted of Natalie Waterson, Chairman; Walburga von Raffler-Engel, Associate Chairman; and Committee members David Bennett, Bruce Ingham and Geoffrey Ivimey. Additional help was given by Margaret Bullowa. There were 12 sections representing a wide range of interests, and 80 papers were given in the form of short research reports. About 200 scholars from 29 different countries attended the Symposium.

The 12 sections and the names of those who chaired them were as follows: Bilingualism, Els Oksaar; Child Sociolinguistics, Susan Ervin-Tripp; Kinesics, Walburga von Raffler-Engel; Language Acquisition and Reading, Ragnhild Söderbergh; Language Acquisition and the Handicapped Child, Geoffrey Ivimey; Language and Cognition, Tatiana Slama-Cazacu; Language Spoken to Children, Catherine E. Snow; Linguistic Universals, Dan I. Slobin; Phonological Development, Charles A. Ferguson; Prespeech, Margaret Bullowa; Semantic Development, Nathan Stemmer; Syntactic Development, Richard Cromer.

There were two invited speakers: Adrian Fourcin and Anthony Buffery. Their papers are included in the volume.

The high cost of publication made it impossible to publish the full proceedings. We are grateful to John Wiley and Sons, Ltd., for agreeing to publish as many as 30 papers, which made it possible to represent those aspects of child language development which created the greatest amount of interest. Selection of papers was a difficult task and we would like to express our gratitude to the section chairmen who gave their advice and recommendations. The selection of only 30 papers meant that several interesting ones could not be included, but these will no doubt appear in print elsewhere in due course.

Within the limits set, we aimed to give an overall representation of what was new and stimulating at the

Symposium, at the same time preserving the international character of the contributions and covering a fair range of language material, as well as including different methodologies such as case studies and experimental manipulation.

The direction in which child language studies have moved in recent years is towards the study of language acquisition within the social context, taking into account the wide range of influences which bear on the child from birth, as well as his influence on those who interact with him. This means that research is no longer neatly compartmentalized. For instance, syntactic development is now mostly studied within the context of language use so that a syntactic study may well overlap with an interactional one. Classifying the contributions under section headings therefore presented something of a problem as several of them could have been placed under more than one heading. However, it is necessary to give some structure to a book in order to make it manageable for the reader, so we grouped the papers in accordance with what seemed to us to be the major emphasis intended by the author. We would not wish, however, to impose our judgement on the reader, and suggest that each paper should be read for its own merits rather than essentially as a contribution to the particular aspect of language acquisition indicated by the section heading under which it is placed.

We owe thanks to many who helped to make this book possible. We are indebted to the authorities of the School of Oriental and African Studies whose generous support enabled the Symposium to be held in London. We thank the authors for responding to our request to expand and revise their ten-minute presentations into fuller papers within a limited time, and all the participants in the Symposium whose comments and questions during the discussions contributed to the final versions of the papers. We acknowledge with pleasure the assistance given to us by the publishers, who provided much helpful guidance during the preparation of the book.

We are also grateful to Vera Williams, who prepared the papers. Her quick and accurate work made it possible to bring the book out sooner than would otherwise have been the case. Our thanks too are due to Bruce Ingham and Marcia Vale who helped in the task of checking the typescript of the book, and to Maria T.H. Singelenberg who assisted in the preparation of the index.

N.W.

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Introduction

The papers collected in this book represent some of the areas in child language research in which new and important developments have taken place in the last five years. Developmental psycholinguistics has undergone remarkable changes in its theoretical assumptions, its methodology, and its areas of concentration. Five far-reaching changes in child language research since 1960 are:

1. Growing interest in the semantic and pragmatic components of children's linguistic competence, replacing the earlier concentration on syntactic competence.
2. Increasing recognition that language is intrinsically communicative and that the acquisition of language occurs within and is dependent upon a social-communicative context.
3. Growing awareness that language acquisition can not be understood without relating it to the concurrent cognitive development of the child.
4. A recognition of the importance of perceptual processing in language acquisition.
5. A reinterpretation of the nature of the innate structures for language acquisition.

The scope of child language studies has thus broadened considerably and although the emphasis has changed, this has not resulted in a neglect of the task of describing the growth of the child's knowledge of syntax; in fact syntactic acquisition can be better understood by virtue of being placed in its context of social interaction, cognitive development, and semantic-pragmatic acquisition. The shift in emphasis away from syntactic acquisition has meant that language is no longer seen as an object of knowledge for the child, a set of rules which he must discover one by one by listening carefully to native speakers. Rather, language is seen as one of several techniques for interacting with other human beings. The communicative function of language is primary and enables the child to learn syntactic structure.

The different areas of theoretical interest are discussed below.

Semantic and pragmatic components. In the early 1960s, child language researchers, under the influence of what were new and exciting developments taking place within theoretical linguistics, concentrated their attention on the problems faced by children in learning word order and transformational rules. Children's utterances were analyzed in terms of syntactic rules which were seen as making their production possible. Such studies were extremely valuable not only as careful descriptions of interesting aspects of language acquisition but also because they revealed considerable regularity in the process of syntactic acquisition, both in the individual child and across children. Unfortunately, the technique of classifying child utterances in terms of the rules necessary to produce them fails to capture many important aspects which can only be understood if the utterance is studied in its conversational and non-linguistic contexts. The expression of case relations, for example, or of the topic-comment distinction, can be identified only by interpreting the child utterance using information from preceding utterances and the on-going activities to determine the child's semantic intent. With full information about context and situation, a start can be made toward answering such questions as which aspects of a situation the child chooses to encode in speech, the rules used for expressing such semantic relations as agent-action or possessor-possessed, and the syntactic means used for expressing illocutionary functions such as demand and inform. A much more complete description of the young child's knowledge of his language is thus made possible, and the relationship between syntax, semantics and pragmatics is made explicit.

The social-communicative nature of language. Emphasis in both theoretical linguistics and in developmental psycholinguistics has in the last few years shifted back to the social-communicative role of language. This shift has had various consequences for child language research; it has resulted in

- 1) Attention to the child's intentions, and to growth in the ability to express various kinds of intentions.
- 2) Attention to the conversational skills which children acquire along with the other components of linguistic ability.
- 3) Recognition of the importance of non-verbal communication: that language is a rather late step in the development of communicative skills, that communication between a child and his caretakers can be established long before the first one-word utterance is produced.

Recognition that what and how the child communicates is the true object of language acquisition research has greatly expanded the age range studied. Behaviours of infants as young as 9-10 months can be identified as truly communicative, and a continuum can be seen between those behaviours at 9-10 months and the behaviour of much younger babies.

The emphasis on the child's message has meant that much more attention has been paid to the interactions in which a child engages. Messages are a social construct; they require a sender and a receiver and a set of rules known to both about the form messages can take. The social construction of messages is a process which can be observed in any linguistic interaction, but it is especially clear in the case of a child's interactions with his caretakers. It often happens that only the regular caretakers or companions of a young child are able to interpret his intentions, in other words, that the child is an effective communicator only within a very limited circle. Language acquisition can be seen as the process of learning how to communicate effectively with a wider and wider circle of members of a language community. The range of notions which young children can express is greatly expanded by virtue of the conversational frames provided by interlocutors. In studying children's speech, it has proved very useful to take as the unit of study not just the child or the child's utterances but the caretaker-child dyad and the conversation.

Language and cognitive development. Neither what children talk about nor the way they talk about it can be viewed as purely linguistic phenomena. Development of language is found to be greatly dependent on cognitive development. Between birth and three years, children undergo a dramatic reorganization of the way they see the world. A few aspects of the ability to use language can, on the basis of recent research, be related to milestones of cognitive development - the ability to use tools, to use objects symbolically, to carry out operations like matching and counting. Many more relationships could be sought between specific milestones in linguistic development and the pre-requisite cognitive achievements.

Perceptual processing. An aspect of cognition which is of central relevance to linguistic behaviour is information processing. The study of the development of the physiological and psychological functions underlying information processing is indispensable to a full understanding of how the child comprehends speech and how he uses the information about the structure of language available from the speech addressed to him.

The early learning of verbal communication is largely dependent on auditory processing, and auditory processing is therefore of vital importance in language

acquisition. Recent neuropsychological research on the various asymmetries in cerebral structure and function and on lateral preferences suggests that their development in man may relate to increasing competence in the use of complex language codes which in turn depend on the recognition of auditory stimuli. The fact that the neonate is found to have a relatively enlarged left-sided planum temporale provides evidence for innate structure specialized for speech perception. Babies are known to be able to discriminate between the human voice and other sounds very early in life and recent work in phonetics has shown that the child starts by processing the lower end of the frequency spectrum and then gradually discriminates more of the higher frequency range. Studies on speaker identity, the means by which people recognize the voice of those they know, have revealed that it is the fundamental frequency, i.e. the low frequency range of the individual's voice, that provides the main cue (E. Abberton, Listener identification of speakers from larynx frequency, in Speech and Hearing, University College, London, 1974). It thus seems that young humans, like other young animals, are biologically endowed to recognize their mother's voice in early infancy, maybe even from birth, and this may explain why the child mostly makes use of the low frequency end of the spectrum in the first stages of language learning.

Innate structures for language acquisition. Early in the 1960s the view was generally held that the human was born equipped with considerable (syntactic) information about the nature of language and that innate factors were of much greater importance in determining the course of language acquisition than environmental factors. Now with the information gained from research into the nature of speech addressed to children which has revealed that such speech provides very rich information about the structure of language, and from growing knowledge about the child's ability for perceptual processing of the speech signal, and the link between cognitive development and language development, there has been a reappraisal of the nature of innate structures.

It seems that the child is able to acquire the language of his environment without the aid of innate linguistic (syntactic) structures but that he has an innate structure for perceptual processing. He can thus construct his own language system on the basis of the linguistic information available to him from the language his caretakers use in interaction with him.

Perceptual discrimination of the speech signal has been found, in both experimental and naturalistic studies, to be a gradual process in children. Longitudinal studies have shown that children can only process a very limited amount of language in the early stages and that the amount processed increases as time goes on.