

The Unicode Standard

>> Neither option conforms to the Unicode Standard.

The core identity of Unicode is that it is the Universal repertoire of code points for scripts.

SignWriting is not a second-class script; It is a 2-dimensional script. For canonical identity and reliable text interchange, any sign needs to be written as a word. These words are written as strings of characters.

There are nine other principles of the Unicode Standard: Logical order, Efficiency, Unification, Characters not glyphs, Dynamic composition, Semantics, Stability, Plain Text, Convertibility. In the Unicode Standard, there are no perfect encodings that follow all of these principles. Different scripts follow different rules with different constraints and compromises.

The SignWriting script utilizes current and future technology. We can only use something that works. What we have with option 1 works great and the users are excited by the update from ASCII.

The Center for Sutton Movement Writing is not against the idea of using a design that conforms to the Unicode Standard according to the current UTC members, but the current UTC members have failed to address our issues and have not suggested a viable alternative.

Fonts and Reliable Text

>> The model advocated in this document relies on a coordinate-based system, which requires the characters to be located in relation to one another. Such an approach would require a font-dependent system: if a different font were used, the relationships could be lost, thereby jeopardizing reliable text interchange.

We acknowledge the constraint that fonts for Sutton SignWriting must follow the general size and shape of the Sutton SignWriting symbols. These symbols each have a definitive glyph designed by Valerie Sutton. Any font designed for Sutton SignWriting must follow the general size and shape of the canonical glyphs designed by Valerie Sutton to be compatible.

We do not jeopardize reliable text. The fonts are freely available for all platforms: Windows, Apple, Linux, and Android. Android is the exception to font installation, but the fonts can be included remotely via CSS or embedded in a browser extension.

It is the Sutton SignWriting in Unicode 8 design that jeopardizes reliable text. There are no fonts that support the facial diacritic design of Unicode 8. There are no design specifications for facial diacritics that can be implemented. Facial diacritic development was abandoned in 2012. It would be near impossible to create a font that supports the facial diacritic design with a font, let alone compatible between two fonts. No one is using the facial diacritic design of SignWriting in Unicode 8 and there is no one developing a font to implement the facial diacritic design.

The Center for Sutton Movement Writing rejects the assertion that we are jeopardizing reliable text when we are the only group to actually produce sign language text.

Makrup language

>> In our view, a well-designed mark-up solution should be used, along with a custom-rendering engine, since plain text won't capture the relation of one character to another. An instructive model, in our opinion, is musical scoring, which requires specialized rendering of the basic set of musical note characters within their complex data structures. Cf. MusicXML, an XML-based file format used to represent Western musical notation.

First, a custom-rendering engine is a poor design choice. We are targeting the Universal Shaping Engine. The whole point of Unicode is to produce a solution that requires as little custom implementation as possible.

Second, the spatial relation of the symbols is meaningful. Loosing this information corrupts text. Information that only exists in XML is easy to loose or discard.

Third, XML development was tried and rejected. The development was called SignWriting Markup Language. Several varieties of SWML were created, but none are currently used. Lots of limitation and few benefits. When a sign is written as an XML document, it has very little portability. It can't be used in Notepad, as part of a URL, in a spreadsheet, and more places than I can list.

When a sign is written as a word (a string of characters that include spatial relation), it can be reliably copied and pasted in a variety of situations too long to list. The Option 1 character design can be used for folder and file names on Mac OS and Linux. The characters can be used in any browser, often reliably in the URL.

The 1-dimensional font currently exists and represents fallback display and an alternate representation of the text.

The 2-dimensional font to be developed in 2018 will use the same characters as the 1-dimensional font, but it will leverage the Universal Shaping Engine to properly display the spatial relations within a sign across the various platforms.