Sign language interpretation and general theories of language, interpretation and communication\*

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The practice of interpretation of sign languages dates back many, many years, though the practice is just now struggling to achieve the status of a profession—shifting from a more-or-less clinical focus to a more-or-less linguistic one. Research on sign languages, which is itself very recent, has convincingly demonstrated that at least some sign languages are indeed languages in the linguistic sense, thereby forcing us to expand our conceptions of the nature of language and to re-examine our approaches to the study of language. Experiments on the simultaneous interpretation of sign languages are contributing to our knowledge and understanding of language and communication in general as well as to the resolution of problems dealing specifically with sign language interpretation. These are the major points that we have gained from the presentations by Domingue and Ingram, Tweney, and Murphy. The relevance of their discussions of sign language interpretation to the general subject areas of language, interpretation, and communication is largely self-evident. Essentially, we are all saying that the interpretation of sign languages is an integral part of the general study of interpretation and that no description (practical or theoretical) of interpretation which fails to take account of sign language interpretation can be regarded as complete. I have set myself the task of demonstrating this point beyond any doubt. The papers by Domingue and Ingram, Tweney, and Murphy have called attention to a number of problems in interpretation of sign languages. My approach will be to explore some of these problems further in relation to language, interpretation and communication in general.

**Linguistic versus semiotic translation**

In his opening remarks, Tweney alludes to Jakobson’s (1959) distinction between linguistic translation and semiotic translation (or transmutation), and, in an earlier paper with Hoemann, he refers to sign languages as ‘semiotic systems’ (after Stokoe, 1972) and to sign language interpretation as a type of ‘intersemiotic translation’ (Tweney and Hoemann, 1976, p. 138). But when Jakobson speaks of semiotic translation, he is speaking of the translation of one non-linguistic code to another, such as the translation of painting to music, or of a linguistic code to a nonlinguistic code, as in the translation of a verse to a series of drawings. If we regard sign languages as ‘the drawing of pictures in the air’, then we might conclude that sign language interpretation does belong to Jakobson’s category of semiotic translation. However, Tweney cites considerable evidence to support the conclusion that sign languages are not ‘pictures in the air’ but are, in fact, linguistic systems, thus establishing sign language interpretation under the category of linguistic translation rather than semiotic translation. What appears to be a dilemma here is, in fact, no different from the problem that we face in characterizing the interpretation of spoken languages. That sign languages are indeed languages in the linguistic sense is a point which has been well established. Lest there be any equivocation on this point, consider the conclusion of Klima and Bellugi (1976, p. 46). “When we refer to sign languages as “languages”, we mean that they have sentential units which have a strict semantic-propositional interpretation (providing among other things for the possibility of paraphrase); that they also have a hierarchically organized syntax – open-ended in terms of possible messages – and furthermore, that at the formational level of the individual lexical units (the individual signs) as well as the syntactic level, there are specific constraints as to well-formedness. What is more, there is a definite sense among those with a sign language as a native language (for example, the offspring, deaf and hearing, of deaf parents – offspring who learned sign language as their first language) that the sign decidedly has a citation form – a form which exists out of any specific real-life context. That is, the sign is not situation-bound as are some affective units of communication. (We presume, for example, that a scream does not have a citation form in this sense; nor presumably would an element of free pantomime). Thus, an ASL sign as such is no more bound to a particular context than is a word of spoken language.” Given this view of sign languages as linguistic systems, we can only conclude that sign languages belong with spoken languages within the category which Jakobson calls linguistic translation. There is, on the other hand, a sense in which sign language interpretation can be regarded as semiotic, but that is a sense in which all simultaneous interpretation—indeed all use of language—is semiotic. Rather than establishing language in opposition to other semiotic systems, Jakobson (1975) has more recently argued for a view of language as a type of semiotic system, a position also taken by Eco (1976). From this perspective, we see linguistic translation, including the simultaneous interpretation of sign languages as well as of spoken languages, not as distinct from semiotic translation but as a subset of the more general category of semiotic translation.

**Limitations to a linguistic point of view**

Recent findings about sign languages are but one entry in a growing list of factors pointing to the inadequacy of contemporary linguistics to describe human languages. Says one prominent anthropological linguist (Hymes, 1973, p. 60): ‘Thus, one of the problems to be overcome with regard to language is the linguist’s usual conception of it. A broader, differently based notion of the form in which we encounter and use language in the world … is needed.’ To Hymes, this broader view is representated by the term ‘ways of speaking’, or ‘the ethnography of communication’. To others, the answer lies in the study of speech acts, ethnomethodology, or the intersection of linguistics with other disciplines, e.g. sociolinguistics, psycholinguistics, or neurolinguistics. Semiotics incorporates contributions from all of these approaches and others besides and, in my view, represents the most productive platform from which to study language in general and simultaneous interpretation in particular. Seleskovitch (1976) takes a similar view of the insufficiency of linguistics to describe simultaneous interpretation. Interpretation, she says (1976, p. 94), is so unconcerned with language (as a linguistic system) that it denies words or sentences any claim to translatability as long as they fail to merge into a meaningful whole: the discourse’. Compare this statement with the following one by a leading semiotician (Eco, 1976, p. 57): I am saying that usually a single sign-vehicle conveys many intertwined contents and therefore what is commonly called a “message” is in fact a text whose content is a multilevelled discourse.’ Referring to the work of another semiotician (Metz, 1970) Eco (1976, p. 57) claims that ‘in every case of communication (except maybe some rare cases of a very elementary and univocal type) we are not dealing with a message but with a text’ and he defines a text as ‘the result of the co-existence of many codes (or, at least, of many subcodes)’. Now, again, compare Seleskovitch (1976, p. 99): “An interpreter receiving a speech never receives linguistic units entirely devoid of context (verbal and situational) but rather receives utterances spoken by a person whose position, nationality, and interests are known to him, speaking with a purpose in mind, trying to convince his listeners. Thus an utterance bearing a message differs absolutely from a sequence of words chosen at random, for the former evokes not only their intrinsic linguistic meaning but facts known to all those for whom the message is intended”. What Seleskovitch is saying, in essence, is that the interpreter must decode, transfer, and re-encode not single, linguistic messages and codes at a time but a multiplicity of messages in a multiplicity of interwoven codes with every single act of interpretation. Treatments of interpretation in general tend to play down the significance of all codes except the linguistic ones, but interpreters of sign languages cannot afford this luxury. We have to interpret every act of communication—intentional or unintentional, human or non-human—that a receptor would normally perceive except for his hearing loss. For example, if a telephone rings during the course of an interview, that ringing must be interpreted. When static comes through the sound system in a conference room, interpreters of spoken language try to ignore the noise, but interpreters of sign languages have to interpret that noise. We interpret airplane noises, sneezes, falling chairs; anything and everything that the receptor would otherwise perceive if he were not deaf. The reverse principle applies as well. If the deaf person signs haltingly, our spoken rendition is halting. Paralinguistic manipulations of the hands, face, and body are interpreted as speech suprasegmentals. We do not filter out ambiguities, either in content or form. Rather, we try to match those ambiguities as best we can in the corresponding codes of the receptor. The primary codes with which we deal are linguistic codes, but we are also concerned to a considerable extent with non-linguistic codes, and, in this sense, sign language interpretation serves to remind us that only a semiotic view of interpretation can be sufficient to describe this complex process.

**Possible contributions of linguistics**

A major problem we face in sign language interpretation is the lack of data to describe the linguistic codes, i.e. the sign languages, we use. Of course, there have been linguistic studies of American Sign Language (ASL), much of which has been reviewed by Tweney in his paper, and there have also been studies of the sign languages of Denmark (Hansen, 1975; Lieth, 1976; Sorensen and Hansen, 1976), Sweden (Ahlgren, 1976; Bergman, 1976), Israel (Schlesinger, 1969), Japan (Tanokani et al., 1976), the South Sea island of Rennel (Kuschel, 1974), and elsewhere. Still, what we know of the linguistic structures of various sign languages, including ASL, is very meagre and very tentative. A central issue in second language teaching concerns whether one should teach about the language or simply teach the language. With sign languages, unless we know about the language, we cannot at all be certain that we know the language. Sign languages have for so long been regarded as mere surrogates of speech, as noted by Murphy, that interpretations of sign languages all too often appear as transliterations rather than as interpretations. Not until we have adequate linguistic descriptions of sign languages will we be able to deal with this problem effectively. We need descriptions that will tell us not only how a given sign language differs from a given spoken language, e.g. how ASL differs from English, but also how various sign languages differ from one another. In recent years, we have seen a new kind of interpretation developing at international conferences—interpretation from one sign language to another, with or without the use of an intervening spoken language. Personally, I suspect that these sign-to-sign renderings are more like glossings than like interpretations, but we cannot be sure of this assumption, nor can we correct it if it proves to be true, so long as we lack accurate linguistic data. There is another way that linguistics can help us, and that is in the development of approaches to the teaching of sign languages. In the United States alone, thousands of persons receive education in some form of American Sign Language every year. Yet, few, if any, of these courses are based on viable principles of linguistics or second-language learning (Ingram, 1977). It is possible to pursue a bachelor’s degree with a major in sign language interpretation, but it is not possible to get a major in sign language per se. We pretend to offer training in the interpretation of sign languages, while at the same time we admit that we do not know enough about the sign languages involved and about methods of teaching those languages. ‘The learning of a natural sign language…requires not only the acquisition of new lexical items in new syntactic structures in a new frame of (semantic) reference but also the adjustment to perceiving language through the eyes rather than through the ears and to producing language through the manipulation of the hands, face, and upper body rather than through the vocal apparatus’ (Ingram, 1977, p. 29). Exactly how this adjustment can best be effected is a task for psycholinguists and learning theorists. Brault (1963) has argued that the teaching of cultural gestures should be an integral part of second-language teaching, but by what methods should these gestures be taught? Perhaps studies of the leaching of sign languages can provide answers to this question. And what part do these gestures play in the interpretation of spoken languages? Here again, perhaps studies of sign language interpretation can provide the answers.

**Deafness as a cultural distinction**

In the study of sign language interpretation, we must combat the assumption that sign languages are not only grammatical surrogates of spoken languages, but also that they overlap spoken languages semantically. Eco (1976) defines meanings as ‘cultural units’, and a number of researchers (Boese, 1964; Lieth, 1977; Meadow, 1972; Padden and Markowicz, 1976; Reich and Reich, 1974; Schein, 1968; Schlesinger and Meadow, 1972; Vernon and Makowsky, 1969) have clearly established that deaf people constitute at least a subculture if not a separate culture. The emerging attitude among sign language interpreters, as discussed by Domingue and Ingram, is that sign languages are distinct forms of representing cultural experiences that are peculiar to deaf people. In other words, deafness is, for the interpreter at least, not a clinical condition but a cultural one. If, as Tweney says, meanings ‘are mapped onto words in different languages in different configurations’ and if there is no one-to-one correspondence of these mappings, then how do the cultural meanings of deaf persons (as reflected in their sign languages) differ from the cultural meanings of the hearing cultures around them? Here we have a challenge for ethnographic semanticists.

**Sign language as a source language**

Among interpreters of spoken languages it is considered axiomatic that one can interpret more easily into one’s own native language than into a second or later-learned language. This axiom, however, does not hold true in the interpretation of sign languages. If it did, then we would expect to find that interpretation from a sign language into a spoken language would be easier for persons who have acquired a sign language as a second language, but what we find, in fact, is that almost all interpreters regard interpretation into the spoken language as more difficult than interpretation into the sign language. In a few rare cases, an interpreter will report that it is easier for him to interpret from the sign language into the spoken language, but these persons are invariably children of deaf parents who have acquired their sign language before they acquired a spoken language—a situation revealing the opposite of what we would normally expect in interpretation. Why should interpretation from a sign language to a spoken language be considered a more difficult process than interpretation from a spoken language to a sign language? In the first place, that interpreters regard interpretation from a spoken language to a sign language as an easier task is no assurance that that process is more effective in terms of communication than the reverse process. A sign language output may seem easier to facilitate than a spoken language output simply because the former is easier to fake. The interpreter can always shift into a sign language form that is easier for him, but not necessarily more comprehensible to the deaf person receiving the message. Unfortunately, deaf persons receiving such interpretations frequently just shrug, ‘Oh, well, he (the interpreter) signs like a hearing person’, and let it go at that. A spoken language output, though, is not so easy to fake; its flaws become readily apparent to the hearing receptor, and the interpreter’s only recourse is to complain that interpretation from a sign language to a spoken language is a more difficult task. But suppose we give the interpreters the benefit of the doubt and assume that there is, in fact, a viable reason why interpretation should be more difficult when the source language is a sign language. What might this reason be? One possible reason might be the very high incidence in sign languages of what Eco (1976) calls undercoding, which he defines as ‘the operation by means of which in the absence of reliable pre-established rules, certain macroscopic portions of certain texts are provisionally assumed to be pertinent units of a code in formation, even though the combinational rules governing the more basic compositional items of the expressions, along with the corresponding content-units, remain unknown’ (pp. 135–36). In other words, ‘undercoding is an assumption that signs are pertinent units of a code in absence of any pre-established rules, that is, it is an imprecise, and still rough coding’ (Sherzer, 1977, p. 81). This is not to say that sign languages are, in general, imprecise and rough codes. Rather, what I am saying is that sign languages may frequently become imprecise in those moments when their users attempt to expand them beyond their current limits. Murphy has reported about the suppression of sign languages that has existed throughout the ages. But now deaf people are beginning to share in events and experiences that were once closed to them, and they are finding their sign languages much too inadequate to represent these new experiences. They are constantly borrowing new lexical items in the form of fingerspelled words and initialized signs, and they are developing their own new signs. When this linquistic creativity takes place across a single deaf culture, there is the opportunity for cultural criticism and standardization, but many signs developed at a given moment to express a given concept fall by the wayside as nonce signs, perhaps never to appear again. It is these signs which constitute the bulk of the undercoding in a sign language and which present perhaps the greatest difficulty in interpreting from a sign language to a spoken language. The problem of under-coding is particularly strong in sign languages, but it is not a problem that is restricted to sign languages. I suspect that the same phenomenon exists in the languages of all cultures that are undergoing technological development or languages that are struggling to break free of suppression. No, the problem is not unique to sign languages, but, here again, we see a problem that should be of concern to all of us most clearly represented in sign languages. In sign languages, we also find a kind of overcoding, meaning that there ‘is either an over-analysis from within the system, or a mis-analysis from outside the system’ (Sherzer, 1977, p. 81). Sign languages code in ways quite different from spoken languages, as Tweney has demonstrated, not just in that they symbolize meanings through the manipulation of the hands but also in their extensive use of the face and upper body to signal grammatical functions. Fischer (1975) has shown that certain word orders can be deemed grammatical, ungrammatical, or anomalous by the raising of an eyebrow or the tilting of the head ever so slightly. Pro-nominalization takes place through the manipulation of space rather that through the ordering of lexical items (Friedman, 1975). These overcoded linguistic rules are known subconsciously to every native user of a sign language, but where many interpreters falter is in determining how a lift of an eyebrow or a twitch of a shoulder is to be expressed in a vocal interpretation.

**Characteristics of sign language interpreters**

As anyone who has ever attempted to work with interpreters (of spoken languages or sign languages) knows, we are a strange breed. Schein (1974) attempted to find out just how strange we really are. He administered the Edwards Personality Preference Schedule to 34 interpreters in three Northeastern United States cities. Analyzing the scores of the 20 interpreters who completed the tests, Schein concluded that the successful interpreter ‘desires to be the center of attention and to be independent, is not overly anxious, does not seek sympathy for self, and is not rigid’ (Schein, 1974, p. 42). Anderson (1976) discusses the interpreter and his role in terms of (1) the interpreter as bilingual, (2) ambiguities and conflicts, and (3) power. Each of these topics is applicable to the study of sign language interpreters. Children of deaf parents usually learn their sign language before they acquire a spoken language (Cicourel, 1973; Cicourel and Boese, 1972; Klima and Bellugi, 1976; Mindel and Vernon, 1971; Schlesinger and Meadow, 1972). The sign language should, therefore, be the child’s dominant language. But, societal pressures being what they are, it is likely that the spoken language eventually becomes established as the dominant language, at least most of the time. This reversal of dominant languages might help to explain why interpreters, even those for whom a sign language is their first language, consider interpretation from a sign language to be a more difficult task than interpretation into a sign language.

Anderson also observes that ‘in general, it is expected that the greater the linguistic dominance the more likely an interpreter will identify with the speakers of the dominant language, rather than with clients speaking his “other” language’ (1976, p. 213). Certainly, the problem of client identification is a major one for sign language interpreters, as we have heard from Domingue and Ingram. Some interpreters tend to identify with their signing clients in a paternalistic way; they feel they have to take a dominant role in ‘straightening out’ the deaf person. Some other interpreters tend to be maternalistic, to try to speak for the deaf person when he is perfectly capable of handling his own affairs. Clearly, the best interpreter and the one who is, in the long run, the most effective is the one who remains neutral in his role between two communicators. The interpreter, whether of sign languages or spoken languages, is unquestionably a person in a position of power. Some children of deaf parents in particular, and some other people as well, become interpreters for this very reason. The child of deaf parents, says Lieth (1976, p. 318), ‘is in an exceptional position; he will usually have sign language as his maternal language, but at the same time he will have to form a link to the hearing world; this gives him a special position within the family which may later cause him difficulties in adjusting himself to social situations where he has neither the responsibility nor the power he used to have in his home’. Rather than give up that power, many of these children of deaf parents assume the role of interpreter for other deaf people, a role which allows them to continue to exert power and influence. Sociological and social psychological studies of interpreters and their roles are greatly needed to help us understand why people become interpreters and how they behave as interpreters. The added factor of deafness makes this line of inquiry all the more interesting, but the basic questions are essentially the same as those raised by the interpretation of spoken language.

**Neurolinguistic and psycholinguistic studies**

There are many more ways in which the relevance of sign language interpretation to the general areas of language, interpretation, and communication can be demonstrated. Not the least of these are the intriguing mechanisms by which the brain is able to process two languages simultaneously, particularly where one of those languages is perceived visually rather than auditorily. Kimura (1976) cites the five known cases of deaf aphasics, and other neurological evidence, to support her claim that ‘the left parietal region is an important part of a system controlling certain motor sequences, both vocal and manual’, and that ‘the symbolic-language functions of the left hemisphere are assumed to be a secondary consequence of specialization for motor function’ (1976, p. 154). The implications here for a theory of simultaneous interpretation are significant indeed, but just how that significance can be applied must await further evidence.

**Conclusion**

I believe I have made my point. Just as no theory of language is complete unless it accounts for the total linguistic competence of human beings, i.e. the ability of people to acquire and use language in all its forms, likewise no theory of interpretation is complete unless it accounts for interpretation of language in all forms. A theory of interpretation based solely on languages which are orally produced and aurally perceived is an incomplete theory. Research into interpretation of sign language serves two main purposes: (1) to develop models and explanations that will contribute to the practice of sign language interpretation, and (2) to develop models and explanations that will contribute to our general understanding of the nature of language and communication. Certainly, there is value in asking ‘What can research contribute to the theory and practice of sign language interpretation?’ but there is perhaps even greater value in asking ‘What can research on sign language interpretation contribute to general theories of language, interpretation, and communication?’ or, to put it another way, ‘How can the general study of language, interpretation, and communication be advanced by the application of data from research on sign language interpretation?’ I hope that some of the answers I have tried to provide to this question will stimulate collaborative research.

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