

ISO-IEC JTC1/SC2/WG2/IRG
Ideographic Rapporteur Group

KangXi Radical Names

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Meeting:	Oracle, Belmont
Title:	KangXi Radical Names

The IRG appreciates the input provided by Michael Everson on the proposed names of the KangXi radicals.

Mr. Everson is correct to point out that a number of the proposed names are (or include) descriptions of the radical's shape. This, however, is not unique to the set of names proposed by the IRG. Attached are tables from three English dictionaries of Chinese which provide a full set of names for the KangXi radicals. The dictionaries used are:

Casey, G. Hugh, S.J. 1980. *Ten Thousand Characters: Cantonese-Mandarin-English, An Analytic Dictionary*. Hong Kong: Kelley and Walsh, Ltd.

DeFrancis, John, ed. 1997. *A-B-C Chinese-English Dictionary*. Honolulu: University of Hawai'i Press.

Meyer, Bernard F., and Wempe, Theodore, F. 1978. *The Student's Cantonese-English Dictionary*, third edition. Hong Kong: Catholic Truth Society-Hong Kong.

All three dictionaries use similar names which indicate the shapes for the second, third, and fourth radicals.

There are some difficulties with Mr. Everson's proposed methodology. Many of the radicals have fallen out of current use as independent characters, but they had distinct meanings in classical Chinese (e.g., U+2F5D KANGXI RADICAL DOG). It should be no surprise that a dictionary of modern Chinese would fail to use this character as the definition for the English word "dog" or, in fact, fail to list the character at all.

Nonetheless, students of Chinese quickly learn to identify this as the *dog* radical and use it appropriately.

Moreover, naming a character after the first character in a dictionary to use it is far too dependent on the dictionary one uses. There is no standard order for ideographs within a single radical/stroke block. If one should attempt to use a universally agreed upon authority, then it becomes likely that all the radicals are actually listed in their own right (as is true for the KangXi dictionary).

Most of the radicals either have a single, well-known English name (the *heart* radical, the *water* radical) or can have one of a small number of well-known names (the *brush/pen* radical, the *gold/metal* radical). Some radicals are so rarely used that there is no universally agreed-upon English name. Not even native speakers would always know their meanings, however. They're generally dealt with as the occasional exception which has to be written out if it ever needs to be described.

The radical names originally proposed by the IRG are a reasonable reflection of current practice for assigning the KangXi radicals English names. Nonetheless, should WG2 consider renaming the radicals the IRG offers the following set of changes which might be simpler or clearer:

U+2F01 KANGXI RADICAL LINE	KANGXI RADICAL DOWN STROKE
U+2F04 KANGXI RADICAL SECOND	KANGXI RADICAL BEND
U+2F09 KANGXI RADICAL LEGS	KANGXI RADICAL WALKING MAN
U+2F0D KANGXI RADICAL COVER	KANGXI RADICAL AWNING
U+2F0F KANGXI RADICAL TABLE	KANGXI RADICAL BENCH
U+2F12 KANGXI RADICAL POWER	KANGXI RADICAL FORCE
U+2F13 KANGXI RADICAL WRAP	KANGXI RADICAL ENFOLD
U+2F14 KANGXI RADICAL SPOON	KANGXI RADICAL SHORT KNIFE
U+2F16 KANGXI RADICAL HIDING ENCLOSURE	KANGXI RADICAL HIDING
U+2F19 KANGXI RADICAL SEAL	KANGXI RADICAL BAMBOO KNOT
U+2F1B KANGXI RADICAL PRIVATE	KANGXI RADICAL SELFISH
U+2F21 KANGXI RADICAL GO	KANGXI RADICAL STEP FORWARD
U+2F23 KANGXI RADICAL EVENING	KANGXI RADICAL NIGHT
U+2F2E KANGXI RADICAL RIVER	KANGXI RADICAL STREAM
U+2F31 KANGXI RADICAL TURBAN	KANGXI RADICAL SCARF
U+2F32 KANGXI RADICAL DRY	KANGXI RADICAL INTERFERE
U+2F33 KANGXI RADICAL THREAD	KANGXI RADICAL LITTLE
U+2F34 KANGXI RADICAL DOTTED CLIFF	KANGXI RADICAL ROOFTOP
U+2F36 KANGXI RADICAL TWO HANDS	KANGXI RADICAL FOLDED HANDS
U+2F3A KANGXI RADICAL BRISTLE	KANGXI RADICAL BRUSHWORK
U+2F3E KANGXI RADICAL DOOR	KANGXI RADICAL HOUSEHOLD
U+2F43 KANGXI RADICAL DIPPER	KANGXI RADICAL BUSHEL
U+2F44 KANGXI RADICAL AXE	KANGXI RADICAL CATTY
U+2F46 KANGXI RADICAL NOT	KANGXI RADICAL NULL
U+2F4A KANGXI RADICAL TREE	KANGXI RADICAL WOOD
U+2F4D KANGXI RADICAL DEATH	KANGXI RADICAL BAD
U+2F4E KANGXI RADICAL WEAPON	KANGXI RADICAL POLEAXE
U+2F4F KANGXI RADICAL DO NOT	KANGXI RADICAL PROHIBIT
U+2F53 KANGXI RADICAL STEAM	KANGXI RADICAL VAPOR
U+2F58 KANGXI RADICAL DOUBLE X	KANGXI RADICAL DOUBLE CROSS
U+2F59 KANGXI RADICAL HALF TREE TRUNK	KANGXI RADICAL BED
U+2F5B KANGXI RADICAL FANG	KANGXI RADICAL SINGLE TOOTH
U+2F5E KANGXI RADICAL PROFOUND	KANGXI RADICAL PROFUNDITY
U+2F68 KANGXI RADICAL DOTTED TENT	KANGXI RADICAL FEET APART
U+2F6B KANGXI RADICAL DISH	KANGXI RADICAL RECEPTACLE
U+2F70 KANGXI RADICAL SPIRIT	KANGXI RADICAL SHOW
U+2F71 KANGXI RADICAL TRACK	KANGXI RADICAL ANIMAL TRACK
U+2F78 KANGXI RADICAL JAR	KANGXI RADICAL POT
U+2F83 KANGXI RADICAL SELF	KANGXI RADICAL FROM

U+2F89 KANGXI	RADICAL STOPPING	KANGXI	RADICAL LIMIT
U+2F8F KANGXI	RADICAL WALK ENCLOSURE	KANGXI	RADICAL WALK
U+2F91 KANGXI	RADICAL WEST	KANGXI	RADICAL COVER
U+2F98 KANGXI	RADICAL BADGER	KANGXI	RADICAL BEAST
U+2F9E KANGXI	RADICAL CART	KANGXI	RADICAL CAR
U+2FA0 KANGXI	RADICAL MORNING	KANGXI	RADICAL TIME
U+2FA1 KANGXI	RADICAL WALK	KANGXI	RADICAL RUSH
U+2FA3 KANGXI	RADICAL BIRD SIGN	KANGXI	RADICAL RIPE
U+2FA6 KANGXI	RADICAL GOLD	KANGXI	RADICAL METAL
U+2FA8 KANGXI	RADICAL GATE	KANGXI	RADICAL DOOR
U+2FAA KANGXI	RADICAL SLAVE	KANGXI	RADICAL ARREST
U+2FAB KANGXI	RADICAL SHORT TAILED BIRD	KANGXI	RADICAL FOWL
U+2FB4 KANGXI	RADICAL LEAF	KANGXI	RADICAL PAGE
U+2FBD KANGXI	RADICAL HAIR	KANGXI	RADICAL LONG HAIR
U+2FC4 KANGXI	RADICAL SALT	KANGXI	RADICAL CARELESS
U+2FCB KANGXI	RADICAL EMBROIDERY	KANGXI	RADICAL NEEDLEWORK
U+2FCC KANGXI	RADICAL FROG	KANGXI	RADICAL TOAD
U+2FD1 KANGXI	RADICAL EVEN	KANGXI	RADICAL NEAT
U+2FD2 KANGXI	RADICAL TOOTH	KANGXI	RADICAL TEETH

Regarding the characters in the CJK Radicals Extension: It is the common practice for East Asian dictionaries which include a radical index to include multiple entries for each radical. Even in a common case like the three- and four-stroke forms of the *grass* radical, the dictionary-maker may provide both variant forms as well as the base form in the index. This would be analogous to an English dictionary including an index with 104 letters: upper- and lower-case for both script and block letters. Such an approach is unheard-of in the West. It is, however, the rule in the Far East.

The characters in the CJK Radicals Supplement are intended to provide support for this practice.