WIT AND POETRY IN AMERICAN SIGN LANGUAGE

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Abstract.

One measure of the psychological reality of more abstract linguistic categories, for native users of a language, is the extent to which those categories are manipulated in such "secondary" uses of language as poetry and wit. The authors are particularly interested in how wit and poetic form in sign language are determined by the visual-gestural mode. A dichotomy will be developed between those properties of the heightened use of sign language which are involved more essentially with the structure created by aspects of movement in general and those that are involved more purely with the grammatical code itself.

In terms of propositional or referential content, it matters little that in English, for example, worst (the superlative of bad) and worst meaning 'sausage' sound the same, or that June, moon, croon, swoon have the same vowel and final consonant--i.e., that they rhyme. But there are functions of language outside of the purely referential for which such otherwise incidental similarities become significant in terms of the totality of what is communicated--in terms of the total import of an utterance. Among cases where this is obviously true for the English speech community are puns; such a punning ad-slogan for mustard as "It brings the best out of the worst (wurst)" derives its full import from the wurst/worst ambiguity in English. And, of course, just such rhymes as June, moon, swoon, croon provide the basis for a superimposed structure of sound whereby mere sentences take on, in addition, that special significance of the patterning embodying verse--albeit the
sentences may express inanities and the verse may be doggerel. What is special about puns, verse, and poetry in general is a heightened awareness of linguistic phenomena as linguistic phenomena. As Jakobson (1960) puts it: "the set toward the message as such, focus on the message for its own sake, is the poetic function of language" (p. 356). Like "art for art's sake", language for language's sake would be pure poetic function. While the poetic function certainly dominates in various forms of language-based art--and certainly very much so in lyric poetry--the poetic function is also represented in everyday language use, though in a less structured way.

In what follows, we shall attempt to show that the poetic function is represented also in the linguistic activities of the deaf using the primary visual-gestural language called American Sign Language (ASL).

An Analysis of Wit and Plays on Signs

We have often been asked whether puns and other sorts of linguistic play are possible in American Sign Language. Sometimes the question arises along with the much older question of whether or not the gesturing of the deaf does or does not constitute a "language" in the sense that English, say, is a language. Perhaps, or so this question sometimes implies, the existence or non-existence of the special form of wit known as punning could give us clues to the status of ASL, since punning relies so heavily on the form of a language. Certainly the older literature on signs and signing contains much that would lead the uninitiated to question whether such possibilities exist. Tervoort (1961) claims that the spontaneous use of signs in an ironical or metaphorical way is rare to non-existent. One might be led to suppose that linguistic creativity in the form of punning and other playful manipulation of linguistic units is also absent. One might even be led to ask if the general sort of structural properties present in all spoken languages that provide the basis for such linguistic play might not somehow be absent from sign language. Thus, since punning and rhyming can inform us about significant structural properties in spoken languages, it is relevant to ask whether or not punning and other forms of linguistic play are possible in ASL.
By 'punning' we mean the calculated use of one word in an utterance in such a way as to suggest, at the same time, the different meaning of another word having the same (or nearly the same) sound. To say, "If you take care of your peonies, the dahlia will take care of themselves", is to play on the similarity in sound of "peonies" and "pennies" and of "dahlias" and "dollars", as well as on one's knowledge of an old saw. When a critic talks of a new series on TV as "The bland leading the bland", he is playing on the similarities between "bland" and "blind", and on another cliché (although such clichés are not essential to punning).

What are the ingredients required for punning in ASL, aside from a kinky imagination bent on verbal punishment? The basis, it seems, is the occurrence--and the awareness on the part of signers--of homonyms or near homonyms. These there are in plenty in ASL, as we have found from the typical errors made in short-term memory experiments we have conducted (cf. Bellugi, Klima, and Siple, in press). Among many others there are pairs like the sign for CHAIR and one of the signs for SALT; the sign for FURNITURE and the sign which translates as NOTHING-TO-IT; the sign for the number THIRTEEN and the sign for EJACULATE. Thus, the ingredients are certainly there within the language. And we can report that the awareness and quirky imagination required to make use of them (and-with mock disdain-to recognize them) is present among deaf signers using ASL. One deaf person signed the equivalent of: "You know he's a man when a boy ejaculates (becomes 13)." Is there the possibility of punning in ASL? Yes, there is, and punning does occur as wit in deaf communication.

Those who ask us such questions may not realize, however, that there is a rich and abundant use of sign-play by deaf people in ASL which does not depend on the principles of punning, but rather on principles which are special to sign language itself. We shall examine here some of these special principles of sign-play used for wit and humor in ASL. We find that such sign-play frequently involves one of three basic processes:

**Process 1. The Overlapping of Two Signs.** This can occur in different ways: a.) by making the two signs simultaneously; and b.) by holding a sign (or part of it) while making another sign. The overlapping of two signs relies on a possibility which exists in sign language, but not in speech. Because we have two hands we can, in principle, make two different signs at
the same time--one with either hand. Our impression is that the desired goal of some of these overlappings in ASL wit is to achieve the ultimate compression of meaning into a minimal number of units.

**Process 2. The Blending of Two Signs.** This can occur: a.) by making one sign and then blending it into another sign so the two form a complex unit; and b.) by blending together at the same time properties of two signs. Again, the result is a kind of compression.

**Process 3. The Substitution of One Regular ASL Prime for Another in a Sign.** Such substitutions can occur in any of the major parameters: hand configuration; place of articulation; movement; or orientation of the sign. The resultant gesture, in such substitutions, is not an existent ASL sign, but rather a possible sign--one closely resembling a particular ASL sign in all but one prime of one parameter. The particular changes in primes generally have morphological or other symbolic or iconic significance.

We will spell out with examples these three basic processes, which by no means exhaust the possibilities of linguistic play in ASL. The examples are from our daily association with deaf people and from our videotapes of everyday signing.

**Process 1. The Overlapping of Signs**

In signing, because of the existence of two autonomous articulators (namely, the two hands), there is the logical physical possibility of producing two independent signs simultaneously. Moreover, such simultaneity would not be inconsistent with some of the facts and impressions about ASL that have been mentioned in the past: the weakness of order of signs alone as a clue for grammatical function (see Fischer, in press); the apparent tendency to compress information into single units (see Bellugi and Fischer, 1972); and the use of simultaneous (rather than sequential) modifications of signs to modulate meaning (Fischer and Gough, to appear). In everyday signing, in fact, one class of signs does occasionally manifest this sort of simultaneity: the deictic signs in which the "pointing" hand is directed to a locus in signing space to be used as a basis of "pronominal" reference [glossed as (THERE), (HE), (SELF), etc.] (see Friedman, 1974). Aside from the simultaneous production of a deictic sign with one hand and a nominal sign with the other, there are many other logical possibilities: for example, the simultaneous signing of a subject with one hand
and its predicate with the other. However, we have found no such instances in our data of conversational signing. Although the visual mode could theoretically accommodate such simultaneity, sentences in conversational ASL are not composed of simultaneous signs.

Overlapping of signs does occur—and quite frequently—in self-conscious signing of preplanned material, in the plays on signs that deaf people love to make, and, as we shall later see, in poetic signing as well. Let us examine a few cases of overlapping (simultaneous) signing in wit.

a.) Making two signs simultaneously. Strict simultaneity is best defined as having the movement of a sign being made in one hand coincide with the movement of a second distinct sign being made in the other hand. Certainly there are restrictions on this type of simultaneity, having to do with the difficulties of making two different motions, one with either hand. The least complex movement of ASL signs is that of making a contact with some part of the body or with a point in space. This is not difficult to combine with the movement of other signs. However, we have seen other types of simultaneity in plays on signs.

Example 1. We asked a young deaf man how he felt about leaving a place he loved for a new situation and a new job. He summed up his feelings eloquently by making, simultaneously, the signs for EXCITED and DEPRESSED (Figure 1, Plate I). Ordinarily each of these signs requires two hands operating symmetrically. Instead, this signer made "half" of each sign with either hand. Not only are they antonyms, they are also
related formationally, differing only in the direction of movement (upward brushing of the chest, downward brushing of the chest). Thus he compressed into a single new sign-creation his ambivalence of emotions.

b.) *Holding one sign (or part of it) while making another.* This involves making one sign and holding the final position and handshape of that sign while making another sign with the other hand. The final positions of both signs are then held. Again, this depends on either choosing signs that are made with one hand only, or on changing the sign so as to make it as a one-handed sign.

Example 2. A deaf person signed to us that she is clever at reading signs but poor at remembering them long enough to write them down. She first made the sign CLEVER with the right hand, and then held that while she made EMPTY-HEADED with the other hand (Figure 2, Plate I), indicating her mixed evaluation of her competence. These are both one-handed signs, with different handshapes but with a simple contact for movement, and thus easily combined in this way.

Example 3. A young deaf man was seen each day with a different girl. When we commented that he had an eye for pretty girls, he twinkled and signed what could be rather freely translated as, "Yes, I'm an expert (girl-)watcher." He first made a sign for EYES, one that mimics the eyes with two hands. Then, holding the final position of "half" the sign with one hand, he made the sign for EXPERT with the other (signing "eyes-pert", as it were). (Figure 3, Plate I) The combination is particularly effective in ASL because the two signs he chose use the same handshape.

**Process 2. The Blending of Two Signs**

There are various ways of blending two signs into one unit. One can make one sign, and then add the movement of another sign, so that the two signs become one unit. One can take, say, the handshape of a name sign and make it with the movement, location, and orientation of a different sign, blending the properties of the two into one unit. One can make a sign and
continue its movement throughout what would normally be the transition to the next sign, allowing for slight changes in orientation or location, until one sign has been transformed into another.

Example 4. One day we were particularly inept in our attempts to sign. Our deaf teacher good-humoredly signed to us that ordinarily we are clever, and then by blending the sign CLEVER with the sign DEFLATE and the formationally related INFLATE, she suggested playfully that today the cleverness was deflated but that tomorrow--after a good rest--the cleverness would become inflated again. She made the sign for CLEVER, which is made on the forehead with one hand. At the same time she blended that with the movement of another sign, usually made with one hand on the other, meaning DEFLATE. She then "re-inflated" the sign back to the CLEVER again (Figure 1, Plate II).

Example 5. (Not illustrated). Name signs are often blends of two signs. (See also Meadow, 1974.) Name signs usually begin by forming the handshape corresponding to the initial of a first or last name, and choosing a location and movement for that hand configuration. The name signs for people in our research group were all given to us by deaf people who work with us. It happens, not infrequently, that as people become better known, deaf people begin to blend the name sign with some other sign that refers to a special characteristic of the person, often originally as a joke or to differentiate several people with the same simple name sign. The name sign for Ursula Bellugi is a "U" on the side of the mouth with a soft repeated contact. Because she always jots down with great excitement any new sign she sees, one deaf person dubbed her "Ursula the Copier", blending the "U" of her name sign with the sign for COPY.

Example 6. We do not know the history of the next sign, but its combinatorial properties are very clear. Long before the impeachment issue arose, the deaf people had a name sign for (former President) Nixon which was used commonly on the news interpreted on television by signers. The name sign consists of the handshape representing the letter "N" made across the chin with a brushing motion. This is a blend of a name sign with "N" and the sign for LIAR, which is made by an index or "pointing" hand brushing across the chin. Thus, the name sign indicated, long before the later scandal and resignation, that he was "Nixon the Liar" (Figure 2, Plate II).
There are other kinds of blends. In some plays on signs, a sign is made and the movement continued throughout what would be the transition to the next sign, while allowing changes in orientation to take place, until one sign has "become" another. In the examples we have found, these depend on choosing signs with the same handshape and similar location.

Example 7 (Not illustrated). There is a regular sign for TOTAL COMMUNICATION which is made with the hands alternately moving away from and toward the signer. In one play on signs involving this sign, as the movement of the sign repeats alternately, the hands gradually move closer and closer to the mouth, until finally one is making the signs alternately for DRINKING and SMOKING-MARIJUANA. Here we have a case of double blending.

Example 8. One time we were explaining to deaf colleagues that the blending of signs depends in part on the felicitous choice of signs in the first place. There is a sign meaning WISE, another meaning BRILLIANT, and a third meaning CLEVER, formed in three very different ways. We non-deaf were stressing the importance of the choice of the form of signs in creating plays on signs. In order to blend the movement of DEFLATE with another sign, we argued, a particular handshape is required which happens to occur in the sign CLEVER but not in the other two signs. One deaf person listened to the explanation, nodded in apparent agreement, and then, as if to show that wit has few restrictions in the right hands, he made the sign for WISE and allowed the hand to droop suggesting "wisdom wilting"; then he made the sign for BRILLIANT and made it shatter into the sign for DUST; and for good measure, made the sign for WISE again, continuing the movement of the sign while changing the orientation of the hand slightly, until WISE had turned to PUZZLED.

These, then, are various ways of overlapping and of blending two signs. Linguistic jokes involving these mechanisms depend on the choice of particular combinations of meaning and form (as does punning); some of them also depend on making deliberate use of a rarely used possibility in sign language: making two complete signs simultaneously, one with each hand.

Process 3. The Substitution of One Regular ASL Prime for Another in a Sign
The third general process we will illustrate used in plays on signs is a change in one of the basic parameters of a sign so that there is simple substitution of one prime of that parameter for another. This is essentially a distortion of a sign so that all but one of the basic characteristics of the sign are retained. The result of this sort of linguistic play is a possible but not an actual sign of ASL: neither a citation form nor a standard modulation of a sign. But it differs from an actual ASL sign in a way that is significant and meaningful—either in terms of ASL morphology, or in terms of more general spatial-gestural symbolism. Appreciating the wit (and often, in fact, recognizing the actual sign behind the distortion) usually depends on knowing the context in which the new sign was created.

It is important to distinguish the differences between various phenomena all characterized by the substitution of one prime for another. In the memory experiments previously referred to (Bellugi, Klima, and Siple, in press), intrusion errors which deaf subjects "misremembered" were frequently formationally similar to the original sign presented—often only a prime away. However, unlike the sign-plays referred to here, the intrusion errors were actual signs of ASL. We also find substitution of primes in one other class of phenomena which are not sign-plays: exchanges of primes may occur in slips of the hand when some aspects of an intended sign message are transposed. These are analogous to slips of the tongue or "spoonerisms" in speech, and Fromkin (1971, 1973) has shown how these can provide clues to the way in which language is organized. For example, if two signs are made in sequence so that, by mistake, the handshapes are transposed, perseverated, or anticipated, the result is a slip of the hand—a prime in one sign being exchanged for a prime in another sign. Slips of the hand are inadvertent, unplanned, and though they may arouse a laugh, they differ from wit. The examples of ASL wit given below were deliberate planned changes in signs depending on the linguistic parameters of the language, and they caused that special type of response triggered by linguistic play.

a.) Change in handshape prime.

Example 9. On one occasion a complex technical point about transformational grammar was being explained in sign language. When asked, "Do you understand?" a deaf person replied with the sign for UNDERSTAND, but instead of using the index finger, the signer made the sign with the little finger. The basis for this distortion is clear: the little finger occurs in a
symbolic way in some signs where it conveys the notion of thinness (SPAGHETTI, THREAD, SKINNY-PERSON) or extreme smallness (TINY, INFINITESIMAL). The substitution of the little finger for the index finger in UNDERSTAND clearly carried the meaning "understand a little" (Figure 1, Plate III).

b.) Change in orientation.

Example 10. The sign for NEW-YORK is ordinarily made with a "Y" hand brushing sideways along a flat open palm-up base hand. New York as a city has become a place where corruption abounds. This distinguishing characteristic is sometimes playfully expressed within the sign itself by making the sign, but changing the orientation of the base hand so that it is palm-down instead and the active hand is below it. The significance of this playful change in orientation is made clear by the fact that the standard citation forms of a few signs in which the palm of the base hand faces downward have a common semantic component: e.g., in STEAL, KILL, BRIBE, SNEAK-AWAY. Thus, making the sign for NEW-YORK with this change in orientation of the base hand can be interpreted as adding
A Line from e. e. cummings: "since feeling is first . . ."

SINCE
FEELING
TRUE ("IS")
FIRST

PLATE IV: STRAIGHT AMERICAN SIGN LANGUAGE (NON-POETIC STYLE)
to the meaning of the sign some of the "underhandedness" of life in the big city (Figure 2, Plate III).

c.) Changes in movement.

Example 11. After an explanation, which may have been more confusing than enlightening, a deaf person responded with: "Yes, I understand." But the sign for UNDERSTAND was made with a backwards movement. Instead of starting from a closed position and flipping open, the hand started from the final position and changed to what should have been the initial closed position. This resulted in something that was not a sign of ASL, but could be construed to mean, "I un-understand." (Figure 3, Plate III).

Example 12. One deaf person was asked if she had attended college. "Yes," she signed, and made the sign for COLLEGE, making the movement downward instead of upward, conveying, if it can be translated at all, something like "non-college" (Figure 4, Plate III). Such sign-play is similar perhaps in spirit--but certainly not in form--to a play on words in English in which the actual English word *upbringing* (in the sense of 'education') might serve as the basis for the playful coining of such a form as "downbringing". Certainly not all movements can be made forwards or backwards, and not all signs with upward or downward movement have predictable meanings. However, there are some sign pairs which are opposite in meaning and are similar in form except for a predictable difference in, say, direction of movement. The existence of pairs of signs like EXCITED and DEPRESSED, discussed in Example 1 above, helps in the interpretation and creation of the plays on signs involving such changes in movement.

d.) Changes in location.

Example 13. Ordinarily the sign for RELAX is made with the hands crossed on the torso. One time a person claimed that her eyes were tired, and so suggested that she should "relax her eyes", making the sign with her hands crossed over her face and resting under her eyes instead of on her torso.
Example 14. Another person told of the time he bumped into a door and his eye became bruised and swollen shut so that he could not see through it. He summed the situation up by signing the equivalent of: "My eye is deaf", making the sign for DEAF across his eye instead of on his cheek. These changes depend on iconic values of the new locations (Figure 5, Plate III).

Example 15. A related phenomenon is characterized by the change of location for finger-spelled words, which are ordinarily signed in the space in front of the chest. One person signed that her daughter was obsessed with thoughts of young men. She conveyed that by spelling B-O-Y-S but on the location of the forehead: i.e., "boys on the mind" (Figure 6, Plate III).

The processes of sign-play which we have been describing involve manipulations of signs which are, on the whole, special to the form of sign language itself. The overlapping of two signs, for example, depends on the use of the two hands independently to create special kinds of simultaneity of signs. This is made possible by the existence of two articulators--the two hands--in producing the language. The blending of two signs, as another example, may involve the fusion of properties of two signs. Lewis Carroll attempted to achieve something similar in speech in his blends of, say, "furious" and "fuming" into "furious". But the essentially sequential nature of word segments does not lend itself in quite the same way to the creation of fusions as does a visual-gestural language based on simultaneously occurring parameters.

Perhaps, we may speculate, a language based on gesture and vision lends itself to particular types of playful extension and distortion of the shape of its basic units a little more readily than our spoken, more "frozen" words, which cannot so easily blend, overlap, or otherwise change shape. In any event, we consider it indicative of the inventiveness and linguistic creativity of the deaf people we have met that wit and humor abound in the everyday communication we have observed and captured on videotape.

AN ANALYSIS OF POETIC STRUCTURE IN AMERICAN SIGN LANGUAGE
The poetic function figures most complexly, of course, in poetry itself, where linguistic form becomes the basis for the patterns constituting the multiple layers of structure underlying a poem. In spoken language, we distinguish several major types of poetic structure. The first of these we shall call Internal Poetic Structure. By internal poetic structure we mean structure which is, as in spoken language, constituted from elements that are completely internal to the language proper (i.e., in the case of sign language, constituted from the form of standard signs in ASL--constituted from parts of the grammatical code itself). The two sub-types of internal poetic structure to which we shall address our attention here we refer to as conventional poetic structure (provided or even demanded by tradition) and individual poetic structure (individual to the particular poem). In the English literary tradition, such metrical schemes as iambic pentameter constitute the basis for a kind of conventional poetic structure. For this structure, the fact that a syllable has greater stress than the syllables immediately surrounding it becomes significant, as do the number of such significantly stressed syllables. Similarly, various end-rhyme schemes that establish recurring sound patterns (e.g., aabb, abab, abba) are part of conventional poetic structure in the English tradition, as are larger designs like the Elizabethan sonnet-form.

In structurally complex poetry, however, conventional structure will be overlaid with more innovative individual poetic structure, consisting of more subtle patterning of not only sound texture but also of other linguistic elements--syntactic, semantic, and thematic. Blake's "Infant Sorrow", analyzed thoroughly by Jakobson (1970), exemplifies the distinction between conventional and individual poetic structure--both constructed from aspects of the grammatical code itself.

In sign language "art-sign", we have discovered three different types of poetic structure. It seems to us that there is an Internal Poetic Structure, corresponding to internal poetic structure in the poetry of spoken languages, but the patterning of linguistic forms in art-sign is by-and-large individual rather than conventional. In addition, we have discovered two types of external structure, different from poetic structure in spoken language, and special to sign language poetry. One type can be distinguished as External Poetic Structure, in which the basic principles include: a.) creating a balance between the two hands; and b.) creating and maintaining a flow of movement between signs. Then there is yet another kind of structure, an External Kinetic Superstructure: a kind of design in space which may be
superimposed on the signs and the signing, just as in song we may have melodic structure superimposed on the words of a poem.

The sources for our discussion of poetic or art-sign structure are varied, but our primary source is from deaf people who are or have been associated with the National Theater of the Deaf, a remarkably talented group of deaf actors (with an occasional hearing person, often one who has had deaf parents). Several of the actors have worked with us in our research at one time or another, generously giving of their time and enormous creative talents. The members of the National Theater of the Deaf have been developing a poetic tradition in sign language within our own time. This blossoming tradition involving the heightened use of sign language is based, as we shall see, on the inherent structural properties of signs and on special characteristics of signing. Aside from formal poems, we have also videotaped "songs" that deaf children invented in sign language, lullabies, children's sign games, and other aspects of what might be called folk art in sign language.

In order to illuminate some of the basic principles of poetic signing, we shall present an analysis in depth of a single line of poetry. Bernard Bragg, a master signer of the N.T.D., has spent many days with us in our work and has greatly enriched our research. In order to study the creative process in the development of poetic signing, we gave him as a problem a poem which he had never worked on before. We asked him to translate it into everyday signing, and then to show us the process of changing it into poetic form in ASL until he found what was to him a satisfying solution. The poem was one by e. e. cummings--"since feeling is first"--and is peculiarly apt, we feel, for linguists and artists to work on together, since it juxtaposes "syntax" and "feeling". The first four lines are:

    since feeling is first,
    whoever pays any attention
    to the syntax of things
    will never wholly kiss you. . .

We shall present here only the first line, and study the change from "straight" (i.e., everyday
non-poetic) signing to poetic "art-sign", in Mr. Bragg's capable hands. The drawings represent the signs which Bragg chose to represent the meaning of the first line in straight non-poetic signing. This version is a direct literal translation of the words into signs of ASL, as can be seen from the English glosses given to the signs (Plate IV).

As in normal everyday signing, we find examples of three formational classes of signs:

a) signs involving both hands, with both active and operating symmetrically:

(SINCE);

b) signs made with one hand only: (FEELING and TRUE); and c) signs made with one hand acting on the other as a base: (FIRST).

Since Bragg is right-handed, the one-handed signs are made with the right hand. In this "straight" version, during those signs, the left hand is by his side or otherwise not in use. In this sequence of four signs, there are changes in handshape from one sign to the next as follows (using symbols from Stokoe, Croneberg, and Casterline, 1965):
The right hand, then, starts with a "G" handshape, switches to an "~" hand shape, and back to a "G" for the last two signs. The left hand starts with a "G" shape, then drops down toward the side of the body and returns with an "A" shape. Note that the hands not only perform the movement of the signs themselves, but also move in making the transition between signs. As one sign is finished and before the next sign begins, the hands move from one place of articulation to another, changing handshape if necessary during that transition. For example, at the conclusion of the two-handed sign SINCE, the left hand relaxes and drops to the side, and the right hand changes from a "G" to an "~" as it is moving in the transition from the final position of SINCE to the initial position of FEELING. When signs are viewed in slow motion (60 fields per second), we might mention that they are observed to be held slightly in their initial and final positions, so that it may become possible to identify notions like "the initial position of a sign", "the movement of a sign", "the final position of a sign", and "the transition to the next sign", by objective measurements.
**Internal Poetic Structure**

In moving from conversational style to the poetic style of art-sign, Bragg made special changes (see Plate V). (While the changes he made are interrelated, we will artificially separate them for purposes of analysis.) Consider first those changes that are associated with the choice of signs—with *Internal Poetic Structure*.

Bragg replaced three of the four signs in changing from a "straight" to a "poetic" version. The only sign that remained the same in the two interpretations is FEELING. Instead of signing SINCE, he chose the sign BECAUSE; instead of TRUE, he chose the sign ITSELF; and instead of FIRST, he created a new sign in which a one-handed rendition of MOST (normally a two-handed symmetrical sign) blends with the superlative marker -EST. He himself "re-translated" the resultant blend as "MOSTEST". While not precisely like the citation form of any single ASL sign, it is certainly interpretable by a deaf viewer. Note that the three signs he chose for the poetic interpretation all have the same handshape ("A"), and furthermore, that they are, in the way he made them, all made with one hand only. And, as we shall see, aside from handshape similarities, there were other characteristics manifested in his particular choice of signs.

In this first line of the art-sign version of the poem, then, we have four signs, each of which is made with one hand only. The three made with the right hand share the same handshape. We have come to feel that this notion of shared handshape similarity is analogous to such phenomena as consonance (alliteration) or assonance in the poetic tradition of spoken language.

**External Poetic Structure**

*External Poetic Structure* is characterized not by the choice of signs, but rather by their style of presentation. One general principle of art-sign seems to be that of maintaining a balance between the two hands. Signers, like everyone else, are generally either right-handed or left-handed, and sign accordingly in everyday signing; the signer will use his dominant hand to make one-handed signs; the dominant hand also is the active hand in signs in which one hands acts on the other (the base). This means that for the majority of signs there is an
imbalance in the use of the two hands by any individual signer. But whether, in the act of signing, it is the right hand that is active or the left is irrelevant to the grammatical code of ASL (and no two signs are distinguished by one being made with the right hand and the other with the left hand or one with the dominant hand and the other with the non-dominant). However, in the poetic tradition being developed by the National Theater of the Deaf an external poetic structure is imposed on art-sign which includes that of maintaining a balance between the two hands. There are several ways in which we have observed ASL poets achieve this balance:

a.) Alternating hands in making consecutive signs. After signing BECAUSE with his right hand, instead of signing FEELING also with the right hand, as he would in ordinary conversation, Bragg uses his left (non-dominant) hand for that sign.

b.) Overlapping, or making (parts of) two signs simultaneously. In this one line, we note that Bragg engages both hands at all times after the first sign. He holds the sign BECAUSE (right hand) in its final position while making the sign FEELING (left hand). He holds the sign FEELING (left hand), and in fact uses it as a kind of base for the sign ITSELF (right hand active). He continues to hold the final position of the sign FEELING (left hand) while making the final sign-blend: "MOSTEST" (right hand). It is in this sense that in art-sign (as opposed to straight signing) there is a balance of the two hands--providing a basis for poetic structure external to the grammatical code proper. It will be recalled that in ASL wit we have also noted occurrences of overlapping signs.

Let us look at the use of the hands in the poetic style of signing the first line, below:
There is a second quite general principle of external poetic structure exemplified by the signing in the presentation of this one line, and that is the creation of a *flow of movement*, or a *continuity between signs*. Creating flow of movement goes beyond the general principle of internal poetic structure whereby signs are chosen so that, for example, the handshapes (part of the grammatical code of ASL) of two consecutive signs are the same. Creating a flow of movement or continuity between signs is often accomplished by interesting sorts of distortions imposed on the form of the signs themselves, again going beyond the grammatical code proper. This, for the most part, is different from what we have found in plays on signs, in spoonerisms, in regular meaningful modulations of signs, or in the memory errors we collected from our short-term memory experiments, and is quite specific to art-sign. The distortions associated with flow of movement involve not only the form of the signs themselves, but also the *transitions* between signs. One way of considering this aspect of poetic style in ASL is to say that an effort is made to utilize the transitions between signs in such a way as to avoid "wasted" movement. In distorting transitions between signs, the sign-poet may attempt to make every movement—even that involved in the transitions between signs—"meaningful," displaying, in some instances, the formational properties of the preceding or following sign. We might mention that poetic signing is, in our experience, decidedly and markedly slower than signing in everyday conversational style. One might speculate that because of this decrease in rate, sign-poets may distort the shape of signs and the transitions between them without losing all comprehensibility.

The sketches in Plate IV of the straight ASL signing of this line of the poem show the position of the hands at the initial and the final stages of each sign. The movement from the final position of one sign to the initial position of the next sign would be what we are calling...
the "transition" between the signs, and is not represented in the sketches.

Consider the sequence of signs SINCE and FEELING in straight signing (see Plate IV). The initial position of SINCE is represented by the dotted lines near the shoulder, and the final position is represented by the hands in the solid lines in the space in front of the shoulder. Similarly, the initial position of FEELING is represented by the lower drawing of the hand, which is a dotted line at the mid-line of the lower torso. The transition between SINCE and FEELING, then, involves dropping the left hand to the side since it is not in use; and, at the same time, moving the right hand from the final location of SINCE to the initial location of FEELING while changing the handshape from the "G" hand to an "~" hand during this movement. This is what we mean by the transition between signs.

In the poetic version of the line, Bragg manipulates the form of the signs so that the final position of the hand after making each sign is precisely the starting position of the next sign. The final position of BECAUSE, which is held throughout the signing of FEELING, becomes the starting position of ITSELF, and the final position of ITSELF is also the starting position for "MOSTEST". This would not be the case in the conversational style of signing the same sequence of signs. So we see that the internal and external structures of the line have been made to work together: a.) there is a simple patterning (repetition) of an element of the grammatical code: the three signs made with the right hand all share the same handshape; and b.) the continuity between the signs, already expressed in the similar handshape, is enhanced by making the final position of one sign coincide with the initial position of the sign following it, without the usual blurred transition or "wasted" movement between signs.

In additional poems we have analyzed there are also other ways of creating a flow a continuity of signs. Some of these involve blending consecutive signs; occasionally one finds a distortion of a sign in the form of the substitution of one prime of a formational parameter for another so that, for example, consecutive signs maintain similar handshapes, even if the citation forms of the signs are different. In art-sign we have also found other ways that signers manipulate what would normally be the transition between two signs i.e., prolonging a handshape throughout a transition; prolonging the handshape and movement of a sign; anticipating a handshape and place of articulation, etc. This does not exhaust the
means of creating a continuity or flow of movement between signs.

**External Kinetic Superstructure**

There is yet another type of external structure which we will consider, and that is *external Kinetic Superstructure*. We consider this somewhat analogous to the combination of melodic and poetic structure which occurs in songs. The melodic structure is superimposed on the words which may as a result undergo certain kinds of distortions from the point of view of the linguistic code, though aspects of melodic and poetic structure may coincide and interact as well.

In the single line of poetic signing under consideration, it may be a little difficult to separate clearly the superimposed kinetic structure from some of the other principles we have discussed. If one looks at the flow charts of the movement of the hands in the non-poetic and poetic styles of signing that one line, it becomes clear that in the latter style there has been a further distortion of the signs which creates an enlarged pattern of movement. This is enhanced by other types of distortions we have discussed (such as those eliminating "wasted" movement in transitions), but this further, grosser distortion clearly seems an aim in its own right as well. Bragg has superimposed a special *design in space* on the signs chosen for the poetic style of signing, a design in space characterized by large, open, non-intersecting movement as is shown below and in Plate VI by a flow chart of the poetic style of signing the line.

Thus we have illustrated three principles of poetic structure in examining closely one poetic line, and the way in which it has been molded, shaped and changed in passing from non-poetic straight signing to poetic art-sign. There is Internal Poetic Structure involving the choice of signs--in this case, perhaps, an analog of alliteration. There is External Poetic Structure, involving a balance between the hands (by alternating hands in making one sign after the other and by holding one sign while making another) and involving a flow of movement, a continuity from one sign to another throughout the line (distortion of the transition between signs, in this case making the formal position of one sign coincide with the initial position of the next). And there is External Kinetic Superstructure, having to do with creating a design in space, superimposed on the signs themselves.
We have found such principles occurring quite generally in the poetic signing of the members of the National Theater of the Deaf and also in the art-sign of other poet-signers. There are, of course, other principles of poetic signing which happen not to be represented in this one line. For further analysis of art-sign see Klima and Bellugi (in preparation)\textsuperscript{10}. Clearly there is developing now a rich and fascinating tradition of poetic style in ASL, highly sensitive to the special characteristics of a visual-gestural language and to the possibilities inherent in performing in a visual-gestural mode.
Notes

1 This research was supported in part by National Science Foundation Grant #GS42927X and by National Institutes of Health Grant #NS 09811 to The Salk Institute for Biological Studies. Our thanks to the many deaf people who have furnished us with examples of the sign-plays presented in this paper in the course of our research.

2 Our experience in communicating with deaf people certainly contradicts Tervoort's claim. The usage of signs in ironical or metaphorical ways occurs frequently and freely. These special uses of signs can often be recognized by very slight changes in the manner in which they are produced.

3 Certain notational conventions used in this paper are forms we have adopted in previous papers on American Sign Language. For example, the English translation equivalents of ASL signs are represented in capital letters, as in UNDERSTAND. (Naturally the form of the sign need have no relation to the English word.) If more than one English word is required to translate a single sign, we hyphenate the two words-e.g., EMPTY-HEADED. Deictic (pointing) signs are indicated by parentheses (THERE), (HE), etc. Words which have been finger-spelled in ASL (not signed) appear with hyphens between each letter-e.g., B-O-Y-S.

In order to convey descriptions of sign-plays discussed here, we have adopted these notations: Two overlapping signs, or two signs made simultaneously, are indicated by a slash-e.g., EXCITED/DEPRESSED. If one sign is made and then blended with another sign a represents the blending. If one prime of a sign is changed to create a sign-play, the English translation-equivalent still appears in capital letters, but the change in meaning appears in lower case--e.g., UNDERSTAND-a little.

In addition, certain examples have two illustrations, one representing the standard form of
the ASL sign, and the other the sign-play. When we refer to the sign-play, it is enclosed in quotation marks. The standard form of the sign appears in capital letters without quotation marks.

4 We refer to the particular values of the major parameters (Hand Configuration, Place of Articulation, Movement, Point of Contact) as the primes of each of those parameters. Thus, the pointing index hand—a "G" hand—is one prime of the Parameter Hand Configuration.

5 The ingenious illustrations for this paper were made by Frank A. Paul.

6 Robbin Battison furnished this example.

7 Among those who have helped us by discussing and creating poetry for us on videotape are: Bernard Bragg and Lou Fant, both of whom have spent many sessions with us in our work; also Jane Wilk, Linda Bove, Pat Graybill, Joe Castronovo, Ed Waterstreet, and others. Members of our research group (either deaf or hearing people of deaf parents) have also shared in interpreting, performing, and discussing poems, including Bonnie Gough, Carlene Pedersen, Ted Supalla, Sharon Neumann, and ShannY Mow.

8 The sign SINCE is a direct translation of the English word "since," but its use in ASL would be restricted to the temporal sense.

9 In a study of more than 2,000 signs of American Sign Language, we found that only 35% involve the use of both hands where both hands are active. About 40% of the signs are made with one hand only, and another 25% are made with one hand acting on the other hand which remains stationary as a base. Thus, for almost two-thirds of these signs, one hand is used as the dominant hand.

10 Klima and Bellugi are preparing a broader discussion of principles of poetic signing as a chapter for their book, THE SIGNS OF LANGUAGE, which will be published by Harvard University Press.
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Because Feeling Itself "Mostest"

Plate V: Poetic Style in American Sign Language