

ASL Orthography

Note that I have only listed handshapes used in ASL words. There are other handshapes, such as the 7 handshape. It's a legitimate shape, but I don't think any ASL words use it. *Please* correct me if I'm mistaken!

Pure Shapes

1



3



4



5



8



A



B



C



D



E



F



G



I



K



L



M



N



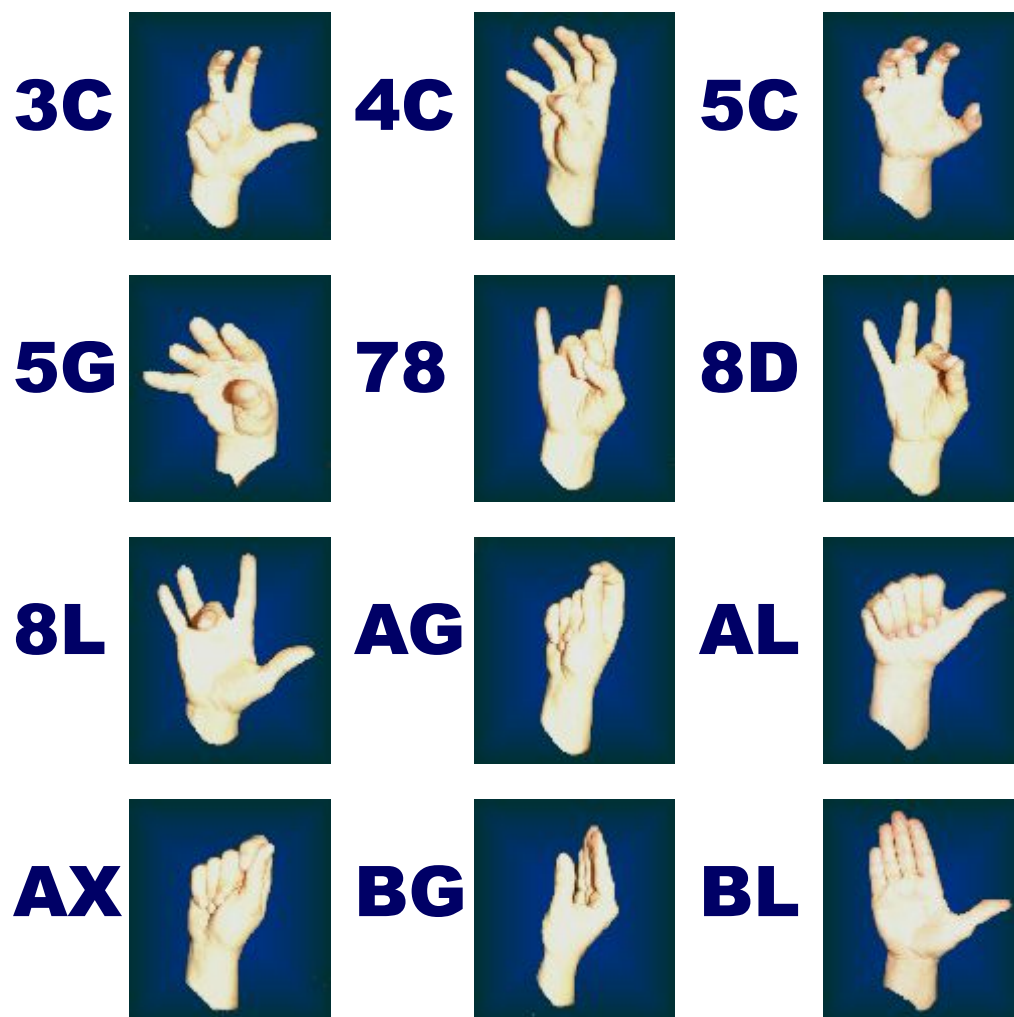
O





Blended Shapes

Combinations of two pure handshapes.





Writing ASL

Meaning, writing ASL *sentences*, not just handshapes. Writing handshapes is cake, like writing English sounds. See [above](#) for handshapes.

Okay, how about writing the ASL *language*? Sure, it's doable. If Chinese writing can flourish, anything is possible. Hey, I like the Chinese, but their writing system is **insane**! Ever seen a Chinese typewriter? Ach du lieber! (I hasten to add that I do like the way Chinese *looks*.)

Anyway, I'm going to put my ASL chicken scratches out on the web. Please [send me](#) your comments. I'm hacking this out in public, so if you see something weird, please wait a day or two before commenting. But I do want your comments.

Btw, I'm not claiming to have any special qualifications to do this. I'm not even fluent in ASL (yet). I merely suffer from a love of languages and writing systems.

Requirements/Philosophy

Meaning, what are the problems that may arise with a new orthography, and how can we prevent or solve them? How can the orthography bring the most benefit with the least effort? How much to aesthetic considerations overrule practical ones? Okay, we've scratched the surface.

- Use only ASCII, because
 - Increases accessibility (though at the expense of notational options).
 - Can be written by hand.
 - My brain is like a sieve.
- There is no need to "phonetically" represent words. We want to design the writing so that a minimum of work is needed to represent signs. Since context also helps identify morphological components (words), a written symbol need only contain enough information to narrow down choices to 1-4 meanings. English is like that -- run a race, run a mile, run in my stocking, run on sentence, run out of food, etc.
- It's gotta be simple. The number of valid signs is far, far less than the number of possible combinations of handshapes/orientations/locations/gesticulations/etc.
- It should be as pleasing to the eye as possible, given other constraints.
- Suggestions?

Word Construction

I decided to use a "place value" approach. Like numbers, ASL words require that certain items occur at certain locations. Also, the use of defaults is very important. If a component does not appear, a default value is assumed. This keeps the orthography relatively simple (I hope).

I use a word/hand/syllable taxonomy. *Words* are composed of one or two *hands*. A hand consists of one or more *syllables*. Everything is described below, starting with some examples.

Examples

In the hope that I've come up with something remotely intuitive, I decided to put the examples before the syntactic explanations. You'll want to check out the handshapes above before looking over the examples.

Of course, I don't consider this a finished product. ASL may not ever be written in my lifetime. But I do hope that I am able to make a contribution. ASL is a beautiful language and deserves to have a wider audience.

Each example contains the ASL writing, an English transliteration, and an English translation.

```
<W'o'o''      ,vY=|,^B      i<BL:-iAL,
Washington    New York    prefer-right
I prefer Washington to New York.
```

```
iY,          v0:s^0:)   i5,c,,      ^0'c<0@:      vX==      >1'
Telephone    number    woman-right  right-give-me  should    it-right
The woman should give me the telephone number.
```

```
iAL,ciAL,,   v5~'-,    :l@   i<5,-i0,,   ^X-%.y
Tomorrow     snow      I      go-away   skiing
If it snows tomorrow, I'm going skiing.
```

```
>1' >K=      CL@'   5-S%
It kitchen   have   milk
There is milk in the kitchen.
```

vSoo.) <3 .<3 >3, .,>3
 Bicycle <classifier;> <classifier;> <classifier;> <classifier;>
There are bicycles all over the place.

5~'c,/vB, ' <4c,<4.,<4 vB:c:,.vB: vV@:/vB:
 Trees-down-right fence-down-left hill-middle person-on-hill
*There were trees down the right, a fence down the left, and a hill
 in the middle.*

.>;1c:, i<;Y: vVC,, -:
 person-go-down-hill suddenly animal-from-right
*The person started down the hill, when suddenly, an animal appeared
 from the trees on the right.*

.>;1c*,,>1 'vKs'^K/,<;4
 person-swerve-left person-over-fence
The person swerved to the left and fell over the fence.

Notation

The description below is not rigorous -- nonsensical combinations are permitted, and more is allowed than is implied by the notation. I didn't want to get bogged down in notational issues. The logic (I hope!) should be apparent from the examples. I'll try to clean it up as I go along.

Any vagueness is probably purposeful, but feel free to ask.

Syllables

General notes:

- Within a syllable, *orientation*, *shape*, and *quality* should be considered a "unit".
- Location markers to the right of the unit denote the *strong* side. Location markers to the left of the unit denote the *weak* side. In other words, syllables have two forms (one for each side);

Strong Side

<anchor><orientation>< shape><quality>< location>

Weak Side

<anchor><location>< orientation><shape>< quality>

- Within a location grouping, the location marker ":" always occurs next to the unit.

ANCHOR

<default> body

i face

LOCATION

<default> natural location for the hand

: (colon) along centerline

, (comma) low or out or low-out

,, lower or more-out or more-lower-out

, , , *even lower* or *even-more-out* or *even-more-lower-out*
 ' (apostrophe) *high* or *out* or *high-out*
 ' ' *higher* or *more-out* or *more-higher-out*
 ' ' ' *even higher* or *even-more-out* or *even-more-higher-out*

ORIENTATION

<default> The natural direction for the hand in question.
 ^ up
 v down
 < in
 > out

SHAPE

<from the list of pictures above>

NOTE: Shapes are always written uppercase

QUALITY

~ shaken or wiggled
 @ curled (wrist)
 = doubled

Hands

The basic form of a *hand* is

<syllable><motion><character><special>
 [<syllable><motion><character><special> ...]

Motion

- unspecified
 c arc
 o circle
 s twist
 z oscillation
 x cross

Character

* emphasis

Special

% repeat all syllables back to start or back to previous %.

Words

Some would say "signs", but I'm a fan of plain English, so I'll say things like "*ASL words*" and "*ASL speakers*" even though ASL has signs and signers. Why draw attention to differences in the physical natures of different languages? Language structure is more important than language transmission medium. A single language may be transmitted over multiple media.

General notes:

- If handshape doesn't change across syllables, it can be omitted as long as the

omission won't cause confusion. Examples:

- $\langle W' o \langle W' o \langle W' \rangle \rangle$ (*Washington*) can be written $\langle W' o' o' \rangle$
- $\langle \nu G \nu G' \rangle$ (*queen*) can be written $\langle \nu G _ \rangle$.

The basic ASL *word* forms are:

<i><hand></i>	one-handed, strong hand
<i>.<hand></i>	one-handed, weak hand
<i><hand><relation><hand></i>	two-handed
<i><hand><relation><complement></i>	two-handed, similarly-shaped

Relation

- . unspecified
- + crossing arms or hands
- | palms facing each other
- / strong over weak
- \ weak over strong

Complement

y	same
)	mirror

Miscellany

- Fingerspelled words are written as plain English text.
- Numerals are written as in English.
- ASL sentences use period, bang, question mark, as in English.
- The weak hand can be written underneath the dominant hand, rather than next to it. In that case, the relation markers are not used.

Issues

- Facial adverbs are not represented.
- No facial features are represented.
- Aspect is not well represented.

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