

# STOCKHOLMS UNIVERSITET INSTITUTIONEN FÖR LINGVISTIK

# FORSKNING OM TECKENSPRÅK II

1978

Brita Bergman

THE FIRST NATIONAL SYMPOSIUM ON SIGN

LANGUAGE RESEARCH AND TEACHING,

Chicago May 30 - June 4, 1977

pp 1-4

Sten Ulfsparre

TEACHING SIGN LANGUAGE TO HEARING

PARENTS OF DEAF CHILDREN

pp 5-10

Inger Ahlgren

EARLY LINGUISTIC COGNITIVE DEVELOPMENT

IN THE DEAF AND SEVERELY HARD OF HEARING

pp 11-15



Brita Bergman

The First National Symposium on Sign Language Research and Teaching, Chicago May 30 - June 4, 1977

The first American National Symposium on Sign Language Research and Teaching was held in Chicago during the summer of 1977, sponsored jointly by:

The National Association of the Deaf The Salk Institute for Biological Studies, Gallaudet College, Washington D.C. California State University, Northridge Center on Deafness, Dep. of Special Education

The purpose of the symposium was "to provide a forum for the exchange of information on sign language research and teaching and to discuss how a continued exchange between sign language researchers, sign language teachers and educational researchers may benefit all educational programs for deaf children and adults as well as persons with normal hearing who want to learn sign language". The quotation is from the announcement folder, where it also states that "the subject matter is to be natural sign language - manual codes for presenting other languages are not on the agenda".

More than 250 people attended the symposium, representing primarily three different groups: researchers, teachers, and students. There were about 10 foreign participants, including the three of us from Sweden.

Apart from the days of arrival and departure, the remaining days followed the same schedule: plenary sessions in the morning, workshops after lunch followed by selected papers (four given simultaneously), and summery of the day. Teaching, research, and utilization were the topics treated during these three days.

To give the reader an idea of what aspects of sign language are being studied today in the U.S. I will discuss here some of the recurring topics of the symposium - those that I found most interesting.

Even though the speakers were convinced that sign language

is a language, and the audience as a whole seemed to agree, it still seemed necessary to stress the issue that sign language is a language. It is not a very common task for a linguist to argue that what you are studying is a language (has anyone proved that English is a language?) but it seems we must cope with the problem due to non-signer's ignorance. The three authors, Ursula Bellugi in her paper The signs of language, Carol Padden on Some contributions of research in American sign language: Toward a linguistic awareness of ASL, Ella MaeLentz on Informing the deaf about the structure of ASL demonstrated great awareness of the fact that people tend not to recognize sign language as a language.

Some papers concentrated on visual and iconic aspects of sign language, which in my opinion represent one of the most interesting and essential tasks for sign language study. However, focus was not on sign language grammar but rather on "learnability". In his opening address Roger Brown put the question: Why are sign languages easier to learn than spoken languages?, and advanced the case for iconicity. He also regarded iconicity as a vital characteristic of sign language, not likely to disappear with historical change. Inger Ahlgren (see page 11) discussed deaf children's acquisition of sign language, using the argument that vision plays a great role in children's cognitive development, in general. To mention a third paper in this area, Mark Mandel gave an account on a pilot study of Iconicity of signs and their learnability by nonsigners.

A third group of papers may be characterized as dealing with sign language structure. For example, Scott Liddell's paper on Non-manual signals in American sign language: A many layered system. Liddell discussed non-manual signals as grammatical markers but had also found four other categories of non-manual signals: pantomimic, components of lexical items, indicators of the signer's attitude toward what he is saying, and non-manual adverbs.

To test the hypothesis that the primary role of facial expressions is to "act in concert with the hands to provide the signal redundancy found lacking in the hands", Rachel Mayberry demonstrated a shadowing experiment using video taped ASL stories, with and

without visual noise.

Geoffrey Coulter discussed <u>Continuous representation</u>. He had looked at adverbial and adjectivel signs and found that, rather than being continuous, they had a number of distinct variants.

Finally, Carlene Pedersen presented her paper on <u>Verb modulations in American sign language</u>, giving a number of examples of aspectual modulations, person inflections and morphological derivations in one sign: "look".

In papers on sign language teaching (Harry Hoemann; see also Ulfsparre page 5 ) and in one of the workshops (Dennis Cokely), the expanding use of video tape material in sign language instruction was evident. I believe this medium will prove vital to the success of teaching for several reasons: (1) because the use of written textbooks hampers the possibility for both students and teachers to free themselves from the heavy influence of English; (2) that written English is an inadequate representation of sign language; and (3) that when using video tape one must learn to rely only on one's eyes which helps to emphasize the visual qualities of sign language.

It is equally as important to have deaf teachers of sign language as it is to use video tape material. With a deaf teacher the students are automatically forced to adopt their communication to a visually oriented mood, while with a hearing teacher they, quite naturally, often use their spoken language as soon as something interesting or important is to be discussed. In Sweden we have had training courses for deaf teachers of sign language since 1974, organized by the National Board of Education. Until that time only hearing interpreters had access to such courses but now only deaf people do.

Barbara Kannapell in her paper The deaf person as a teacher of American sign language: Unifying and separatist functions of American sign language discussed from a sociolinguistic point of view the problems of deaf teachers who are not aware of their bilingualism, and unconsciously hesitatant or even unwilling to use and to teach their own language to hearing people.

Two of the plenary session papers were delivered in sign, by Louie Fant and Larry Fleischer. They were not interpreted simultaneously (as is usually the case for spoken language papers) but consequtively. This had many advantages, among others that the deaf participants were able to have continuous eye contact with the speaker. It was especially appreciated by those of us who did not have native fluency in English since it facilitated interpretation. Both the deaf person and the interpreter were able to watch the speaker while he was signing and when the (English-speaking) interpreter was talking, the Swedish interpreter could translate simultaneously to Swedish sign language, i.e., if we had not already understood the speaker. We felt this to be the only really effective way to arrange the interpretation and believe this is how it should be done when there are two or more sign languages involved. Also, those using spoken language themselves, especially at international meetings, should take consecutive interpretation.

A fact pointed out by several speakers was that there is a gap between researchers and teachers of sign language. For example, Louie Fant mentioned the lack of a comprehensive description of the structure of sign language. While awaiting its arrival, we may study the proceedings from the symposium.

In addition, researchers need more regular contact with one another and one of the results of the symposium in Chicago is that the Institute of Linguistics, University of Stockholm, will arrange the First International Symposium on Sign Language Research in Stockholm, June 1979, as a step in that direction.

Sten Ulfsparre

### Teaching Sign Language to Hearing Parents of Deaf Children

## The present situation in Sweden

Since the beginning of our research project on sign language acquisition in deaf children<sup>X</sup> we have noted the lack of communication between deaf people and those hearing people that learned Signed Swedish.

Signed Swedish is a constructed language that is used almost exclusively in teaching. For communication it works poorly because it is based on simultaneous use of speech and sign. The combination of speech and sign seem to have a hampering effect on both communication modes, and one must be very well skilled in order to produce that language well. To understand it you need a good knowledge of Swedish. The majority of deaf people do not have the necessary mastery of Swedish but even those who know Swedish very well find Signed Swedish slow, clumsy and boring to look at. The result is that deaf people are unwilling to communicate with the hearing persons that learned Signed Swedish even if they have studied it for a long time and learned it rather well. Also, when deaf do communicate with the hearing they automatically try to adjust their own signing to the Signed Swedish. This means that they use a language that is not their own, and it precludes the hearing from learning the sign language of the deaf. Therefore the hearing have no opportunity to develop their sign language through communication.

And yet most of sign language courses in Sweden teach Signed Swedish. No information is given on the rules and structures of deaf signing, partly because too little is known about sign language and partly because Signed Swedish is a more acceptable language in the teachers opinion. Therefore you can attend sign language courses without even knowing that you learn a language not used by the deaf. For hearing parents of deaf children this situation is rather difficult. They learn a language that is not

<sup>&</sup>lt;sup>X</sup>For a closer presentation of the project see Ahlgren in this volume.

a very comfortable way of expressing feelings and emotions and at the same timepresupposes knowledge of Swedish. Small deaf children know nothing of Swedish and need to have a good emotional contact with their parents. To establish that contact the parents must know a language suitable for visual communication which Signed Swedish in its rigid form is not. Even if Signed Swedish is modified to include some characteristics of deaf signing it is still not the language that the deaf children will use later on when they grow up. If the parents want to develop and keep the contact with their children they must be able at least to understand deaf signing.

## Why we tried to teach deaf signing

In our child language-project we were forced to work with the problem of parents sign language competence. The parents constitute the main linguistic surrounding for their small deaf children. The early acquisition of sign language in the child is very much dependant on sign language abilities of the parents. Therefore we found that we had to give parents better possibilities of learning sign in order to encourage the linguistic development in their children.

For that purpose we worked out a model of an intensive course in communication with small deaf children for hearing parents. The course consists of two weeks with a nine month interval and this is a report on the first experiment with the first week.

#### What we did

Participants were parents of deaf preschoolers mainly in the age group 1 - 2 years. The teachers were all deaf and the children were cared for by deaf adults. A few hearing siblings were also included. The course was held in a place where all lived together with intensive teaching in daytime and lively gatherings in the evening with children, parents and teachers. Children included, the deaf people were in majority and thereby the hearing were put in a real sign language surrounding. In addition to the parents,

some workers from day care centers, where these children spend most of their days, also participated.

Included in the schedule every day was, apart from pure language training, storytelling, pantomime and mimics, analyses of child language and nonverbal communication. Much of this was directly inspired by the work of Brita Hansen, Centre of Total Communication, Copenhagen, Denmark.

For sign language teaching we used only videotaped material. Sign language is movement, therefore moving pictures is the only material that can logically be used.

The videotaped material includes many different examples of sign language vocabulary and grammar with motivated and arbitrary signs, sequences of definite and indefinite signs, compound signs, meaning modifications, localizations and so on. It also includes dialogues and monologues for comprehension exercizes.

One hour and 40 minutes every morning was spent on pantomime and mimics. The point of these exercizes is not the artistic qualities, but rather communication. The parents must resort to pantomime when their signing is not sufficient and they must also interpret the pantomime of their children. These lessons also serve as a relaxing start for the rest of the day.

A spontaneous dialogue recorded at home between a deaf father and his three-year old son was used for analyses of child signing. The dialogue takes 14 minutes altogether, but it takes five lessons each 45 minutes of duration for the participants to really notice and understand everything that is happening between the father and the boy.

In practising storytelling the participants told stories from picture books. The English series <u>Talk About</u> (Ladybird Books) was used. It has almost no text since it is meant to serve as material for free story telling. It is thereby especially useful for sign language communication.

The lessons in nonverbal communication were an amusing and important part of the teaching. The material consisted of coloured and noncoloured pictures. The participants were placed in pairs facing each other with two to three meters between. One in each pair got papers with coloured pictures of a doll, a house, etc. and the other got a black-and-white copy of the same picture and a box with crayons. The purpose of the exercize was to communicate

the right colours to the right places with gestures and the colour signs.

The students (twelve people) were divided into three groups. The teachers were three deaf persons with long experience in conventional sign language teaching. The lessons were organized with moving groups: the teachers each had their station and the groups changed station for every lesson. This system is motivated by the difficulties in moving the video equipment but it also means variation for the students, a well-accepted device in the psychology of teaching.

In the social gatherings each evening only sign language was used. During the first two or three evenings signs were accompanied by speech occasionally but the end of the week sign language and gestures were dominating. Discussions about deaf people, their culture and language were frequent in the evenings. We are convinced that these gatherings are an important part of the course since it gives an opportunity to (not to say forces) natural communication in sign.

### Evaluation and experiences

For the children the course provided opportunity to meet other deaf children and deaf adults. For some of the children this was the first contact with deaf adults and we could observe that it was a very strong and positive experience for the children.

The parents all agree that their sign language and communicative skills improved. Their willingness to sign increased even more noticably through the constant contact with adult signers in daytime as well as in the evenings.

Their opinion of their own children was influenced in a positive way by their meeting several grown up deaf people (some of which are poor speakers) to whom deafness is not a problem but a fact.

The fact that the children were present meant not only that both parents could participate but also that they immediately could try their new skills in communication. The parents could also learn from watching the interaction between deaf children and deaf adults as well as between the children.

Our experience from this is that hearing parents should have the

opportunity to learn the sign language of the deaf. It is the primary language for the deaf and since it is used among deaf adults it will be used by deaf children when they grow up. It is a really visual language, not one constructed to meet the conditions of speech. Sign language is used for communication among native speakers and it is in contact with native speakers, not through teaching, that you really learn a foreign language. Teaching gives you the basic tools for learning language but you must try them in communication in order to learn their proper use. There is so much variety in signing, so many nuances and possibilities to modify expressions. It can be adjusted to more nonverbal communication (as in conversation between deaf from different countries) or to the Swedish language (as in the exact interpretation of a written text). It is a rich source for expression but it is neither easier nor more difficult to learn than any other language. However, you need good teaching and ample possibilities to use it with fluent signers. Good teaching requires both that we know a lot more about sign language than we do today and that we have well trained teachers in sign.

Sign language research is a new field and most of the deaf do not know enough about their own language. Sign language has for a long time been regarded as a poor means of communication. It has been suppressed at school and the deaf have been taught that signing is ugly, hampers the development of speech, and should not be used. The oralists have for decades tried to strenghten that impression. (Note that most of the opponents to sign language did not know it themselves.) Therefore we need, apart from research, training of deaf teachers to be able to offer good teaching on a large scale. We think that it is important that the teachers are deaf. It is only with deaf people that sign language becomes really natural to use. Between hearing people speech is always more natural. In order to provide a communicative situation which is as realistic as possible, deaf teachers are preferred even to those hearing that have completely mastered sign language.

We feel also that comprehension rather than production of sign should be emphasized in teaching parents. The children are often tolerant to bad signing and understand their parents surprisingly well. But when children grow and develop in their sign language the parents in turn develop problems of understanding. Of course the parents must know the basics about how to make signs but it is their receptive skills that make it possible to learn the language in communicative contact with deaf people. The second week that follows within one year is organized the same way but there is then more emphasis on pure language training.

## Plans for the future

When we saw that this form for teaching worked very well we contacted educational authorities in Sweden and suggested that the same opportunities to learn sign language should be given all parents of small deaf children all over the country. So far, they have decided to try this kind of course in a few places as an experimental program. We think it is important that these courses be organized locally with teachers from the same area where the parents live, in order to encourage a continued contact between the hearing parents, the deaf children and deaf adults. The teachers will be educated within our project so that our knowledge of small deaf childrens communication is directly used.

Inger Ahlgren

Early Linguistic Cognitive Development in the Deaf and Severely Hard of Hearing

### Background

The project being reported here concerns early sign language development in deaf children. It is being conducted in the Institute of Linguistics, at the University of Stockholm, and supported by the Swedish Board of Education. The project staff consists of one hearing and two deaf researchers. The subjects are four deaf children, all of whom were born in 1974-75. of the children have deaf parents and two of them have normally hearing parents. The children are visited regularly at least once every two weeks either in their homes or at their day-care centers. These visits are made at varying times of the day in order to obtain a full picture of the child's daily activities. The majority of the sessions are recorded via diary-type notes but approximately every second month the sessions are recorded on video tape. We utilize the method of participant-observation and attempt to perform the analyses continously. For each child we also conduct one "full-day" recording. That is, for each child video tape recordings are made of one full day from the moment he awakes in the morning to when he falls asleep in the evening.

The theoretical basis for our analyses is an attempt to synthesize four theories of interaction. The cognitive psychology of J. Piaget and J.S. Bruner provides us with a general framework for cognitive development through interaction while the psycho-sociolinguistic theories of L.S. Vygotsky and M.A.K. Halliday describe the role of language and communication in the interactions. Within this framework the key phrase of our project is "communicative situations". The study is not restricted to analysis of utterances produced by the child but rather an attemt is made to understand the total situation in which the child produces or perceives linguistic messages. That is, we are attempt-

ing to determine in what contexts communication occurs, what constitutes a situation favorable to the development of communicative skills, what successful communication actually is, and what happens when communication breaks down.

Such goals apply, of course, to language acquisition in general but it is our special goal to obtain information relevant to deafness and to the special sort of bilingual situation faced by the deaf child in a hearing family. Thus, the purpose of the project is two-fold: 1) to obtain perspectives on language acquisition through the study of sign language development, and 2) to study the deaf child in a hearing-family environment as an illustration of communicative poverty.

In the first issue we are concerned with the use of sign language as a tool especially useful for the study of language perception. It is quite easy to observe when a deaf child is looking at signs but it is quite difficult to observe when a hearing child is listening to spoken words. Data on this aspect come primarily from the family where all family members are deaf. In such a family it can be assumed that sign language has the same function as speech has to a hearing family.

The second aspect of the research, that of the deaf child in a hearing family, is concerned with what can be done to compensate for the child's lack of an adequate communicative setting. Here we are concerned with simulating the conditions of the deaf family so that the deaf child with hearing parents might be provided with the same environmental possibilities as those of the deaf child with deaf parents.

# Are deaf children linguistically more advanced?

The problem I wish to discuss with you stems from observations of interactions in deaf families.

Our observations of the deaf child in an adequate linguistic surrounding, i.e. deaf parents, strongly suggest to us that not only is he using language on a developmental level comparable to his hearing peers but in fact, on an even more advanced level. The deaf two year old appears to have a richer vocabulary (grant-

ing the difficulty in estimating size of vocabulary), a more context free and informative use of language and a more conscious and analytical attitude towards language. We have, for example, recorded a 2 year old boy teaching sign language to another deaf child 1 1/2 years of age. We have several examples of children from 1 1/2 years to 2 1/2 years asking questions about signing and the manual alphabet. In addition we have several examples of how the deaf child uses language to express such feelings as anger or fright where the hearing child of the same age would scream or bite or communicate in some other nonverbal fashion. These observations have been corroborated by staff from the daycare centers. Are such observations only the result of a few unusually bright children by chance selected for the project, or is sign language in some way favourable to linguistic development? I think sign language is an easier method of communication and a better tool for concept formation than is speech because of its close bound to visual perception.

The development of communication in hearing children is a neglected area of research. Very little has been written about how children communicate their wishes and needs before the development of language. The acquisition of spoken language has been studied, but very little effort has been directed to the communicative aspects of early child language. We must therefore resort to the every-day experience of small children. The following observations are based on such experience.

Hearing children communicate rather well with gestures even before they utter their first words. They understand many gestures such as pointing, waving, nodding and so on in their first year and they use gestures for a variety of messages. Even when they beging to talk they still rely heavily on gestural communication for a long period of time. Gestures are used as complements to words both when the child speaks and when he is spoken to. The acquisition of speech in the hearing child can therefore be said to be a gradual transition from a visual-gestural mode of communication into an auditory-spoken mode. The deaf child does not change modes but develops language out of his gestural system.

If we now turn to the cognitive development of hearing

children we are scientifically on much safer grounds due to the extensive work of J. Piaget and his associates. Through his work we can appreciate the overall importance of visual perception for cognitive development. Piaget shows that the child's experience of the world develops in three stages. During the sensori-motor stage he can only obtain experience through direct In this period vision and movement are the most manipulation. important for development. Visual, tactile, and auditory information coordinated with action is the basis for concept formation, but of the three perceptual channels vision is the most important. Deaf children show no retardation in this period while blind children do, according to studies referred to in Piaget's work (Piaget & Inhelder 1969). The second stage is when interpretation of pictures becomes an important source of information. child makes mental images of the world and begins to express himself e.g. in drawings. In the description of this stage Piaget uses perception synonymously with visual perception. stage hearing is developmentally important only in connection with language acquisition. But language in this period merely reflects the development of thought and does not influence it. Not until the third stage is language the source of information about reality. It is then that true logical operations emerge.

Turning back to the deaf child, we see that he has the same developmental prerequisites as the hearing child with the difference that he also uses his visual system for language acquisition. The language in which the deaf child organizes his experience, abstracts, and makes generalizations about the world is based on the perceptual channel that is most highly developed and most closely related to thinking. This may give him an advantage in linguistic development compared to the child that develops language based primarily on the auditory channel.

To summarize: I propose that sign language develops earlier and is more advanced in deaf children surrounded by signing than does spoken language in hearing children. Sign language is an ontogenetically more basic means of communication and it is cognitively more closely linked to the most important source of information about the world than is spoken language. The data

that will support or refute this proposal will come partly from our continued analyses of sign language acquisition and partly from pedagogical experiments that we intend to perform with the subjects in the project.

## References:

Bruner, J.S., Beyond the Information Given, London 1973.

Halliday, M.A.K., Learning How to Mean, London 1975.

Piaget, J. & Inhelder, B., The Psychology of the Child, London 1969.

Vygotsky, L.S., Thought and Language, Cambridge, Mass. 1962.