



STOCKHOLMS UNIVERSITET  
INSTITUTIONEN FÖR LINGVISTIK

## FORSKNING OM TECKENSPRÅK IV

1978

---

Brita Bergman

CURRENT DEVELOPMENTS IN SIGN LANGUAGE RESEARCH IN SWEDEN

## CURRENT DEVELOPMENTS IN SIGN LANGUAGE RESEARCH IN SWEDEN

Summery of a paper presented at a Sign Language Seminar sponsored by The British Association and the Northern Counties School for the Deaf, at Newcastle, October 1977.

Research in sign language began in Sweden five years ago with a four-year long study of Signed Swedish.<sup>1)</sup> Presently there are two research projects concerned with sign language in progress at the Institute of Linguistics, University of Stockholm: "The sign language of the deaf"<sup>2)</sup> and "Early linguistic cognitive development in the deaf and severely hard of hearing"<sup>1)</sup>.

### Signed Swedish

Signed Swedish is a constructed language which is closer to the Paget system, than to what in Britain is usually referred to as Signed English. Most of the signs in Signed Swedish, however, are borrowed from the Swedish sign language (SSL; cf BSL), but there are also the so-called grammatical signs in Signed Swedish and quite a few compounds not found in SSL. The main characteristic of Signed Swedish is the simultaneous use of speech and sign according to the principle one word - one sign. Hence it follows that the signs appear in the same order as the spoken words.

---

1) sponsored by The National Board of Education

2) sponsored by The Bank of Sweden Tercentary Foundation

The construction of Signed Swedish was a compromise on the part of the association of the deaf. The schools for the deaf refused to use sign language and one of the arguments used was that it is impossible to use SSL proper simultaneously with speech. Another argument against SSL, still being used, is the wide-spread misconception of SSL as being a threat against spoken and written language. To meet this argument Signed Swedish was constructed in a way that it should facilitate deaf children's acquisition of spoken and written language; that is, the manner of signing was adapted to spoken Swedish. However, in order to accomplish this goal two conditions must be fulfilled: a) the deaf child growing up in a family using Signed Swedish must really be signing in the same manner; it is not enough if the child understands what the parents are signing, but to know Signed Swedish also requires that the child express himself in the same manner; and b) that the Swedish language is represented in an accessible form by Signed Swedish.

Now, to start with (b), Signed Swedish from the child's point of view (and remember that the child does not know Swedish) consists of visually perceived lip movements and signs. The child can learn the signs, i.e., the form of the sign and the meaning (concept) conventionally attached to it. The child may even use the same lip movements as grown ups use with that sign. But this does not mean that the child really gets hold of the form of the word, spoken or written. (I demonstrated this in a concrete and convincing way at the seminar, when I switched off my voice and signed two sentences in Signed Swedish. The participants got the meaning of the sentence ("I am reading a book") but no one could tell me the Swedish words, spoken, written or finger-spelled.) We see here that Swedish cannot be acquired automatically just through the use of Signed Swedish for communication. Even if the child were to produce sentences in which the signs occurred in the same order as the words do in Swedish (cf condition a), the forms of each word would still have to be taught.

Most hearing parents of deaf children in Sweden learn Signed

Swedish. Only a few develop a good command of it, largely due to the grammatical signs, constructed to accompany some of the most frequent inflexional bound morphemes (suffixes) in the Swedish language. A correct use of those signs actually requires a continuous analysis of the sentences you are producing. This hampers the speed of communication and in some cases also leads to an unnatural pronunciation of the words, greatly influenced by the spelling. More serious though is that when using Signed Swedish some people tend to concentrate on teaching Swedish rather than on the important matter of a working and mutual communication.

When it comes to communication and Signed Swedish I must mention another complication. Most people who learn Signed Swedish are not aware of the fact that they are being taught that, and not how deaf people sign, since the courses are called simply sign language courses. However, when they meet deaf adults (parents are encouraged to join the deaf clubs which are all affiliated to the Swedish Association of the Deaf) they discover mutual problems in communication. Hearing people tend to believe that the difficulties are due to their own inability to perceive sign language, without realizing that the reason is that they are confronted with a totally different language. To understand SSL you must, of course, have knowledge of that language, which you do not have if you have only been taught Signed Swedish. To understand Signed Swedish the receiver must know Swedish, a criterion which all deaf do not meet. I will return below to the problem of teaching hearing adults sign language.

### Swedish sign Language

Thus far I have given an introduction to Signed Swedish and have touched upon a few results from my research into that language. I will also, though very briefly, say a few things about SSL that I am presently investigating. It was planned as a three year project, and began 1977. There are two of us working full-time on the project, Lars-Åke Wikström, who is deaf, and myself, who is hearing. In my opinion it is not reasonable to do

research in sign language or any of the sociological or psychological aspects of deafness without deaf people taking an active part in the research, although it is possible to do so without hearing people.

In our study of SSL we concentrate on two levels of the language: the symbols (the signs) and how they combine to form phrases and sentences (rules of syntax). We have started to collect signs (how large is the vocabulary?) and have now a rapidly expanding card index register of signs. Representing signs in written form remains a great problem, but for the time being we have solved it by using a written system originally constructed for Signed Swedish. One very simple reason for not using Swedish words as symbols for the signs is that for many signs there is no one-word-translation into Swedish. We hope the material collected in this study will be used for the compilation of a dictionary, using both photos and the sign transcription in a modified form.

Most descriptions of signs focus on the manual aspect of the sign. In some dictionaries, for example, only the hands are depicted, with the body and head omitted. But when observing sign language you see not only the moving hands, but other bodily parts being used as well. We have found that the traditional view of the sign as being only manually produced is not a sufficient model for the description of all signs.

There are signs whose correct performance require a movement or a certain position of the lips. Some of these can be traced back to Swedish words, but many of them cannot be explained with reference to lipreading. We even have examples of these signs represented only orally, with the manual aspect of the sign deleted. Other examples are signs that require movements of the head, the eyes, the shoulders or the whole trunk. (Unfortunately I must refrain from describing these different types of signs in this abstract - a problem not present at the seminar where I had eye contact with the receivers and was able to provide demonstrations.)

I mentioned above that hearing people having learned Signed Swedish do not understand SSL when first confronted with it. This is a very simple and distinct indicator of the fact that they really are two different languages. The most conspicuous difference is found in syntax: the signs occur in different order within the two languages. But that is only part of the problem. Contrary to Swedish and Signed Swedish, which might be characterised as linear or sequential languages, the outstanding features of SSL are simultaneity and spatiality. In SSL (and it is reasonable to suppose that this is true also for other native sign languages) two signs may be produced simultaneously, not taking into account that a movement of the eyes or eyebrows produced at the same time may modify the meaning of the sentence in a manner functionally the same as suprasegmentals of speech. When it comes to signing of this kind it seems that the boundary between sign description and syntax is not as distinct as we had expected and the distinction between levels becomes difficult to maintain.

The spatial aspect of sign language syntax is manifest in the use of the localisation of a sign (either actual, somewhere in front of the signer's body or indirect by means of pointing), which determines the meaning of the sentence and may also influence the structure of the following sentences.

In SSL we find syntactic rules of quite a new kind compared to those of vocal (oral) languages (NB sign language is verbal!). And this is part of the problem of analysing sign language. For a start we simply must learn to use our eyes in order to be able to observe everything that is going on. We try to free ourselves from the "prejudice" or expectations about what language may look like, that our knowledge of vocal languages constitute. We must be prepared to find rules of syntax, and symbols, of quite another kind in a visual language than in an auditorily perceived one, for the very simple reason that hearing and vision function differently.

There has been, and still is, a tendency for linguists to be tricked into trying to prove that the native sign languages are languages. (Has anyone proven that English is a language?) We want

to avoid this approach. The plain fact that a lot of people do use sign language is enough reason for us to study it. With such an attitude towards sign language it is very likely that we will learn more about human language, and that sign language research in general will contribute to our concept of language eventually influencing the theories of human communication and language.

Is SSL difficult to learn?

A common argument against SSL in comparison to Signed Swedish is that it is too difficult for (hearing) adults to learn. But to learn to understand SSL is, of course, possible if one has vision and a good knowledge of your first language. (The latter is a standard prerequisite for learning any second language.) The sign language production though, is likely to be more or less influenced by Swedish. If hearing people are taught SSL rather than Signed Swedish they will acquire a greater sign language skill with more possibilities of variation. They will be able to choose to use either a more genuine sign language or to sign and speak simultaneously (with or without voice), which is perhaps the most natural and simplest for hearing people, but to use the signs in a manner adopted to how deaf sign. To sign and speak simultaneously is not the same as Signed Swedish. And when people knowing Swedish and SSL (bilinguals) combine the two languages as sometimes deaf people and interpreters of the deaf do, more natural and unconsciously produced forms of "signed Swedish" will emerge, with many of the characteristics of visual language which are lacking in the construction Signed Swedish as it is being taught today. The greatest benefit, however, if hearing people are given instruction in SSL, will be that they will be able to understand what deaf people sign.

We hope the results from our investigation of SSL will lead to improved sign language instruction. Within the project we are now giving sign language courses where we are testing our knowledge of sign language. Instead of using printed material for instructional purposes we are using videotaped sign language sequences,

and, more important, deaf teachers.

### Bilingualism

Finally I should like to comment on sign language in the schools. An argument long used, especially by those opposed to sign language communication in school, is that the unsuccessful acquisition of spoken and written language of deaf children can be explained with reference to SSL, which is said to destroy the Swedish language and lessen the motivation for learning Swedish. A more natural way of regarding this would be to look for the explanation of the insufficient knowledge of Swedish in how the teaching is being pursued. It is not the methods of instruction that I have in mind but rather how communication is carried on. A working communication must be regarded as a prerequisite for successful teaching, i.e., expanding knowledge and improving skills of the children. As I see it, it is impossible to discuss the choice between different systems of education as long as teacher and child cannot communicate with each other on more equal terms than is now the case. How does it effect the children that they cannot express themselves in their own language because the grown ups in their surrounding do not understand it, or insist that they express themselves in another way? What attitude to their own language, which they will continue to use later in life, is in this way conveyed to the deaf children during their entire school career.

I should like to see sign language established as a subject of its own in the schools for the deaf. Deaf people have the right to be proud of their language and to feel at ease with it. So, it is not sufficient that the school accept that the children use their own language. The school must sooner or later take its responsibility for the primary language of the children to be treated with the same respect as vocal languages. Bilingualism will then be the obvious goal of language teaching in the schools, bilingualism for both children and teachers.



I serien Forskning om Teckenspråk (FoT) har hittills utkommit följande 7 nummer:

- nr I (1976) Ahlgren, I., Rapport om planering och förarbete i projektet "Tidig språklig kognitiv utveckling hos döva och gravt hörsel-skadade. 10:- (32 sid)
- II (1978) Bergman, B., The first national symposium on sign language research and teaching.  
Ulfspärre, S., Teaching sign language to hearing parents of deaf children.  
Ahlgren, I., Early linguistic cognitive development in the deaf and severely hard of hearing. 5:- (15 sid)
- III (1979) Bergman, B., Dövas teckenspråk - en inledning. 12:- (43 sid)
- \*IV (1978) Bergman, B., Current developments in sign language research in Sweden. (7 sid)
- V (1979) Ahlgren, I., Om språkutveckling hos hörande och döva. 5:- (12 sid)
- VI (1980) Ahlgren, I., Projektet Tidig språklig kognitiv utveckling hos döva och gravt hörsel-skadade: Arbetssätt och erfarenheter.  
" Döva barn och vuxna döva. 10:- (28 sid)
- VII Ahlgren, I., Döva barns teckenspråk. 10:- (26 sid)
- Videogram I (1981) Bergman, B. & Wikström, L-Å., Svenska handalfabetet och bokstaverade tecken (svartvit U-matic 49 min)
- Supplement till videogram I (tryckt, 15 sid)
- 

FoT-rapporterna kan beställas från Institutionen för lingvistik, Stockholms universitet, 106 91 Stockholm. Tel 08-16 2347.

Nya häften i serien aviseras i de nordiska dövtidningarna.

Häftena får kopieras under förutsättning att också omslags-sidan kopieras.

En asterisk \* framför ett nummer anger att det är slut.

---

Utöver FoT-serien finns att köpa följande skrifter:

Ahlgren, I., Bergman, B., Papers from the First International Symposium on Sign Language Research 30:- (1979)

Ahlgren, I., Björneheim, H., Särtryck ur Nordisk tidskrift för dövundervisningen 6:- (1981)