

ISO/IEC JTC1/SC2/WG2

**Title : Response to N2666 (Principles on Encoding Phags-pa Script)**

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>In document N2622, Mr. Andrew C. West proposes 52 Phags-pa to be encoded in  
>ISO/IEC 10646. Chinese experts reviewed this proposal and provide  
>their comments on encoding Phags-pa script in this document. Unfortunately,  
>Chinese experts on Phags-pa Script are not enable to attend the WG2  
>#44 for the discussion since we received the document N2622 is too late to arrange  
>the trip.

A draft version of Document N2622 was provided to Professor Quejingzhabu of the University of Inner Mongolia in July, which should have allowed time for any necessary arrangements to be made. (Professor Quejingzhabu is an expert on Mongolian encoding issues and a delegate to previous WG2 meetings.)

>Principles on Encoding Phags-pa Script

>1. Phagags-pa script used to be a kind of “Mongolian script” for “translating all  
>kinds of script”, i.e., script of Mongolian Khan Empire and Yuan Empire.  
>It had become a dead script with the collapse of Yuan Dynasty. Phags-pa script shall  
>not contain Zhuanti (篆體) Tibetan script which was formed later  
>on the basis of Phags-pa letters.

A. The Phags-pa script is not a dead script, as it is still used as a decorative script in Tibet. Example 5 of Document N2622 provides an example of such use.

B. The Zhuanti (篆體) (i.e. "Seal Script" form) is a calligraphic style of writing Phags-pa, modelled on the Chinese Seal Script. Phags-pa Seal Script is well-documented, and commonly found in seals and epigraphic inscriptions. The Tibetan style is another calligraphic style of the Phags-pa script used in Tibet, which is frequently found in books about modern Tibetan calligraphy published in the PRC. It cannot be stated that "Phags-pa script shall not contain Zhuanti (篆體) [or] Tibetan script" as it most evidently does. However, there is no intention to encode the Seal Script calligraphic style or the Tibetan calligraphic style separately from the standard calligraphic style. The Seal Script style and Tibetan style of Phags-pa characters provided in Document N2622 are informative only.

>2. Phagags-pa script has its unique alphabetic repertoire although it was derived  
>from Tibetan. Phags-pa alphabetic repertoire consists of 41 letters  
>including 34 consonants and 7 vowels ( primal alphabets ). Some letters were added  
>later for other languages using Phagags-pa alphabet to represent.  
>The added letters are variants with changing forms or mirroring images of original  
>basic Phags-pa letters.

Agreed.

>3. Historic literature should have been the basis of ordering of Phags-pa script. There  
>are differences in ordering among Fashu Kao (法書攷), Shushi  
>Huiyao (書史會要) and Menggu Ziyun (蒙古字韻). The reason is that the ordering  
>shown in Menggu Ziyun (蒙古字韻) was formed with affection of  
>Chinese Han language tradition which is suitable for Chinese Han language only.  
>The ordering shown in Fashu Kao (法書攷) and Shushi Huiyao (書史  
>會要) are the connatural ordering generally used for “translating all kinds of  
>script”. Hence, Phags-pa ordering shall be formed according to Fashu Kao (法  
>書攷) and Shushi Huiyao (書史會要). Letters added later should be placed after

>the basic letter repertoire and sorted on the ordering of corresponding  
>language/script.

The ordering of letters in N2622 is indeed based on Fashu Kao (法書攷), Shushi Huiyao (書史會要). Later letters are mostly appended to the end of the 41 original letters, but the reversed series of dental letters are interpolated within the original set of letters to correspond to the ordering of letters in the Unicode Tibetan block, and superfixed and subjoined forms of the letter RA are interpolated after the subjoined letters YA and WA. Although I believe the ordering presented in N2622 is the most logical and consistent order, I have no strong objections to reordering the letters so that "Letters added later should be placed after the basic letter repertoire and sorted on the ordering of corresponding language/script." if that is preferred.

>4. Typical Typeface for encoding: There are 3 typefaces of Phags-pa script, e.g.,  
>Kaiti (楷體), Zhuanti (篆體) and Caoti (草體). Typeface used for  
>encoding Phags-pa script should be the most widely used one. When Choosing  
>Kaiti(楷體), its typical and authoritative properties shall be considered.  
>Undoubtedly, imperial edicts and documentation have these properties . Hence,  
>typeface for encoding shall be designed according to the imperial  
>edicts or monumental inscriptions on stone.

Anyone can design any typeface they like for the Phags-pa script - neither ISO/IEC 10646 nor Unicode prescribes what typeface should be used to render a given character. I presume that the comment is here directed at the reference glyphs. The reference glyphs have been carefully chosen as representative of Yuan dynasty inscriptions and texts. As epigraphic inscriptions tend to use unusually broad strokes, I have generally modelled the forms of the reference glyphs on Yuan dynasty printed and manuscript texts such as Baijiaxing Mengguwen 百家姓蒙古文 [The Phags-pa version of the "Hundred Chinese Surnames"] and Menggu Ziyun 蒙古字韻 [Rhyming dictionary of Chinese with Phags-pa spellings]. Again, it must be emphasised that the reference glyphs are informative not normative, and that anyone is free to design a typeface that is modelled on a different calligraphic or epigraphic model.

>Conclusion

>The points above are so important that without consensus on them, it seems  
>immature or unpractical to discuss any Phags-pa encoding scheme.

The above points have not raised a single issue of importance. I think that the two points raised are :

#### A. Ordering

Ordering of the Phags-pa characters within the Phags-pa block is cosmetic (a codepoint is just a codepoint), and I am willing to be flexible on this.

#### B. Glyph Shapes

The authors of N2666 seem to object to the inclusion of examples of Phags-pa glyphs written in the pseudo-archaic Seal Script style and the Tibetan decorative style. These are informative only.

The reference glyphs are intended to most clearly illustrate the most common form of the corresponding character. These are again informative only.

>Phags-pa script was invented in China, major user communities are nationalities in  
>China. Most cultural relics and literatures are found in China, key  
>researchers and outstanding scholars are living and working in China. Chinese  
>Phags-pa scholars are capable and willing to propose a scientific,  
>usable and history accorded Phags-pa encoding scheme under ISO arrangement..

Agreed. I am happy to work with Chinese experts, and made the proposal available to Professor Quejingzhabu at the earliest opportunity. I do not presume to suggest that I know more about the Phags-pa script than eminent Chinese scholars, but I do have some expertise in Chinese (I was an Assistant Professor of Chinese Literature at Yale University 1993-1996, and have a monograph written in Chinese published by the Shanghai Chinese Classics Publishing House 上

海古籍出版社 [1996]), and am competent in Mongolian and Tibetan. I wrote the Phags-pa proposal because I am currently engaged in research into the Phags-pa script and thus have a pressing need to represent Phags-pa text in electronic format.. I spent many months preparing the proposal, and examined hundreds of examples of Phags-pa texts and inscriptions from the Yuan dynasty and later, representing Chinese, Mongolian, Tibetan, Uighur and Sanskrit usage of the script. I believe that the proposal is as complete and thorough as is possible.

Finally, I might add that Professor Quejingzhabu was generally very positive towards the proposal, and submitted a document to the UTC (see L2/03-246), which included the following statement (my translation) :-

I would also like to inform you and your colleagues that when those of us in positions of importance in the relevant organizations, both within the Inner Mongolia Autonomous Region and at the national level, heard about your "Proposal to Encode the Phags-pa Script" we regarded it with great importance. I have already suggested to the appropriate organizations that a working group be set up expressly to examine your proposal, and to put forward the official Chinese position on the proposal. I think that the proposal will gain official approval.