The Iconic Representation of the Sounds of Japanese in the Manual Syllabary of Japan Sign Language

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People talking without speaking, people hearing without listening

Simon and Garfunkel, The Sound of Silence

#### 1. Introduction

Japan Sign Language (JSL), the language of Deaf people in Japan, like other sign languages around the world, is a minority language surrounded by a majority language, spoken Japanese. In such a language-contact situation, lexical borrowing from the majority spoken language to the minority sign language is inevitable, as are manual systems within the sign languages for representing the borrowed lexical items and the sounds of the spoken languages. These manual systems often consist of iconic handshapes that represent the written letters used for representing the sounds of the majority spoken languages. For example, as Wilcox (1992: 12) explains, in American Sign Language (ASL), the manual system of "fingerspelling is a signed representation of written English, which is itself an alphabetic solution to the representation of a spoken language". In other words, the ASL fingerspelling handshapes represent the different letters of the alphabet, that are themselves intended to represent the different sounds of English. In JSL, however, the "solution" is a bit more complicated.

The manual syllabary of JSL, in contrast to the fingerspelling system of ASL, does not consist merely of iconic representations of a written system, but is instead a combination of imitations of: 1) some of the written letters of the alphabet (imitative handshapes that have been borrowed from ASL into JSL), 2) some written Japanese *katakana* syllabary letters, 3) the meanings of some one-syllable words that are homophones of the desired syllabary sounds, and 4) the meaning of some multi-syllable words the first syllables of which are homophones of the desired syllabary sounds. Since, as far as I know, there has been little written in English about these iconic aspects of the JSL manual syllabary, the present paper will focus on a description of the iconicity in these JSL manual syllabary handshapes.

In addition to the fact that there has been little written in English about the iconcity of the JSL manual syllabary, there are also other reasons for focusing on these handshapes for this paper. First, in JSL research (both in English and Japanese), there has not been much discussion of the sub-lexical handshapes used for sign formation, and looking at the JSL manual syllabary is one way to contribute

to an analysis of these sub-lexical components and sign-formation. (Although the manual syllabary is not a perfect or complete list of the sub-lexical handshapes in JSL, it can serve as a good partial list of some of these components.) Another reason to focus on the handshapes of the manual syllabary is that they do not involve other non-manual factors, such as facial expressions and body orientation, factors which can complicate any analysis of sign language signs tremendously, and are particularly difficult to reproduce and describe in written research reports such as the present paper. By focusing only on the handshapes of the manual syllabary, then, our overall task is simplified, and we can represent the handshapes to be discussed with a single chart of simple illustrations (see below) of one-handed representations, and nothing else.

And last but not least, the focus on the JSL representation of the sounds of Japanese for the present paper was selected because this paper is to appear in a publication in honor of Professor Shimizu, a person who has spent his entire life researching the sounds of language. It is hoped than this paper can serve as some small tribute to Professor Shimizu and his scholarly work over the past half century.

## 2. The Syllabary

As Charles Hockett (1960) so famously stated more than half a century ago, one of the characteristics of natural human language is its *duality of patterning*, which, in other words, means that on one level, the sounds (and shapes) of languages are meaningless, while on another level they are meaningful. The sound [a], for example, means nothing in itself, but it can become somewhat meaningful as the indefinite article 'a', or it can have a meaning like 'I see!' with the proper lengthening and intonation when forming something like 'Aaah!' Of course, the meaningless sounds (shapes), in combination with other sounds in words (signs), can have almost limitless meanings.

The same can also be claimed for the sub-lexical manual components of sign languages, where basic meaningless handshapes on one level, can take on meaning on another level. In the following, however, what I would like to do is illustrate how some of these basic meaningless handshapes, at an intermediate level, where they still have no semantic function, can silently represent sounds of the surrounding majority Japanese language.

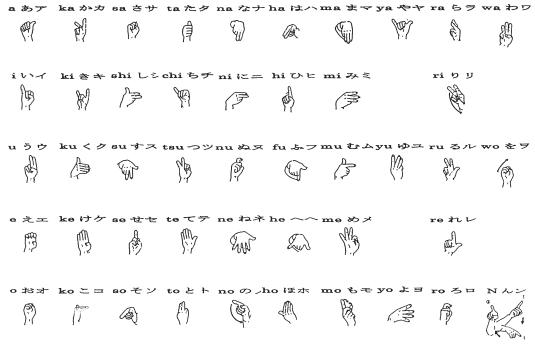
Silent, meaningless handshapes are used to form fingerspelling systems in sign languages around the world. Fingerspelling systems in sign languages are defined by Sandler and Lillo-Martin (2006: 105) as systems "which represent the letters of the alphabet of the ambient spoken language with different handshapes on one or both hands". In JSL, the manual syllabary is a one-handed system that represents the sounds of the written Japanese syllabary by imitating, as mentioned above, different objects, these objects varying from written letters (of the alphabet as well as the Japanese syllabary) to various objects in the real world for which their pronunciations in Japanese produce homophones for the desired sounds of the Japanese syllabary. Once again, the system of representation of the JSL

manual syllabary can be described as follows:

To manually represent each of the forty-six one-syllable sounds/written characters of the Japanese syllabary, the JSL manual syllabary characters imitate certain aspects of:

- 1) Some (15) ASL fingerspelling handshapes (which themselves imitate the shapes of the letters of the alphabet).
- 2) Some (15) *katakana* syllabary characters (three of which are drawn in the air with the forefinger of one hand).
- 3) Some (16) things that are the referents of JSL signs and for which the first syllable of the corresponding Japanese word (or the whole word if it is a one-syllable word) is a homophone for the desire syllabary sound.

What we have here, then, is almost an exact division in handshapes that are 1/3<sup>rd</sup> an imitation of ASL fingerspelling handshapes, 1/3<sup>rd</sup> an imitation of written *katakana* letters, and 1/3<sup>rd</sup> actual meaningful signs which contain the desired initial syllable sound. A chart of the JSL manual syllabary handshapes appears below, and is followed by brief explanations of each of the handshapes and their iconic origins. The chart of the manual syllabary can be referred to when reading the explanations of each handshape.



JSL Manual Syllabary

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A, is an imitation of the ASL fingerspelling for a, which is itself an imitation of that letter of the alphabet.

I, is an imitation of the ASL fingerspelling for i, which again, is an imitation of the same letter of the alphabet.

U, is an imitation of the ASL fingerspelling handshape for u.

**E**, is an imitation of the ASL fingerspelling handshape for *e*.

**O**, is an imitation of the ASL fingerspelling handshape for o.

KA, is an imitation of the ASL fingerspelling handshape for k.

KI, a handshape with the pointer finger and pinky pointed up (to imitate ears), and the thumb and middle and ring finger touching and pointed out (to imitate the snout), to represent the head of a fox-like creature, which is a ki-tsune in Japanese, and thus the first syllable ki- is what is important here and what is represented.

KU, is the sign for the number 'nine', which is pronounced ku in Japanese.

**KE**, The origin of this handshape is unclear, but one hypothesis is that it is how the hand is shaped when saluting, which is *ke-irei* in Japanese, where the first syllable, *ke-*, is the desired sound.

**KO**, is an imitation of the *katakana* shape for *ko*  $(\exists)$ .

SA, is an imitation of the ASL fingerspelling handshape for s.

SHI, is the JSL handshape for the number seven, which is pronounced *shi-chi* in Japanese.

SU, the same handshape as *shi*, but with different orientation, imitating the *katakana* shape for su(z).

SE, an extended middle finger, imitates the concept of height, which is pronounced se in Japanese.

**SO**, pointing with the index finger to some area in the distance, since some demonstrative pronouns in Japanese meaning *over there* (*so-no*, *so-ko*, *so-chira*, etc.) begin with the sound *so-*.

**TA**, is a somewhat revised version of the ASL fingerspelling handshape for t. The handshape was revised because the ASL fingerspelling handshape for t as it is a vulgar gesture in Japanese culture.

**CHI**, a handshape in which the extended little finger represents 1, and the other three circled fingers touching the thumb represent three zeros (000), and therefore the whole handshape represents the number 1,000, since the Chinese character for 1,000 can also be pronounced *chi*, and because the *katakana* for *chi*  $(\mathcal{F})$  is similar to the Chinese character for 1,000  $(\mathcal{F})$ .

**TSU**, is probably an imitation of the *katakana* for *tsu*, (") which is two dots above a line.

**TE**, is simply the extended hand, since *hand* in Japanese is *te*.

**TO**, is probably a representation of the Japanese word for *together*, which is to.

NA, is borrowed from ASL and imitates an n.

**NI**, is formed by extending two fingers to the side, with the meaning of two, since the Japanese word for *two* is ni, and is also written as  $(\Box)$ .

**NU**, is derived from the JSL word for *to steal*, which is *nu-sumu* in Japanese, and so it is the first syllable of the Japanese word, *nu*-, that is the desired sound.

**NE**, is a representation of the JSL sign for *root* (which is itself an imitation of roots spreading out), which is pronounced *ne* in Japanese.

**NO**, is simply tracing the *katakana* for *no* in the air ( ).

**HA**, is borrowed from the ASL fingerspelling for h.

**HI**, represents the number 'one', which is pronounced as *hi-totsu* in Japanese, and therefore the first syllable, *hi*- is what is important.

**FU**, imitates the *katakana* for fu ( $\mathcal{I}$ ).

**HE**, imitates the *katakana* for *he*  $(\land)$ .

## 名古屋学院大学論集

<b>HO</b> , is an imitation of a boat's sail, which is pronounced as <i>ho</i> in Japanese.
$\mathbf{M}\mathbf{A}$ , is borrowed from ASL and imitates an $m$ shape.
<b>MI</b> , represents the number three, which is pronounced $mi$ -ts $u$ in Japanese (and written as $(\Xi)$ ), and so the first syllable $mi$ - is important.
<b>MU</b> , imitates the <i>katakana</i> for $mu$ ( $\triangle$ ).
ME, imitates an eye, which is pronounced me in Japanese.
MO, represents the idea of also or together, which are pronounced mo in Japanese.
<b>YA</b> , is borrowed from ASL and imitates a <i>y</i> .
YU, imitates a symbolic representation of steam rising from a hot spring that is used on maps to indicate a hot spring resort. This is because the Japanese word for hot water is $yu$ .
<b>YO</b> , represents the number four, which is pronounced as <i>yo-n</i> in Japanese.
$\mathbf{R}\mathbf{A}$ , is borrowed from ASL and imitates an $r$ .
<b>RI</b> , is the <i>katakana</i> for $ri$ (1) drawn in the air.
<b>RU</b> , is an imitation of the <i>katakana</i> for $ru$ ( $\nu$ ).
<b>RE</b> , is an imitation of the <i>katakana</i> for $re(\nu)$ .
<b>RO</b> , is an imitation of the <i>katakana</i> for $ro$ $(\Box)$ .
$\mathbf{W}\mathbf{A}$ , is borrowed from the ASL and imitates a $w$ .
$\mathbf{WO}$ , is the handshape for $o$ that is moved backwards.
N, is the <i>katakana</i> for $n \ (>)$ drawn in the air.

## 3. Conclusion

In conclusion, it should be remembered that the discussion in this paper has been concerned mainly with the iconic motivation involved in the original formation of the handshapes in the JSL manual syllabary, and thus is not a claim that the users of these handshapes are always aware of this iconic motivation. For example, none of the Deaf signers that I asked in an informal survey were aware that the a, i, u, e, o, handshapes of the syllabary were borrowed from ASL, or that they were originally based on the corresponding letters of the alphabet. This, however, does not diminish the fact that the handshapes were iconic in origin, and it is hoped that a descriptive paper like this one will add to the ever-growing body of data on the sign languages of the world, and especially contribute to the spread of knowledge of my favorite sign language, JSL.

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