

Source: John H. Jenkins
 Date: 31 January 2014
 Topic: UniHan data file change and kRSUnicode

In consideration of the problem, I think it's best to keep alternate radical-stroke indices from being part of the 10646 data files. I'm concerned that having them there means that a change would have to be made to a normative property in 10646 every time a new alternate radical-stroke count pops up, as they do from time to time.

I would therefore recommend making a new field, kRSAlternate. It would use the same syntax as is currently used by kRSUnicode and be provisional. The description would be:

“This field is supplementary to kRSUnicode and contains alternate radical-stroke counts for characters. There are a small number of ideographs which could be reasonably indexed under multiple radical-stroke counts. One example is U+521D 礻. It is found in dictionaries both under radical 18 with five additional strokes and under radical 145 with two additional strokes. Because the KangXi dictionary uses the former, its ‘official’ radical-stroke index for the IRG is 18.5. The kRSAlternate field can then be used to indicate that 145.2 is also an acceptable radical-stroke index.

“The kRSAlternate field is intended for use in generating radical-stroke charts (such as are included in the Unicode Standard) and for radical-stroke lookup. Note that for sorting purposes, kRSUnicode should be used exclusively, whereas for radical-stroke lookup (as in an input method), both kRSUnicode and kRSAlternate should be used.”

I should have an action item to populate the new field, remove the multiple values from kRSUnicode, and update UAX #38 accordingly. The description of the kRSUnicode field should be updated as well to remove references to multiple values.

I should point out, by the way, that only 36 characters have multiple values in their kRSUnicode fields and eight of those are the result of minor ambiguities in the stroke-counting process. The kRSAlternate field would therefore be initially populated with the following 26 values:

U+3687 kRSAlternate 66.6
 U+49F9 kRSAlternate 53.10
 U+51E1 kRSAlternate 3.2
 U+521D kRSAlternate 145.2
 U+52D7 kRSAlternate 73.7

U+5364 kRSAlternate 197.0
U+56CA kRSAlternate 145.17
U+5782 kRSAlternate 33.5
U+5E51 kRSAlternate 60.11
U+6B3D kRSAlternate 167.4
U+6C3D kRSAlternate 85.2
U+6E20 kRSAlternate 75.8
U+7262 kRSAlternate 40.4
U+7740 kRSAlternate 123.5
U+8006 kRSAlternate 72.6
U+9756 kRSAlternate 117.8
U+9F50 kRSAlternate 67.2
U+221A1 kRSAlternate 39.11
U+22605 kRSAlternate 110.4
U+243F2 kRSAlternate 86.11
U+2F835 kRSAlternate 86.2
U+FAAA kRSAlternate 123.5
U+FAC8 kRSAlternate 117.8
U+9FBD kRSAlternate 195.4
U+9FC2 kRSAlternate 196.7
U+2AAA9 kRSAlternate 55.15