Guidelines on usage of the terms

November 27, 2024

[Vyshantha Simha](#) (Institute of Digital Humanities, University of Cologne, Germany)

This document is intended to give guidance on how the terms *script*, *font* and *writing system* are interwoven yet clearly distinct based on contemporary knowledge. The sets under consideration are intentionally human created shapes (conditionally graphemes or glyphs) on a medium and could be one or more of the following types: glotto-graph, or semasio-graph, or pasi-graph or kineto-graph or an unclassified.

Script[1]

> A set or collection of graphemes that adheres to a structured format and enables capturing linguistic units (be it spoken or signed) is a script (or shaped markings). The encoding information in the grapheme set could manifest as tachygraph, or phonograph, or logograph (or morphograph), or kineto-graph or cipher, or undeciphered typeface or combination of the above. A script could have multiple orthographies and within a particular block or cluster of graphemes the direction could be different to the general direction of text (reading or writing), thus it can be non-sequential in nature.

> Given a set or collection of glyphs isn't deciphered to be encoding language or isn't known to encode language owning to obsolescence of that glyph set, then if it can be proved beyond reasonable doubt through pattern recognition, computational and digital humanities methods that the glyph set indeed encodes a form or part of a language then such a set or collection of glyphs should be considered as script as well. One should look for evidence of syntactic structure (including graphotactics) namely compositionality and recursion to validate if a set or collection of glyphs is likely to encode language.

Note - A set of graphemes need not be developed over several years or centuries organically and they could be designed or co-created by field or domain experts in a short period of time and such neographies should be subject to the Litmus Test for conformance.
For extinct languages if the glyph set has attestation by means of aforementioned techniques or multi-scriptal or multi-lingual texts decipherment, then the glyph set should be subject to the Litmus Test for conformance.
A set of graphemes can certainly encode a constructed or auxiliary or artificial or fictional or cryptophasia or liturgical language or languages en route to revival, they should be subject to the Litmus Test for conformance.
A script could be used to express many languages and that script may not encode complete phonology of a language. Pasigraphy isn't a script rather a notation system.

> The Shavian script encodes the complete English phonology. The Adinkra symbols are a script used to encode the Akan languages.

Litmus Test to determine a set or collection of glyphs is a font variant (including calligraphic types) of an existing script or a new script

Here are the proposed parameters to determine if a given glyph set (that conforms to being a script) is a font variety of an existing script or a new script by itself.

1. Does this new set of glyphs have aesthetically coherent distinct shapes of characters or signs that represent a language as opposed to the existing glyph set ? Yes / No
2. Does this new set of glyphs require a different or modified set of orthographic rules in order to represent the language, namely the set of glyphs are linked or joined or spaced or ordered differently as opposed to the existing glyph set ? Yes / No
3. Does this new set of glyphs use a new way of representing sounds of a language namely the existing glyph set uses segmental form of representation whilst the newer uses syllabic or even logographic form of representation ? Yes / No
4. Does this new set of glyphs require different directionality or text layout rules as opposed to the existing glyph set ? Yes / No
5. Does this new set of glyphs inculcate distinct cultural, or visual and / or structural identity (like tactility) as opposed to the existing glyph set ? Yes / No
6. Does this new set of glyphs address needs of a language or group of languages that hasn't been dealt with through the existing glyph set ? Yes / No
7. Has there been a multitude of forms of a glyph which encodes the same information owing to separation by space and time ? Yes / No
8. Does this new set of glyphs address the contextual usage which the existing glyph set did not meet ? Yes / No
9. Has there been compendium (material like teaching material, books - information on usage) for the new set of glyphs produced ? Yes / No
10. Are members of a community using or have used it for their required niche purpose during their contemporary times ? Yes / No

Note - Weightage for criteria 8, 9 & 10 passing and 7 *not* passing is more than criteria 1 to 6 all passing.
The sets being compared should be not very dissimilar and intentionally not bound by space and time, in other words comparison shouldn't be made between Devanagari vs. Katakana, or Devanagari vs. Ge'ez, or Katakana vs. Vai, rather Devanagari vs. Nandinagari, or Katakana vs. Man'yōgana.
        The set of glyphs being compared should not be a composition of part aesthetically appearance such as Blackletter(Fraktur) and part aesthetically appearing like Times New Roman. Given if two sets have similar number of glyphs, encode the same information and only vary with any of these weight, size, serifs or style properties i.e. essentially visually, then the set is unequivocally a font variant of the existing script. A substitution cipher from a graphemic perspective could be prescribed as a font variant of an existing or a new script itself.

The glyph set that doesn't conform to being font variant of a script nor a script, might encode semasiographic, or pasigraphy, or undeciphered or yet unknown information.

Font[2]

A set or collection of glyphs that doesn't conform to the Litmus test is a font. The guidelines imply that variance (font-variant or typeface or type-set of font-face) is an attribution of the glyph set and the set of glyphs should be a font variant of at least one script or be a script by itself.

As per the guidelines the inscriptions made during the Gupta dynasty i.e. the sets of glyphs (Northern, Narmada, Krishna, etc.) are the font-variant of Brahmi script. The Gaelic script is a font-variant of Latin script. The Kanji, Hanja are font-variant of the Hanzi.

Writing System[3]

A system that allows capturing of linguistic (glottography) and non-linguistic information (like numerals, non-phonetic suprasegmental like punctuations, semasio-graph or kineto-graph or pasi-graph, etc.) for a specific language (either spoken or signed) is a writing system.

A writing system could include more than one type of script (multi-scriptality) not limited to heterograms to encode a language and a language might employ multiple writing systems (polygraphy) for encoding information. All scripts (including font variety) are part of writing systems, however not all writing systems can be scripts.

Bhaisuki, or Garay, or Arabic, or mediæval Latin documents by Cisterians as a writing system has text required to be read or written in a particular direction, while the numerals modify this direction.

The languages Bosnian, Inuktitut, Kashmiri, Konkani, Mongolian, Serbian, Uzbek are a few examples which employ multiple writing systems (polygraphy) in different contexts and / or niches.

The writing system (multi-scriptality) for languages Japanese and Old Korean requires multiple scripts for encoding information.

Pinyin had been designed to be a writing system and is a font-variant of the Latin script (inclusive of diacritics).

An idealistic system that allows encoding all probable and plausible thoughts in a particular speech (inclusive of verbal & non-verbal parts of language) is a complete writing system.

References

1. Daniels, P. T. and Bright, W. (Eds.). (1996). *The World's Writing Systems*. Oxford University Press.
    Verbatim : A **script** is a set of graphic signs used to represent units of language in a systematic way. It serves as the visual representation of a writing system, encoding linguistic units such as sounds, syllables, words, or meanings into readable symbols.

2. Bringhurst, R. (2012). *The Elements of Typographic Style*. Hartley & Marks Publishers.
    Verbatim : A **font** is the complete set of characters in a given style, weight, and size of a typeface. It is the practical manifestation of a typeface, containing all the letters, numerals, punctuation, and other symbols required for written communication.

3. Daniels, P. T. and Bright, William (Eds.). (1996). *The World's Writing Systems*. Oxford University Press.
    Verbatim : A **writing system** is a set of visible or tactile signs used to represent units of language in a systematic way, with the purpose of recording or communicating ideas.

Acknowledgements