

# The Cross-Linguistic Study of Sign Languages

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**Abstract:** Limiting ourselves to the study of only one sign language can be dangerous linguistically as well as politically. The study and comparison of sign languages around the world can give us insights into how language is structured, how the channel of communication affects language structure, and what is possible in the signing modality. Data from American Sign Language, NihonSyuwa, and Chinese Sign Language are discussed to illustrate these points.

**Key Words:** sign language, language, international, linguistics, crosslinguistic

## Introduction

In this paper I would like to discuss the examination of sign languages cross-linguistically. I hope to demonstrate that the cross-linguistic study of sign languages is important. I will be discussing the following topics:

- The role of the linguist in legitimization
- What sign languages have in common
- The role of modality for those commonalities
- Why differences might be important, for linguistic, political, and educational reasons

In order to illustrate these topics, I shall be citing some fascinating (to me, anyway) data from ASL (American Sign Language), NS (NihonSyuwa 日本手話), and CSL (Chinese Sign Language, 中国手語)

## What a linguist can do

Although I do teach deaf students, my academic specialty is linguistics. I have come to realize that in the area of deaf education, a linguist cannot stay in her ivory tower contemplating language in the abstract; rather, she often ends up advocating for the rights and needs of deaf people. Since I am a linguist who studies sign language, I base my advocacy on the role of the linguist with regard to sign language. Here are some points that a linguist can make:

- Interest in sign language legitimizes its study. The mere fact that a linguist is studying a sign language makes other linguists sit up and take notice. I have been doing research on American Sign Language for over 30 years, and in that time have seen recognition for ASL emerging first among linguists and then among educators.
- Findings on sign languages can influence education. Knowledge is power, and when educators are educated as to the true (rather than mythical) nature of sign languages, their attitudes change. Here are some examples:
- If academic linguists think sign languages are languages, schools eventually will too.

Many of the myths about sign languages that have impeded their use in schools have been debunked by linguists (see below for examples). What are these myths? One evidence of ASL's growing legitimacy in the US has been that it is taught for credit at many high schools and colleges, on a par with foreign languages such as French or German.

—If schools think sign languages are languages, they may be more willing to use them. In the past there was a reluctance in schools to use signing. Part of that reason had to do with misconceptions about the nature of sign languages, which linguists can do a great deal to dispel. What kinds of misconceptions? They are things like the myth that sign languages are limited to the iconic; the myth that sign languages have no grammar or are merely a debased form of the spoken language; and the idea (false) that if children are permitted to sign they will never learn the spoken language of the community (we now know that early exposure to accessible language is crucial for overall cognitive and linguistic development, and spoken language is not fully accessible to a child who cannot hear).

—Teachers and parents may be more willing to learn to sign. In the US, teachers and parents — or at least mothers — have been willing to learn to sign for some time, because of the increased ease of communication with their children, but what they learned was a form of signed English rather than ASL, (it is possible to use ASL signs in English word order and without many ASL inflections; this is signing in English, but it often misses elements of both ASL and English) because that was what was taught in the schools. But the children would develop ASL as well, and then the parents would have trouble understanding them. Now, rather than thinking that something is wrong with the school, parents have a better understanding of the advantages of using a natural sign language such as ASL or NS.

### *Examples of progress in the West*

In this section I shall briefly discuss some of the changes I have witnessed in the US and Europe over the last 30 years since I have been actively involved in sign language research. These changes reflect the ways in which sign languages have gained legitimacy.

- ASL is offered for credit at high schools and colleges in the US

This development has accelerated over the last 15 years. For example, in New York State, ASL counts as a foreign language for purposes of high school graduation. Many universities offer ASL for credit, though not always for foreign language credit if there is a foreign language requirement.

- Sign languages count as minority or heritage languages within the European Community. In the EC, minority and heritage language receive special protection; in the last six years, that protection has been extended to the sign languages of the countries within the EC. In some countries like Sweden, the natural sign language is taught to children and their parents from a very early age and the spoken language in its written form is taught later.
- Bilingual /bicultural programs expanding

The vast majority of deaf education in the US occurs in some version of English. Most programs in the US are bimodal, in that they use speech and signing, but they are still essentially monolingual, since ASL is not officially used (There are still a

handful of oral-only programs, but their numbers have been dwindling over the last couple of decades); rather, signing is “in English,” either an artificial sign system such as SEE or a natural sign system such as Pidgin Sign English. A number of schools have changed to a bilingual approach in which ASL is used as a teaching and learning medium on a par with English. Such programs also recognize the distinctness of Deaf culture as distinct from hearing culture.

- Deaf Studies is emerging as a discipline at the college and graduate level

There is a tradition in the US of ethnic and minority studies. Many colleges and universities, for example, offer degrees in African-American Studies, Hispanic or Latino Studies, Asian Studies, or Women’s Studies. While they may largely attract students who belong to those affected groups, they also have a broader enrollment. In a similar vein, a few colleges now offer degrees in Deaf Studies. One has recently been instituted at NTID and RIT, and similar programs have been instituted at Gallaudet University, Boston University, Lamar University, Towson State College, the University of South Florida, California State University at Northridge, and the University of Arizona. Both Deaf and hearing students are enrolled. They study Deaf literature (on video), history, culture, and language — in the case of the US, that means ASL. In addition to these, there are courses and concentrations in Deaf Studies that do not lead to undergraduate or graduate degrees.

#### *Examples of progress in Asia*

We turn now to changes that have occurred over the last number of years in Asia that have led to a greater legitimization and acceptance of sign language study and use.

- Bilingual programs in Japan (e.g., Mie) and China (e.g., Tianjin): Japan has a centralized system for education. Traditionally, sign language has been discouraged in elementary schools, though grudgingly permitted in high schools. However, within that very controlled system, experiments have taken place that look very promising for the acceptance of sign language. Very young children in Mie are learning NS alongside Japanese; in Tochigi Prefecture, a signed version of Japanese is being used in elementary schools. One of the schools for the deaf in Osaka has been using sign language continuously since it was established.
- In China, the situation is a bit more complex; signing is used in elementary schools, but again it is signed Chinese, not Chinese Sign Language<sup>i</sup>, and only recently has very early education included signing, in an experimental program in Tianjin funded by UNICEF (Rebecca Imber, personal communication, December, 2001).
- Increased visibility of Deaf persons on TV: The first time I lived in Japan, 11 years ago, I was impressed that sign language was being taught on NHK and that there was a nightly 5-minute news broadcast in sign language. However, what was being taught on NHK was signed Japanese, and although the main language model was a native Deaf signer, the person who was in charge of explaining the language was hearing, and insisted on signed Japanese. Similarly, the news was, in general, signed by hearing persons, in more or less Japanese word order, often accompanied by voice. Now, however, the news is in NS rather than signed Japanese and in general

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i Confusingly, the term “Chinese Sign Language” is used to refer to the artificial system of signed Chinese (see Yang & Fischer, in press).

is signed by Deaf persons; furthermore, in addition to NHK programming, there have been at least two video magazines that teach NS. Also, on Japanese TV there have been depictions of deaf people inドラマ, though unfortunately in the most recent case that I heard about, the person playing the deaf character was hearing. This at least has the effect of exposing the general Japanese populace to the idea of signing. In China there is also signed news on television; most of it is done by hearing persons, but they are skilled signers who are eager to learn more about Chinese Sign Language.

- Increased awareness in print media in Japan. A number of years ago, Saito Michio, a producer for TV Tokyo, produced a documentary on deaf children's sign language in Japan; this was followed with a long article in a magazine and finally a book, もう一つの手話. At the same time, D-Pro, a Deaf advocacy organization, was established; it was originally spearheaded by Kimura Harumi and her colleagues. D-Pro tries to affect both hearing and deaf persons' attitudes toward deaf persons and sign language.

- Professionalization of interpreting

The American Registry of Interpreters for the Deaf started in 1964, and has been certifying interpreters for almost 40 years. In Japan there is now a certifying agency, as well as a number of established interpreter training programs, and there are now people making a living at interpreting. The need now is to recognize that for major events it is important to hire qualified interpreters so that deaf audience members have equal access and there are no role conflicts for those persons who are interpreting at the event. In China, PEN International (which has a relationship with TCT) is working to establish an interpreter training program.

- Conferences on sign linguistics

In both Japan and Hong Kong, sign language scholars have been getting together frequently to discuss their research. I attended such a conference in Hong Kong in 2001, and was encouraged to note that sign language research is going on over much of Asia. Being invited to the TCT Third International Symposium, which was broadcast to a large number of locations within the country, was, in my view, another indication that sign language studies have attained some credibility in Japan. It is very exciting to be part of an enterprise that furthers the development of scholarship in far-flung locations.

### **What do most sign languages have in common?**

We now turn to some direct comparisons of sign languages. First, let us consider what most or all sign languages share.

- Distinction from spoken language

As I mentioned earlier, there is a distinction between ASL and signing in English, as there is between Nihonsyuwa and signing in Japanese order. In every country in Europe, Asia, and the Americas, there is a distinction between the sign language used by deaf persons with each other and the kind of signing used with users of the matrix spoken language of the community. Indeed, there are many ways in which a particular sign language may differ grammatically from the spoken language that surrounds it. Those distinctions persist even when the school system does not use the natural sign language.



- Three kinds of verbs

All sign languages seem to have three kinds of verbs: these are called inflecting, spatial, and plain. An inflecting verb changes the way the hands face or move to show agreement with subject and object; by contrast, English inflects verbs only for subject, and Japanese does not have agreement with any noun at all. Spatial verbs inflect to show movement of an object between locations. Plain verbs do not change the way they move at all to reflect subject, object, or location. This is somewhat arbitrary, so that in western Japan the verb SUKI changes its shape to inflect for subject and object, while in eastern Japan it does not. Similarly, the ASL verb TELEPHONE inflects for subject and object on the East Coast but not on the West Coast.

- Verb agreement with objects & subjects

In all sign languages there are inflecting verbs that agree with their objects; there are also some verbs that agree with both objects and subjects. This contrasts markedly with East Asian spoken languages, which generally do not inflect verbs at all, and with Western spoken languages, which may show agreement with subject but only marginally with object. So, in English there is a difference in verb form between “she likes” and “they like.” But no matter how many things are liked, the verb does not change to reflect the number or person of the object. In sign languages, by contrast, it is common for verbs to change depending on the person and number of both object and subject. For example, the NS verb IU can show the meaning “I tell you” and “you tell me” in the following way

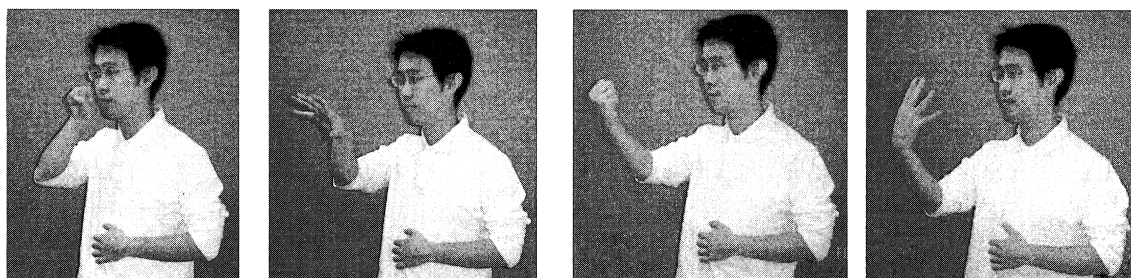


Fig. 1 a. I tell you (NS)

b. You tell me (NS)

- Classifiers and incorporation

All sign languages have special handshapes called *classifiers* that represent semantic classes (See Supalla, 1986). They function similarly to pronouns, but with more distinctions than pronouns in English or Japanese. We shall see later that these can be used productively to make new words. An example of a classifier in ASL would be the handshape for vehicle. NS also has a classifier for car, but the two are different. These two classifiers are illustrated in Figure 2:

- Topic-comment structures

Some languages tend to emphasize grammatical relations such as subject and object, whether or not overt agreement is present; English is an example of such a language. Other languages emphasize information structure (e.g., old vs. new information). These are called topic-comment languages. Japanese is such a language but topic-comment structures are fairly uncommon in English and many other

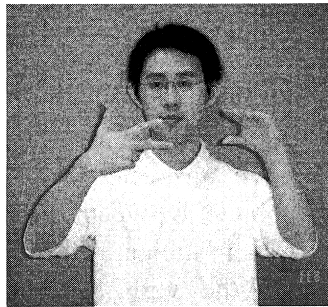


Fig. 2 Classifiers for vehicles in ASL (left) and NS (right)

western languages. Almost all sign languages have them (though they are rare in Chinese Sign Language (Yang, personal communication) and Mexican Sign Language (Quinto-Pozos, 2002)). So for example, if in Japanese one said 魚はまぐろが好きです, 魚は is the topic; one could express the “wa” phrase in either ASL or NS by using facial expression, specifically a brow raise. The equivalent in ASL would be this:

Br  
 FISH ME LIKE TUNA  
 ‘as for fish, I like tuna.’

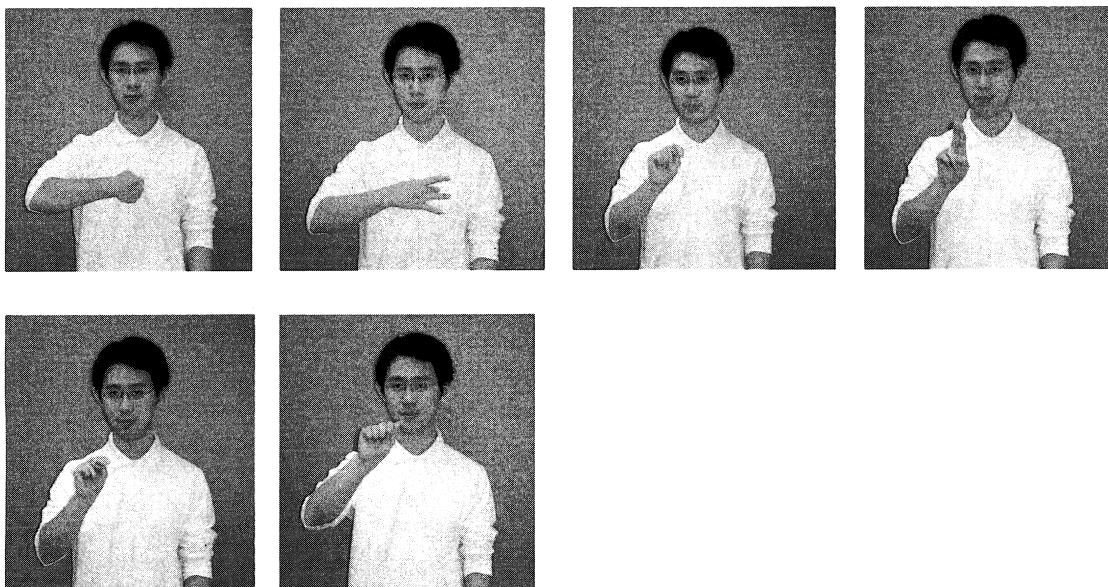


Fig. 3 魚はまぐろが好きです (equivalent in ASL) “As for fish, I like tuna.”

•Grammatical use of nonmanual behaviors such as facial expression

Not only topic, but functions such as negation and questions are signaled by the face, head, and body in almost all sign languages. If one wants to ask a yes-no question in ASL one raises one’s eyebrows and leans her body forward. If one wants to say “do you like fish?” in ASL, one uses a brow raise as illustrated in Figure 4.

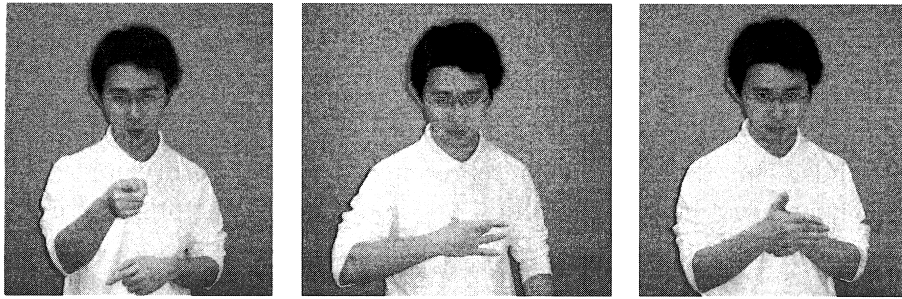


Fig. 4 魚好きですか? (equivalent in ASL) “Do you like fish?”

### *The role of modality in these commonalities*

Why do sign languages share so many grammatical features? Part of the reason probably has to do with the way they are learned, since most deaf children have hearing parents and learn sign language at a non-optimal age. But the visual-gestural modality in which sign languages are communicated plays an important role. It both constrains and enables the possible structures in the language.

- Visual modality makes things slower

If we compare the articulators for signing versus speaking, it is clear that the articulators for signing are much bigger. Therefore they move more slowly. If one is to communicate efficiently some sort of compensatory mechanism is necessary. (see Bellugi & Fischer, 1972).

- Visual modality favors simultaneity

But at the same time, in the visual modality one can do — and express — several things simultaneously, as we will see shortly. This has exactly the compensating effect that is required. As one example, most people have two hands. Each hand can be expressing a different idea, and the relationship and movement between the hands can even add a third meaning. The next example shows the idea of a vehicle crashing against a wall; the dominant hand (usually the right hand) represents the vehicle, and the nondominant hand represents the wall.

- Facial expression and other nonmanual behaviors

Still another possible simultaneous means of expressing meaning is nonmanual behaviors such as facial expressions or head and body shifts. They can be overlaid and even doubled: for example, a negative question can have a headshake simultaneous with a brow raise overlaid on the kind of structure shown in figure 5.

- A classifier handshape is another example of possible simultaneity can be overlaid

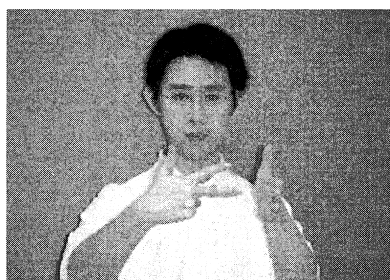


Fig. 5 Vehicle hits wall (ASL)

on a path and thus express several more ideas simultaneously. The two handshapes in figure 5 are in fact classifier handshapes.

If we compare this situation to that of spoken languages, we can see that it is difficult to represent things in the world directly with sound, except perhaps for representing sounds. But the hands can represent what the world looks like — though obviously sign languages have the ability to represent things other than the concrete. Consider the sign shown in Figure 6.

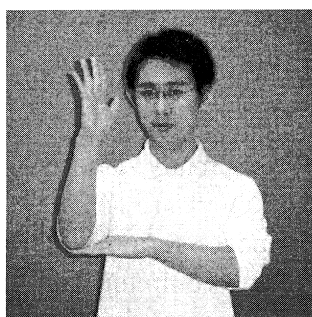


Fig. 6 ASL sign for “tree”

This sign is what we might call iconically translucent, in that without knowing its meaning it is difficult to figure it out, but once we know it means “tree” we can see the relationship. Classifier handshapes such as the one for vehicle abstract away from the shape of the object. Of course there are classifiers for abstract concepts as well.

- Direction of movement

Verb agreement is another case where iconicity plays a role, though there again, it is possible to have abstract ideas expressed through verb agreement. If I say “I hate you” (figure 7) one can think of my hatred moving from me to you, which is the same as the path of the verb.

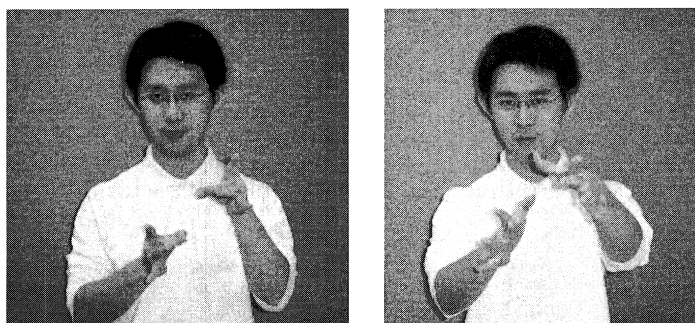


Fig. 7 I hate you (ASL)

### **Why are differences important?**

In this section, I want to reasons for the importance of recognizing differences among the structures of different sign languages. There are, I think, at least three types of reasons: linguistic, political, and educational.

- Linguistic reasons

One of the reasons why I am fascinated by sign language is what it tells us about language in general. If we find something in spoken language that doesn't exist in sign language, or vice versa, then we may have to rethink our assumptions: what we thought was true for all languages may turn out to be true only for sign languages or only for spoken languages. By the same token, if we examine only one sign language, we run the risk of thinking that what is true for, say, ASL, must necessarily be true for all sign languages. Unless we look at a variety of signed (or spoken) languages, we cannot know the range of possibilities. For example, until I learned Nihonsyuwa, I didn't know that a sign language could grammatically mark gender differences. Even at the level of sublexical structure, there are certain handshapes that exist in one sign language but not in another.

- Political Reasons

There are also some political reasons why it is important to look at different sign languages. The first is the danger of taking ASL as the norm. ASL is the sign language that has been the most studied. If we then compare it with other sign languages, we can too easily make value judgments when another sign language lacks something that ASL has; one might say that ASL is "better" than another sign language. While it is true that some sign languages are younger than ASL, that doesn't make them more primitive.

A second political reason for looking at a variety of sign languages is the very real danger of equating similarity of structure with simplicity. We have already remarked on many similarities among sign languages. There is a danger of assuming that because they look so similar sign languages must all be primitive. This is unfair, since spoken languages share many similarities as well. In any case, by highlighting the differences among sign languages, we can allay that danger of thinking that they are all alike and therefore simple (furthermore, any hearing person who has tried to really learn a sign language knows that sign languages aren't as simple as a naive viewer might think).

- Educational and Social Reasons

There are also educational and social reasons why it is important to examine a variety of sign languages. The first I shall discuss is the facilitation of student and faculty exchanges. At NTID, approximately 8% of our students are from other countries. If we know more about the sign languages of those countries, we can help to bridge linguistic and cultural differences between students and faculty, as well as among students. When exchanges take place, as I hope they will continue to do, the understanding that we have of each other's sign languages will facilitate communication.

The second educational and social reason is that linguistic understanding can more rapidly facilitate mutual social understanding. Languages have their own structure, but they also are a reflection of culture. If we learn about other sign language, we are at the same time learning about other cultures.

### *Basic word order differences*

Let us turn now to comparisons of sign languages. For this paper I shall mostly discuss differences between ASL and NS, but will also bring in CSL as well.

Languages can differ in the order of elements. This is true equally of signed and spoken languages. The order of elements in a language is not random (see Greenberg, 1966). For example, if a language has the verb at the end of the sentence, relative clauses will precede the noun they modify and the language will have postpositions instead of prepositions. English and Japanese have opposite values for these *parameters*. In English, the verb precedes its object, relative clauses follow the noun they modify, and there are prepositions. In Japanese, the verb follows its object, relative clauses precede the nouns they modify, and postpositions follow their objects. It also follows that in a language like English, auxiliaries precede their verbs while in Japanese auxiliaries follow their verbs.

It is probably no accident that ASL has the verb before its object, like English, while NS has it after, like spoken Japanese; these reflect the contact with and influence from the spoken language. Similarly, in ASL, auxiliaries underlyingly precede their verbs while in NS they underlyingly follow their verbs. The spoken language of a community, through sustained contact, will influence the grammar of the sign language. However, there remain differences between the signed and spoken languages. For example, NS is actually more consistent than spoken Japanese in having function words follow content words. In spoken Japanese one sees phrases like あの先生, where in NS you would get SENSEI ANO instead. Certain formulas in ASL are also different from spoken English; for example, when talking about old-fashioned televisions, we say WHITE-BLACK vs. the English order *black and white*.

#### *The expression of semantic relations*

Every language, signed or spoken, has to have some way to express the relations among elements in a sentence; who does what to whom. Spoken languages have essentially two ways: one is to mark a word, as in Latin or Japanese; the other is to fix the order of elements so that the relationships among them are predictable. For example, in English if we change *The dog pushed the cat* to *the cat pushed the dog*, the meaning changes drastically. But in spoken Japanese, grammatical particles signal the semantic relations among elements of the sentence. So whether one says 犬が猫を押しした or 猫を犬が押しした the dog still pushed the cat, and we know that by the position of *ga* and *wo*.

Sign languages are somewhat unusual in that some elements can inflect, as we have seen, while others of the same class cannot. So, in both ASL and NS, some verbs inflect, resulting in a freer order of elements. But what about plain verbs, those verbs that do not change their movement to reflect the relation among elements in the sentence? In ASL, as well as in many other sign languages, when the verb does not inflect, the word order is more fixed. NS can use fixed order as well, but there is a third way, which occurs not only in NS, but also in the sign languages of Denmark, the Netherlands, Taiwan, and Nicaragua. In NS, if one wishes to say “Tanaka likes Suzuki,” one can keep the word order fixed. The other option is to add an empty auxiliary, usually at the end of the sentence, that is there only to carry agreement. This is illustrated in Figure 8.

This auxiliary, which is devoid of meaning except for agreement, works similarly to the verb “do” in English.



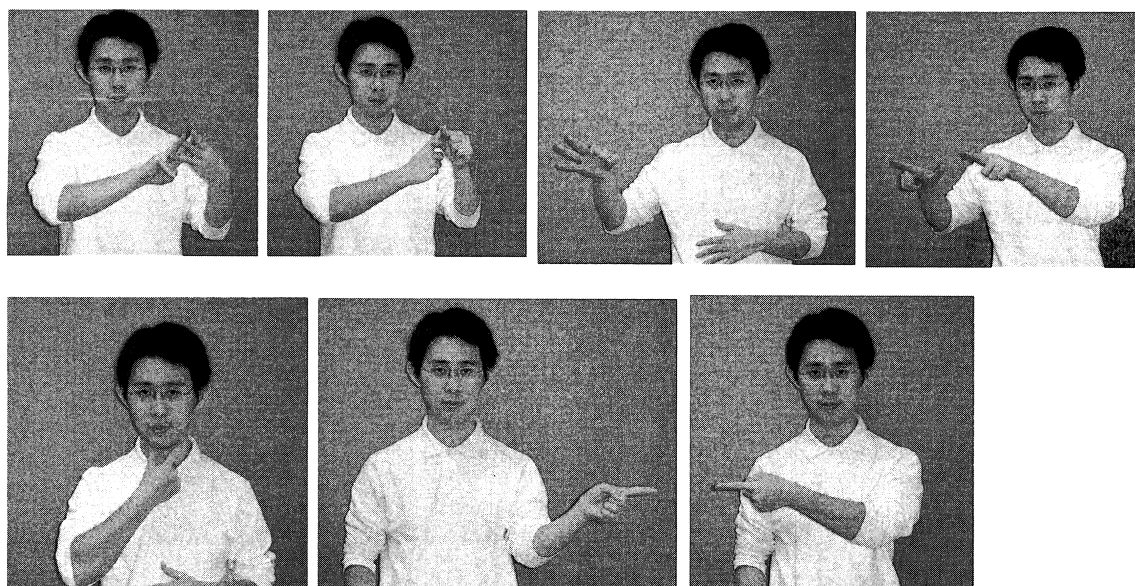


Fig. 8 Tanaka likes Suzuki (NS, with auxiliary)

### *Ways of coining and borrowing new words*

All languages also have ways of making or borrowing new words for new concepts. Japanese has borrowed and adapted many words from English such as テレビ or ゼネコン, and often uses Chinese roots to coin new words like 自動車. In sign languages generally, word-formation processes are highly productive; it is easy to make new words out of old parts. We've already covered the idea of classifiers, which are one way that all sign languages use to make new words. In ASL a path verb like “go uphill” can be overlaid with any number of classifiers, such as a car or a person.

A second way in which ASL makes new signs is via fingerspelling. Some fingerspelled words lose their middle letters, gain movement, and become signs. Some examples include #JOB, #EARLY, or #NO. The fingerspelled loan sign #NO has become a verb, meaning “to say no to”. This verb inflects for subject and object, so one can say “I say no to you” versus “you say no to me” as shown in Figure 9:

A third way that ASL makes families of words is with *initialization*. Initialization occurs when one substitutes the handshape for the first letter of a particular target English word for the handshape of a general sign. For example, the general sign BUNCH can be modified to form FAMILY, GROUP, or ORGANIZATION. Initialization is no longer “politically correct” in ASL, but some initialized signs like I have been around for almost a century.

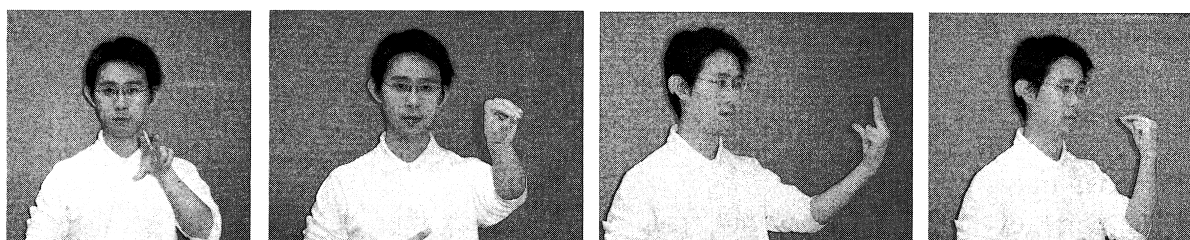


Fig. 9 a. I say no to you (ASL)

b. You say no to me (NS)



How are new words made in other sign languages, especially NS? NS does use classifiers, though the handshape for a particular concept may be different. We already saw the classifiers for vehicles in ASL and NS in Figure 2. We can have a car move, say, up a hill, or we can have a more elaborate description using the vehicle classifier for the parking garages in Japan where the cars go in a miniature ferris wheel (we don't have these in the US). See Figure 10:

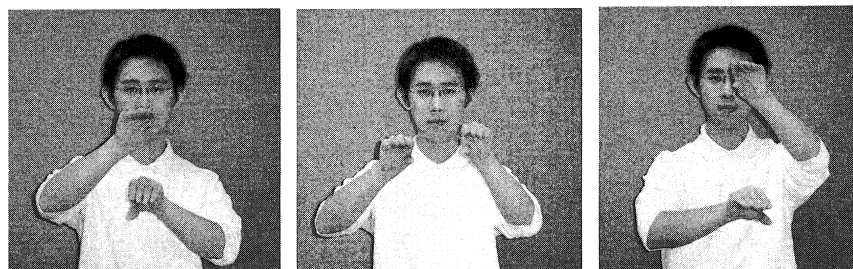


Fig.10 KURUMA-UGOKU, Ferris-wheel-parking-garage (NS)

Compared to ASL, NS uses very little initialization. I think this may be for two possible reasons: first, Japanese uses a syllabary rather than an alphabet, and second, since NS is not used very much in schools, especially in elementary schools, there is little motivation to expand the vocabulary in this way. One initialized sign of which I am aware in NS is REPOOTO, which is based on the sign KAKU (write) but uses a  $\surd$  handshape.

Perhaps an equivalent to initialization in NS and some other Asian sign languages is the incorporation of Chinese characters. There are two ways of doing so, and Chinese and Japanese differ (Miyamoto, 2001) in exactly how they do so, even with the same character.

The first way is by drawing the kanji in the air. NS limits this method to very simple kanji; for example, HITO, as shown in figure 11.

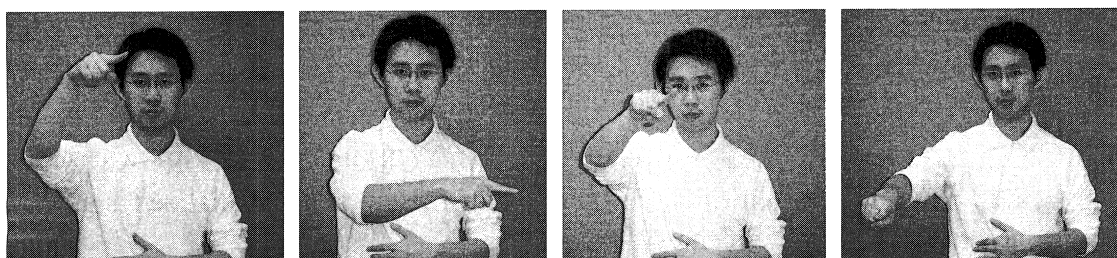


Fig.11 HITO (NS)

In the case of HITO, we can see that this kanji has truly become a part of NS since it can incorporate numerals by substituting the numeral handshape for the index finger that traces the kanji.

In point of fact, CSL does not trace 人 in the air, but rather shows the shape of the kanji more directly in the hands. The Chinese sign for 人 could be easily confused with the Japanese sign HAIKU, shown in Figure 12.

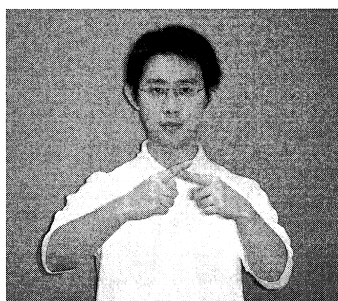


Fig.12 HAIRU (NS)

HAIRU can also be seen as truly integral to NS in that it can inflect for goal (final location). Thus the equivalent of “I enter your house” would be in the opposite direction from “you enter my house.” Thus, the use of kanji in NS and CSL can be seen as equivalent to the fingerspelled loan signs discussed above.

#### *Interesting markers*

In ASL, if one wants to talk about the past, one cannot inflect the verb to make it past; instead, at the beginning of the discourse, one must set up a time frame by means of an adverb such as LONG-TIME-AGO. ASL shows time but does not have true tense, where by tense we mean an inflection that is attached to the verb to show time. Also, in ASL there is no systematic way to indicate whether someone is male or female, except in kinship terms, which are differentiated by gender. By contrast, in NS one can and sometimes must do both. Consider the example shown in Figure 13, which means “did you tell her?”

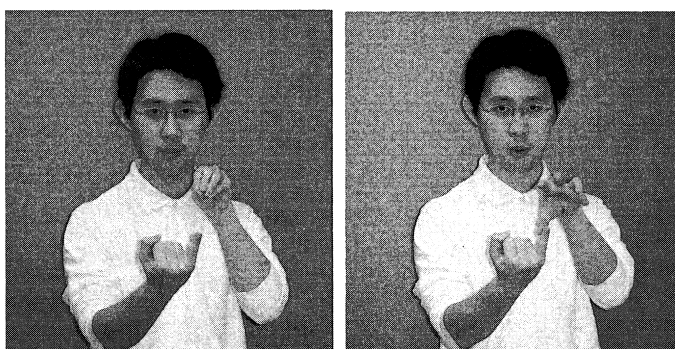


Fig.13 Did you tell her? (NS)

When we analyze this sign in detail, we realize that it is a truly amazing utterance; five distinct meanings are coded simultaneously: first, “did”, i.e., the past tense, is coded by means of a lip movement “po”. I have never seen anything like this in any other sign language. There is another way to show past tense in NS, using a suffix on the verb, but I shall not discuss that here.

“You” is coded in the eyegaze. The sign for “tell” (IU) is modified from its citation form to inflect for a second person subject and a third person object. And

“her” is encoded by the I handshape toward which IU is directed. If we used a thumbs-up handshape instead, the meaning would be “did you tell *him*?”; that is, NS marks gender. There are a few verbs that permit a handshape to substitute for a location to show agreement, In NS, however, not only can one specify gender, but this handshape substitution is totally productive; any inflecting or agreeing verb can substitute a gender handshape for the agreement locus. This type of process of gender marking seems to be unique for NS, except for Korean Sign Language and possibly Taiwan Sign Language, which are historically related to NS.

There is another interesting difference between NS and ASL. We have seen that both ASL and NS can mark subject agreement if the verb moves toward a locus. An example would be the equivalent of “[a specific] someone told me”. This is done by signing IU with the palm facing toward the signer rather than outward. However, in NS, one can mark subject agreement by moving away from the gender marker (representing the subject) toward the object. This is **totally impossible** in ASL!! Thus, in ASL I can say “I convince you” with an index finger taking the place of the object, but I cannot say “you convince me” with the index finger taking the place of the *subject*. This is *totally grammatical* in NS, so I can say, for example, “did she tell you?” as shown in Figure 14

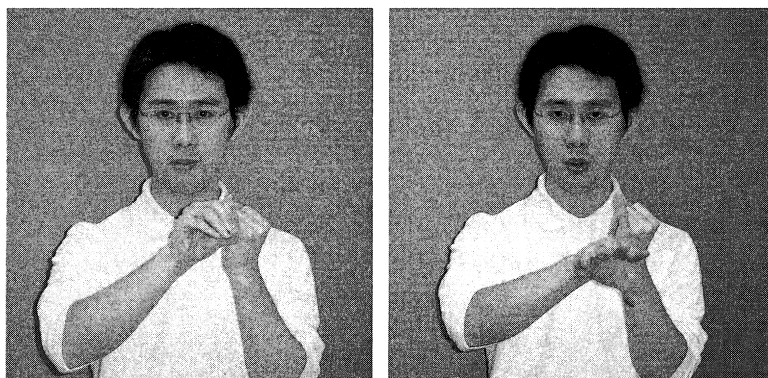


Fig.14 Did she tell you? (NS)

When I show this kind of sign to American Deaf people, they are utterly shocked and amazed.

#### *Interesting facial expressions*

I mentioned earlier that one of the things that all sign languages share is the use of nonmanual behaviors such as facial expressions for grammatical purposes. One way in which this occurs in most sign languages is to form wh-questions. In both ASL and NS, there is a specific expression spreads over the entire question. Figure 15 shows one way of saying “what color do you like” in NS; ASL would use the same facial expression for the same meaning.

But NS has another wh-facial expression that seems to be unique to NS. It may be associated with an element being questioned, but it does not spread and occurs at the end of the sentence. Furthermore, it can occur by itself and need not be attached to a particular word. The sequence in Figure 16 shows another way to express the

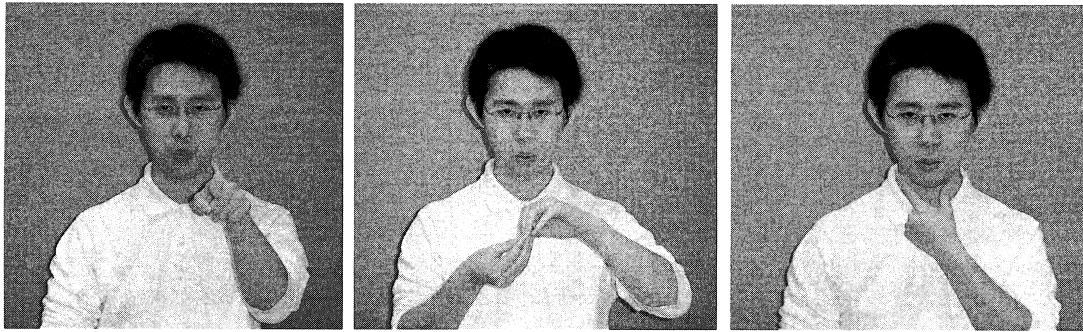


Fig.15 What color do you like? (NS)

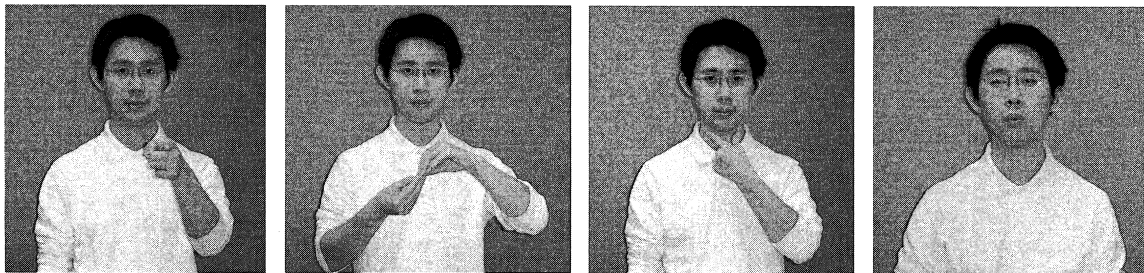


Fig.16 What color do you like? (second version) (NS)

same idea of “what color do you like”. Here, the sign IRO by itself shows no evidence of being questioned; rather, the question is marked only by the final facial expression.

Let me emphasize again that if we examined only ASL, we would have no idea of the richness of expression that is possible in signed language.

### *Interesting Markers*

We have seen that there are two handshapes that can distinguish male and female in NS, based in Japanese [hearing] culture. In Chinese Sign Language, those same two handshapes designate positive and negative. These handshapes, as we shall see, can be used productively in combination with other signs to indicate a variety of meanings. The positive and negative handshapes can effectively occur on their own, be incorporated into signs, or be suffixed to signs to change their meaning. Figures 17-19 show the following meanings respectively: right-wrong, neat-dirty and skillful-unskillful. (See Yang & Fischer, in press)

Again, this kind of grammatical process doesn't exist in any other sign language I know of (except for Hong Kong and Thai sign languages, which appear to be closely related to CSL); if we studied only ASL, we would never know what kind of diversity we were missing.

### **Conclusions**

The data I have discussing demonstrate clearly that while sign languages may share some features, they are not all alike. Seeing these differences delights me as a



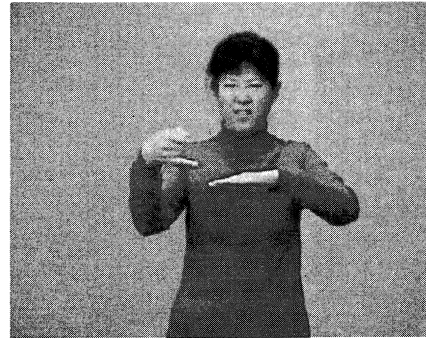
Figure 17. a. right (CSL)



b. wrong (CSL)



Fig.18 a. clean (CSL)



b. dirty (CSL)

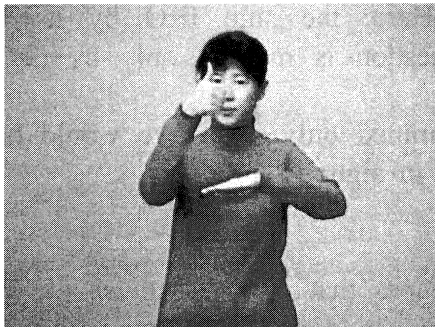


Fig.19 a. skillful



b. unskillful

linguist. One of the main goals of my professional life has been to understand these differences and what they mean for theories of sign language, and more generally theories about language. I hope that I have convinced the reader that it is important to know about many different kinds of sign language. When we know about other languages, it is possible to resolve miscommunication among different Deaf cultures; to appreciate and celebrate linguistic diversity, to see how others see us, and, ultimately, to understand our students and help them to succeed academically and professionally.

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