1. Introduction

Sign language poetry is the height of artistic signing. It is an unusual linguistic phenomenon in that the communicative purposes of the language can be overridden by the importance of the language itself. As Sutton-Spence (2000) points out, “the language used [in poetry] enhances --and may even take precedence over-- the message of the poem.” (80-81). Klima and Bellugi (1979) state: “What is special about verse in general is a highlighted awareness of linguistic phenomena as linguistic phenomena….Like art for art’s sake, language for language’s sake would be pure poetic function” (341).

As a result, various formal devices are used in sign language poetry in order to achieve poetic effect, such as manipulation of parameters (handshape, movement, and location), visual and temporal rhythm, eyegaze, and so forth. Among those devices is the issue of symmetry. Symmetry, the arrangement of two elements in symmetrical locations, is an essential aspect of poetic signing. Its primary function is to create aesthetic signing. It can also metaphorically represent abstract concepts such as harmony, balance, equality, and peace, or contrast and duality. Absence of symmetry also plays an important role in sign language poetry.

This paper deals with how poets make use of symmetrical signing in sign language poetry, and what kind of symbolism it carries. It will start with a general introduction to the concept of symmetry, followed by examples both in spoken and signed language poetry. The particular genre of signed poems which will be the focus of this paper is haiku, the shortest poetic genre in the world.

1 I would like to thank the Alumni Foundation of University of Bristol for their support on my presentation at TISLR 9. I am also grateful to Linda Day for her kind permission to use images from her poem. Rosaria and Giuseppe Giuranna gave me their permission to use images from the LIS haiku. Images from Jesus Marchan and Sam Sepah’s work are courtesy of PEN-International, National Technical Institute for the Deaf, Rochester, NY. These two poems are available on their website (http://www.pen.ntid.rit.edu/news.php). I thank Chris John for his technical support.
2. Symmetry

2.1. Definitions of symmetry, asymmetry and non-symmetry

It is conventional to open a philosophical account of symmetry by giving two kinds of definition: broad and narrow (Weyl 1952, Walser 1996). The Oxford Advanced Learners’ Dictionary presents a narrow definition: “the exact match in size and shape between two halves, parts or sides of something”. This geometric definition of symmetry, restricted to two-sidedness of an entity, is also called “bilateral symmetry”. Many objects in our life show such bilateral symmetry, varying from our own body structure to the shape of an aeroplane, from a tiny little crystal of a snowflake and to the enormous Taj Mahal.

On the other hand, symmetry in its broader sense is identified with the notions of balance, harmony, invariance and equality, and ultimately with beauty. This broader notion of symmetry is based on our understanding of something symmetric as orderly and pleasing. Symmetry represents a “created order, beauty and perfection” in our world (Weyl 1952: 5).

In relation to sign languages, I would like to loosely define symmetry as the arrangement of two elements which are located across a certain plane or axis. This notion of symmetry does not form a strict dichotomy of what is symmetric and what is not. It is rather a continuum. For example, two-handed signs are more symmetric than one-handed signs; two-handed signs at the same height are more symmetric than those at different heights; two-handed signs with the same handshapes are more symmetric than those with different handshapes (see Figure 1).

Figure 1: a) one-handed signing, b) two-handed signing at different locations, c) two-handed signing with different handshapes, and d) most symmetric two-handed sign

The antonym of symmetry is considered to be asymmetry. However, the notion of asymmetry presupposes the notion of symmetry. In other words, asymmetry is understood as incomplete symmetry. In poetry, asymmetry is often considered to be the poet’s deliberate breaking of symmetry. We need to distinguish asymmetry from non-symmetry, absence of symmetry without any (poetic) intention.
Intended asymmetry, or symmetry breaking, is an important feature of sign language poetry. Symmetry in poetic signing is so pervasive that its absence stands out as something marked. This related to Geoffrey Leech’s notion of obtrusive regularity and irregularity. Leech (1969) illustrates two ways that poetic language can be foregrounded: either the language is used in a deviant and marked way (obtrusive irregularity) or in “abnormally normal” (Sutton-Spence 2005) ways so that such normality becomes noticeable (obtrusive regularity). Symmetry in sign language poetry first stands out as regularly obtrusive (unusual perseverance of two-handedness). But then it reaches the stage where such symmetry becomes a norm. At this point, any breaking of such symmetrical signing demands considerable notice. I will give one example of such symmetry breaking later in this paper.

2.2. Symmetry in Language

The fact that symmetry can be narrowed down to the notion of geometry shows that symmetry has fundamental appeal to our vision. A symmetrical pattern is primarily visual, synoptic, and two-dimensional. It does not involve the concept of time. This poses a big challenge in creating symmetry in language, because language is time-bound and time is non-symmetric. It flows unidirectionally from past to future. People need to make an extra effort to stop this unidirectional flow of the language in order to achieve symmetry in language. For example, conscious and intense efforts are required to make good palindromes such as “ABLE WAS I ERE I SAW ELBA”, ironically attributed to Napoleon (Walser 1996).

Sign languages have a unique status, in that they are both spatial and time-bound. As with all languages, they follow a linear structure. But at the same time, the visual-manual modality of sign languages makes it possible to create spatial arrangements. This is the reason why symmetry is a popular and important feature of sign language poetry.

2.3. Symmetry in poetry

There are two ways to achieve symmetry in poetry (both in spoken and signed languages): in repetitive patterns along the time line (temporal symmetry), and in the actual, visual configuration of a poem (spatial symmetry). Temporal symmetry is closely linked to the rhythmic structure of a poem, to rhyme, meter, and repetition of parts of the poem. William Blake’s Tyger, Tyger (also known as Fearful Symmetry) provides many examples of temporal symmetry2.

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2 To read the full text of this poem, go to [http://www.artofeurope.com/blake/bla2.htm](http://www.artofeurope.com/blake/bla2.htm).
In this poem, the first and the last stanza are identical except for one word\(^3\), with four inward stanzas being “sandwiched” by them. Nöth (1999) points out that there are certain kinds of identification between the second and fifth stanzas, and between the third and forth stanzas, which promotes symmetry across the middle point. The rhyme of this poem contributes to the regularity of this poem.

Whereas temporal symmetry, by definition, is bound to time, spatial symmetry involves visual representation of a poem. Although in many cases the configuration of written poems is insignificant, there are some examples where the shape of the poems has a meaning. George Herbert’s following poem is a good example:

```
Easter-wings

Lord, who createdst man in wealth and store,
Though foolishly he lost the same,
Decaying more and more,
Till he became
More poore:
With thee
O let me rise
As larks, harmoniously,
And sing this day thy victories:
Then shall the fall further the flight in me.

My tender age in sorrow did beginne:
And still with sickness and shame
Thou didst so punish sinne,
That I became
Most thinne.
With thee
Let me combine
And feel this day thy victories:
And feel this day thy victorie:
For, if I imp my wing on thine,
Affliction shall advance the flight in me.
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George Herbert (1693)

This poem is written in a symmetrical configuration, and as a result it looks like a pair of wings. It also symbolically shows the process of fall and rise of a human soul by creating an X shape. In the first stanza the physical appearance of the poem is reduced while the poet recalls the process of losing, and with the words “More poore” it reaches the least stage. Then it will start

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\(^3\) This is an example of symmetry breaking. The intentional mismatch of one word prevents identification of two stanzas and saves the poem from pretentious perfection.
increasing the number of words, as the poem proceeds talking about the wish to rise. As Hollander (1975) analyses, this visual configuration has a strong metaphor of “what goes up will come down” “what becomes less will be more”. Spatial symmetry in this poem is metaphorically connected to the poem’s theme.

Although Herbert’s poem is a good example, spatial symmetry in written language poetry is a rare phenomenon (remember the time-bound, linear nature of spoken languages). In sign language poetry, on the contrary, the poets need to make the most of visual representation including spatial symmetry. Section 4 in this paper focuses on the symmetrical patterns in sign languages.

3. Symmetry in Sign Languages

3.1. Inherent Symmetry in Sign Languages

Before discussing symmetry in poetic signing, it is necessary to refer to symmetry in sign languages in general. The classic notion of symmetry was first introduced in sign language research by Battison (1974), when he proposed two related constraints:

1. Symmetry Condition
   (a) If both hands of a sign move independently during its articulation, then
   (b) Both hands must be specified for the same location, the same handshape, the same movement (whether performed simultaneously or in alternation), and the specification for orientation must be either symmetrical or identical.

2. Dominance Condition
   (a) If the hands of a two-handed sign do not share the same specification for handshape (i.e. they are different), then
   (b) One hand must be passive while the active hand articulates the movement, and
   (c) The specification of the passive handshape is restricted to be one of a small set: A, S, B, 5, G, C and O.

Napoli and Wu (2003) have replaced these two conditions with more detailed accounts of two-handed signs in ASL. Using The American Sign Language Handshape Dictionary as a database, they categorised signs into different types. The categorisation is made according to the types of symmetry (reflection, reflection with inversion, rotation, translation, glide reflection) and to the different types of axis/planes (vertical midsaggital plane, vertical wall plane, horizontal plane). They found out that the majority of signs are based on reflection, and that the vertical midsaggital plane is the overwhelming majority among three principle planes.

Similar attempts were made for BSL in Sutton-Spence and Kaneko (to appear) using The Dictionary of British Sign Language / English. They found that two-thirds of two-handed signs are symmetric, at least partially (i.e. some part of signs, such as handshapes, locations, movements, show symmetrical distribution). They also found that there are far more examples of symmetrical
signs based on vertical plane (which corresponds to Napoli dnWu’s “vertical midsaggital plane”) than the other two planes.

Figure 2: Percentages of symmetrical signs across different planes in ASL (left), based on Napoli and Wu (2003) and BSL (right), based on Sutton-Spence and Kaneko (to appear)

3.2. Three planes

Three principle planes for symmetrical signs result in left-right, front-back and up-down symmetry. Figure 3 shows examples from each plane.

Figure 3: Examples of symmetric signs (left-right, up-down, front-back) in poetry

The main reason why left-right symmetry is more common than the other two is a matter of physiology. Up-down symmetry involves locating signs at different altitudes, which is less easy than left-right arrangement. Front-back symmetry requires twisting the wrists/elbows/shoulders, which is physically very demanding4.

Additionally, left-right distinction has a unique status because our body is symmetric in this orientation only.5 This, for example, leads to the fact that it functions less frequently as a basis for

4 This is why signers often rotate a sign up to 45 degrees off the centre (as in figure 3).

5 While most people do not have any problem in distinguishing up and down and front and back (e.g. when being told to look “up”, we can do so instantly, without ever giving a thought to it), quite a few people have a difficulty in telling right and left immediately.
orientational metaphors than other two directions. Orientational metaphors are one kind of metaphor which “gives a concept a spatial orientation (Lakoff and Johnson 1980, 14). They are based on our experience with the orientation of the body. Since the up-down and front-back orientations are asymmetric in nature, it is easier to attribute two opposing concepts to those two directions than to left-right (Ohori 2002). “Up” is universally associated with positive concepts, and “down” with negative concepts (“He cheered me up” “Don’t let me down”). Front-back orientation is usually associated with time (“I look forward to seeing you.” “Looking back upon the past…”). In contrast, we have a limited number of orientational metaphors in left-right, and moreover, the association in those left-right metaphors is often arbitrary. For example, “right” tends to mean positive in Western cultures (“right” means “correct” or “true”, while “left” can be a synonym of “clumsy”)6, but in East Asian cultures, it is sometimes opposite. In traditional political systems in China the minister at the highest position is called “Left-Minister”, and so-called “Right-Minister” is placed one rank below. In other words, attribution of good and bad to right and left is a by-product of cultures.

To put it in a different way, left-right is a neutral direction free from any strong, presupposed attribution of concepts. This means that poets can use this direction freely, and possibly attribute their own meaning to left and right.

3.3. Symmetry in Sign Language Poetry

As mentioned in the introduction, the primary purpose of symmetric signing is to create aesthetic effects. Therefore, we can assume that the number of symmetrical signs increases in poetic signing (which uses artistic language) compared with daily signing. Russo, Giuranna, and Pizzuto (2001) have pointed out that the proportion of two-handed signs is higher in poetry compared with everyday conversation. In their study, two-handed signs occupied 49% of poetic signing but only 21% of non-poetic signing (106). This shows that symmetric arrangement of two-handed signs is especially important in poetic signing.

As in spoken language poetry, sign language poetry has both temporal and spatial symmetry, although, unlike in spoken/written poetry, the latter becomes as common as the former.

Temporal symmetry in signed poems is represented by the rhythmic patterns in signing. Blondel and Miller (2001) describe the rhythmic repetition of long and short movements in nursery rhymes in LSF (French Sign Language) and show the symmetry across the middle stanza.

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6 The main logic for this is that most people are right-handed, and therefore something done by right hand is likely to be regarded as proper.
Sutton-Spence and Kaneko (to appear) provide examples of spatial symmetry. For instance, a BSL poem *Staircase* by Dorothy Miles makes considerable use of left and right symmetry. It describes the way a group of people who encounter a huge staircase manage to climb up to the top of it, being led by one man.7 When people gather and proceed along their way, Miles uses two-handed symmetric signs to show the progress. First, one person from each side moves ahead (an index finger extended), then two (index and middle fingers extended), and then many (3-4-5 handshapes). The increase in number is symmetrically represented by both hands. This spatial symmetry not only adds beauty to the singing, but also metaphorically represents “the togetherness and collective nature of the Deaf community” (Sutton-Spence and Kaneko, to appear).

4. **Symmetry in Sign Language Haiku**

For the remainder of this paper, I will focus on the symmetry in sign language “haiku” poems. Haiku originated in spoken/written Japanese, and is considered to be the shortest form of poetry in the world. Accordingly, sign language haiku can be defined as a very short piece of poetic signing8. Because of its concise nature, poetic devices in signed haiku are arranged very effectively and in an elaborated way, which provides useful observations when analysing its poetics.

4.1. **Haiku**

Haiku originated in medieval Japan. Traditional Japanese haiku consists of 17 syllables. The purpose of haiku is to create maximum effect based on minimum number of words, and the best way to achieve this is to present a simple and vivid image that triggers vast imagination in the reader’s mind. In this sense, a good haiku is analogous to a good photograph. Topics of haiku are often visual sketches of nature.

Since when Dorothy Miles first introduced the concept of haiku into sign language poetry in 1970s, haiku has become very popular among Deaf poets9. Many poets and researchers have agreed that sign language is “an ideal vehicle” (Sutton-Spence 2005: 163) for haiku, or vice versa. As Klima and Bellugi (1979) point out, “The particular compression and rich imaginary of haiku seem especially suited to sign language” (350).

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7 It represents a story of the first Deaf students who completed a British university course in sign language with the help of a Deaf tutor.
8 Although there are many other ways to describe haiku in sign languages.
9 There are haiku competitions organised in the US, Japan and in the UK.
4.2. Symmetry in haiku

Symmetry plays an important role in traditional haiku, both in form and in theme. Classic Japanese haiku poems consist of seventeen syllables, divided by 5-7-5 sections, which shows perfect symmetry. There are so-called “broken” haiku poems which have either one more or fewer syllable, but even those irregular poems prefer symmetric patterns such as 5-8-5 or 5-6-5 to patterns like 4-7-5, so that their irregularity does not stand out (Mukai 2000).

In terms of theme, haiku often presents a symmetrical sketch of a natural scene to create vivid impression. For example:

Nanohanaya tsukiwahigashini hiwanishini (Yosa Buson¹⁰)
Yellow flowers; Moon on the east; Sun on the west.

Akizorawo futatsuni tateri shiitaiju (Takahama Kyoshi)
Autumn sky; divided into two; by a big chinquapin tree.

A symmetrical sketch is an effective way to create vivid visual contrast that appeals to the readers’ mind. There are many examples of visual contrast in traditional haiku. Sign language haiku combines this tradition of “symmetrical sketch” in Japanese haiku with its own capability of symmetrical signing, and fully embraces the poetic effects of symmetry.

4.3. Case studies


There are many objects and natural phenomena in our world that show symmetrical patterns. As Weyl (1952) points out, one of the functions of symmetry is to reproduce the existing order in our world. Sign languages, being visual-spatial languages, are capable of faithfully reproducing such symmetrical order in the language. With the help of aesthetic symmetry, such simple reproduction of natural phenomena by itself can be a piece of poetic signing. This is especially important in sign language haiku, in which a simple description of nature is highly regarded.

The BSL haiku poem Eclipse, composed and performed by Linda Day, provides an illustration of a solar eclipse using left-right symmetrical signs, each of which represents the sun and the moon. The effect of symmetry in this poem is highlighted by the gradual approach of sun and moon, represented by identical (but reversed) movement of two hands toward the vertical

¹⁰As convention, names of the Japanese haiku poets in this paper are written in Japanese name order (surname first).
midsaggital plane. The height of this movement is when the two circles overlap and become one (see Figure 4).

Day successfully “miniaturises” the phenomenon of solar eclipse into the signing space, while faithfully preserving the main characteristics (such as movements, locations and the shapes of the sun and the moon). There is a direct one-to-one mapping between the elements in the actual eclipse and those in signing (circular handshapes represent the shapes of actual planets, movements of hands are movements of the sun and the moon, the locations of two hands are the locations of two planets).

The simplicity and the vividness of symmetrical representations in this poem best fit the characteristics of haiku.

**Figure 4: Symmetrical sequences in *Eclipse* by Linda Day**

### 4.3.2. **Haiku – a LIS poem – by Rosaria Giuranna (1998)**

This poem is composed and performed by the Italian Deaf poet Rosaria Giuranna. It describes a process of two people coming together, holding each other, and being separated at the end. Giuranna in this poem makes considerable use of symmetry and asymmetry. First of all, she creates temporal symmetry in the structure of the poem. For example, she uses the same handshape, location, and (reversed) movement for signs at the beginning and the end of the poem (a closed fist with extended thumb, moving toward/away from the centre). Between these initial and final signs come signs with B-handshape (an open hand with fingers together), which are signed in a smaller scale at the centre of the signing space. This arrangement of signs creates a “sandwich” effect, which is a good example of temporal symmetry.

In terms of spatial symmetry, all signs are created based on perfect bilateral symmetry. Throughout the poem, both hands have the same handshape, movement, and location. This feature contributes to unification and aesthetic effect of this poem.

On the other hand, there are certain elements which are not symmetric in this poem. For example, although she uses the same signs at the beginning and the end of the poem, the speed of signing is completely different. While the initial movements are slow and gradual, the final
movement is abrupt and instantaneous. This might metaphorically represents the fact that we normally take some time to get to know other people whereas separation can come suddenly.

Another asymmetric feature is facial expression. Giuranna’s face changes according to the development of her poem, but the pattern is not symmetric. The initial neutral expression is followed by smile while two hands are held closely, and then by negative facial expressions when two hands move apart. The pattern does not follow the “sandwich arrangement” of the manual components, representing the irreversibility of a human encounter.

In this ten-second haiku poem, Giuranna manages to show the essence of human interaction. Her use of symmetry helps create depth in her performance.

![Figure 5: Symmetry in sequence from Giuranna’s LIS Haiku](image)

4.3.3. *Cornfield* by **Sam Sepah**

This is a haiku poem created by Sam Sepah in ASL. No title is given, but I call it *Cornfield* for convenience’s sake. The English translation of the poem is:

Playing hide-and-seek
Chased into the cornfield
Our first kiss¹¹
(translation by PEN International)

Unlike Giuranna’s poem above, there is no consistent use of symmetrical signs in this poem. However, the last two signs show good examples of front-back symmetrical signs and they add considerable poetic effect to the poem. The first sign iconically expresses two people’s encounter, as if they are looking at each other in the mirror. The second sign expresses the kissing of the two (Figure 6). The axis for these two signs is slightly oblique against the body.

¹¹ Used by permission of PEN-International, National Technical Institute for the Deaf, Rochester, NY. PEN-International is funded by a grant from The Nippon Foundation of Japan.
Up to this point, the poet uses numerous lexical signs in rather a busy manner (fast signing speed, involving various movements and perspective shifts) However, when these symmetrical signs are introduced, the poet reduces the speed of signing to attract attention. By doing so, the poet maximally highlights the beauty of the two symmetrical signs.

The kissing scene is the climax of this poem. The vividness of this scene is best represented by the use of front-back symmetry. Symmetry also highlights the mutuality of the kiss (not “I kissed her” or “she kissed me” but “we kissed”). It looks as if they are spontaneously pulled together with equal and gradual speed, which contributes to a heart-warming afterglow of the poem.

![Symmetric signs in Sam Sepah’s Cornfield](image)

**Figure 6: Symmetric signs in Sam Sepah’s *Cornfield***

### 4.3.4. *Fish* by Jesus Marchan

The last example is another ASL haiku by Jesus Marchan, which I call *Fish*.

Fish swim eagerly
In a mad dash for the prize
Only to be hooked\(^{12}\)

(translation by PEN International)

Throughout the poem both hands are active in the signing space. Six out of ten segments involve bilateral symmetry. Considering that other four are instantaneous movements, symmetrical signing commands most of the poem. In most cases, the handshapes of the two hands are the same, and both hands move in perfect mirror-image across the vertical midsaggital plane. This continuation of symmetric signs adds an aesthetic sense to this poem.

However, symmetry in this poem is not just for the sake of beauty. It is deeply related to the theme of the poem, that is, the fish’s freedom and its loss. Jesus Marchan uses his two

\(^{12}\) Used by permission of PEN-International, National Technical Institute for the Deaf, Rochester, NY. PEN-International is funded by a grant from The Nippon Foundation of Japan.
hands (and the fact that we only have two hands) to show this theme. At the beginning, he establishes a link between “free swimming” and a symmetric figure-of-eight movement created by both hands (see Figure 7). In other words, in this particular poem the sign for swimming has to be two-handed. Throughout the first half of this poem, this two-handed signing associated with free swimming successfully continues.

Then, a “prize” (or a “hook” in reality) comes into the picture. In order to express this third element, the poet has to give up the perfect symmetry of two-handed signing. He uses his left hand to refer to the existence of the prize/hook (Figure 8), but by doing so, he destroys the balance of two-handed swimming which has been kept intact till that moment (the right hand remains inactive while the left hand is engaged in “hook” expression, which may symbolise the fact that one hand alone cannot express the act of swimming). The scene when prize/hook first comes into the poem is the scene when asymmetry is first introduced to the poem, and also, it is the scene of a warning toward the forthcoming loss of free swimming in this poem. In fact, the moment the fish reaches out to grab the prize (Figure 8), the balance is lost forever and there is no symmetry beyond this point. The last sign of this poem, a “flapping” movement signed only with right hand, is an attempt to re-create free swimming, which is extremely imperfect as two-handed symmetry is already lost.

This is not simply a poem about fish that is hooked by a trap. It tells us about the innocence of a free fish, which is only highlighted by its loss. The symmetry of two-handed swimming symbolises perfection, balance, and satisfaction of the fish as a free swimmer. The symmetry breaking in the end shows incompleteness, and sudden loss of freedom.

![Figure 7: Two-handed sign FISH-SWIM](image)

![Figure 8: Asymmetrical signs in Fish](image)
5. Summary

As I have described in this paper, symmetry is an important feature of sign language poetry, both as an aesthetic tool and for its symbolic function. Successful poems can connect the formal beauty of symmetrical elements with their theme. Sign languages, being visual-spatial languages, can apply the notion of symmetry more directly to the poetic language than spoken/written languages can. The elaborated use of symmetrical signs contributes to the overall effect of poetic signing.

References
