

APPENDIX 6

THE RADICALS

1. History and Background

The traditional method of ordering entries in Chinese and Japanese character dictionaries is known as the **radical system**. This system is based on a table of 214 elements (plus about 150 variants) called **radicals**. A radical is a frequently recurring graphic component used for classifying characters into groups sharing a common element. The radicals are listed in increasing order of their stroke-counts. Characters sharing the same radical are further grouped in increasing order of the stroke-counts of their *nonradical* elements.

The radical broadly suggests the area of meaning of the character, and is often related to the character's etymology. For example, 木 'tree; wood' is found in many characters designating the names of trees or wooden objects, e.g., 梅 *bai* 'plum tree'. Often, however, the radical is merely an element used for classification purposes and is unrelated to the character's meaning, e.g., 寸 in the characters 对 and 将.

The radical system was first introduced some 1900 years ago in the well-known Chinese classic dictionary 說文解字 *setsumon kaiji* (Chinese: *shuowen jiezi*), in which the characters were classified under 540 categories. In 1716, a comprehensive character dictionary called 康熙字典 *kōki jiten* (Chinese: *kangxi zidian*) was published in China, reducing the number of radicals to 214. The latter has served as a model for all later character dictionaries, and the radical system it introduced is still in use as the most widespread scheme of lexicographic classification today.

The original forms of the 214 traditional radicals are referred to here as the **standard** or **parent form**. A radical may also have one or more **variant forms** of considerably different shape and/or stroke-count. For example, 彳 is a three-stroke variant of the four-stroke 'water' radical 水 (Radical 85). On the other hand, the difference between some variants is merely a slight difference in proportion. For example, the standard form 弓 of Radical 57 (as in 彎) has the left-side variant 彡 (as in 彈).

The position of many radicals is constant in relation to the other elements of the character. Traditionally, the radicals are classified into categories according to their position within the character, as shown in the table below:

Types of Radicals

◻	偏	hen	left	イ in 使
◻	旁	tsukuri	right	欠 in 欧
◻	冠	kanmuri	top	宀 in 定
◻	脚	ashi	bottom	儿 in 兄
◻	垂	tare	top-left	广 in 広
◻	繞	nyō	left-bottom	廴 in 廷
◻	構	kamae	enclosure	門 in 問

The radical system is complex and difficult to master. One problem is that the simplification of the characters that took place with the introduction of the Tōyō Kanji and Jōyō Kanji lists in the postwar period has resulted in the disappearance of the radical element from some characters. For example, 並 is traditionally classified under 立 (Radical 157) based on its old form 竝, but the element 立 has completely disappeared from the abbreviated form 並. (The traditional radical of these “lost-radical” characters can be determined by looking the character up in the **Radical Index**.)

Another problem is that some characters include several radical elements and one must choose between them. For example, 副 consists of four elements, all of which are radicals (see **SYSTEM OF KANJI INDEXING BY PATTERNS § 1.1.1 The Radical System** for details). Because of these difficulties, determining which element of a character is the radical can be a laborious task. Some useful guidelines can be found in **§ 4. How to Determine the Radical** on p. 1931.

Despite these problems, the time-honored radical system, which is still in widespread use today, is important and should be learned by the serious student. A knowledge of radicals is useful for looking up characters in dictionaries and reference works based on the radical system, and helps the learner understand character etymology.

2. Radical Chart

The **Radical Chart** below gives a full list of radical forms, variants, names, and cross-references. It includes the following information:

- 1. Radical** The radicals and their variant forms are listed in increasing order of the stroke-counts of their standard forms, and are numbered consecutively from 1 to 214 according to the traditional historical arrangement. The **radical number** is a serial number assigned to each radical that is widely used in character dictionaries and reference works for identification. The left part of the **Radical** column gives the radical number; the right part gives the radical. Note that the radical and radical number for each entry character appear in the main part of the dictionary (see **GUIDE § 7.2 Radical**).

- 2. Radical Name** When talking about the components of Chinese characters it is convenient to describe them by naming their constituent radicals. For example, we can say that 洋 consists of *sanzui* (the ‘water’ radical) on the left and *hitsuji* (the ‘sheep’ radical) on the right. Most radicals have well-established names in Japanese. The left part of the **Radical Name** column gives the romanized version of the most common name in Japanese; the right part gives the name in Japanese script.¹ If a radical has more than one name, the less common one appears after a comma.

The words “variant not used as radical” sometimes appear in this column. This indicates a variant used only as an independent character but not as a radical in its own right. For example, 竜 *ryū* is an independent character meaning ‘dragon’, but as a radical it always appears in its full form 龍.

- 3. English Name** Some common radicals, such as 水 the ‘water’ radical, have well-established names in English, but many others are called by different names in different works. The names appearing in the **English Name** column are based primarily on tradition, where such tradition exists, and on the meaning and/or function of the radical as a character-building element.

- 4. Standard and Variant Forms** The **Form** column indicates if the radical is a **standard form** or a **variant form**. If it is a variant form, it shows the position in which it normally appears within the character, as explained below:

Standard	parent radical in its full traditional form (心 in 必) (this form may appear in various positions)
Left	variant normally appearing on the left (忄 in 情)
Right	variant normally appearing on the right (卩 in 削)
Top	variant normally appearing at the top (宀 in 岩)
Bottom	variant normally appearing at the bottom (灬 in 慕)
Enclosure	variant normally enclosing the remainder of the character (戶 in 戾)
Variant	variant appearing in a position other than the above (羽 in 習)

For a given radical, the standard form appears first, followed by its variants. Although the original forms are called “standard,” it should be noted that some variants are more common than their standard forms. For example, 讠 (Radical 162) is now the common form while the original 辵 is never used.

- 5. Number** The **Number** column indicates the **entry number** where the radical appears as an entry character in the body of the dictionary. That entry includes the **RADICAL** section, which gives further information about the radical, such as a description of its meaning and function, and examples of characters in which the standard and variant forms appear as a radical. See **GUIDE § 8. RADICAL Section** for details.

¹ Japanese radical names are often written in hiragana. As far as we know, this is the first list of radical names in their full kana-kanji “spellings.”

RADICAL CHART

Radical	Radical Name	English Name	Form	Number		
1 STROKE						
1	一	ichi	一	one	standard	3341
2	丨	bō	棒	downstroke	standard	3343
3	丶	ten	点	dot	standard	3344
4	丿	no	ノ	left stroke	standard	3345
	ノ	no	ノ		top	3346
5	乙	otsu	乙	hook	standard	3339
	レ	re	レ		variant	3340
6	乚	hanebō	撥棒	hooked stroke	standard	3347
2 STROKES						
7	二	ni	二	two	standard	1922
8	亠	nabebuta	鍋蓋	lid	standard	3363
9	人	hito	人	person	standard	3368
	亻	ninben	人偏		left	3373
	亼	hitoyane	人屋根		top	3374
10	儿	ninnyō, hitoashi	人繞, 人足	legs	standard	4
11	入	iru	入	enter	standard	3370
12	八	hachigashira	八頭	eight	standard	2928
	𠂆	hachi	八		variant	3
	𠂇	hachigashira	八頭		top	2
13	冂	keigamae	冂構	border	standard	3352
14	冃	wakanmuri	冃冠	cover	standard	3353
15	冫	nisui	二水	ice	standard	1923
16	几	tsukue	机, 几	table	standard	3349
	凵	kazagamae	凵構	enclosure	standard	3354
17	凵	kannyō, ukebako	凵繞, 受け箱	receptacle	standard	3364
18	刀	katana	刀	sword	standard	2926
	刃	rittō	立刀		right	1
19	力	chikara	力	strength	standard	3371
20	勹	tsutsumigamae	勹構	wrap	standard	3375
21	匕	sajinohi	匕の匕	spoon	standard	2925
22	匚	hakogamae	匚構	box	standard	3355
23	匚	kakushigamae	隱構, 匚構	enclose	standard	3356
	匚	kakushigamae	隱構, 匚構		enclosure	—
24	十	jū	十	ten	standard	3365
	廴	jūhen	十偏		left	3366
25	礻	bokunoto	トのト	divine	standard	3367
26	卩	fushizukuri	節旁	seal	standard	3357
	卩	fushizukuri	節旁		variant	3358
27	厶	gandare	厶垂	cliff	standard	3359

Radical	Radical Name	English Name	Form	Number		
28	厶	mu	厶	oneself	standard	3376
29	又	mata	又	right hand	standard	3361
	又	mata	又		variant	3351
3 STROKES						
30	口	kuchi	口	mouth	standard	3382
	凵	kuchihen	凵偏		left	—
31	凵	kunigamae	凵構	enclosure	standard	3391
32	土	tsuchi	土	earth	standard	3403
	ㄣ	tsuchihen	土偏		left	—
33	士	tsuchihen	士	knight	standard	3405
34	夕	samurai	夕	descend	standard	3392
35	夕	fuyugashira	夕頭	move slowly	standard	3393
	夕	suinyō	夕繞		bottom	—
	夕	natsuashi	夏脚		bottom	—
36	夕	yūbe	夕	evening	standard	3387
37	大	ōkii, dai	大	big	standard	3416
	大	ōkii, dai	大		top	3423
38	女	onna	女	woman	standard	3418
	女	onnahen	女偏		left	3424
39	子	ko	子	child	standard	3390
40	宀	ukanmuri	宀冠	roof	standard	3425
41	寸	sun	寸	inch	standard	2935
42	小	chiisai	小	small	standard	7
	尗	naogashira	尗頭		top	5
	尗	tsu	尗		top	—
43	尤	mageashi	尤	lame	standard	2937
44	尸	shikabane	尸	corpse	standard	3389
45	屮	tetsu	屮	sprout	standard	3412
46	山	yama	山	mountain	standard	2940
	山	yamahan	山偏		left	—
	山	yamakanmuri	山冠		top	—
47	川	magarigawa	川	river	standard	9
	川	sanbongawa	曲がり川 三本川		variant	6
48	工	takumi	工	work	standard	3381
	工	takumihen	工偏		left	—
49	己	onore	己	self	standard	3380
	巳	mi	巳		variant	3388
50	巾	haba	巾	cloth	standard	3409
51	干	hosu	干	shield	standard	3379
52	干	itogashira	干頭	tiny	standard	3426
53	广	madare	广	roof	standard	3427
54	延	ennyō	延	proceed	standard	3394
	延	ennyō	延繞		standard	3394
55	又	ennyō	又	enclosure	standard	3395
55	又	nijūashi	又	clasp hands	standard	3413
56	式	shikigamae	式	spike	standard	3422

Radical	Radical Name		English Name	Form	Number
57	弓	yumi	bow	standard	3383
	弓	yumihen		left	—
58	彡	keigashira	pig's head	standard	3396
	彡	keigashira		variant	3397
	彡	keigashira		variant	3407
59	彡	sanzukuri	decoration	standard	1927
60	彡	gyōninben	locomotion	standard	1928
4 STROKES					
61	心	kokoro	heart	standard	11
	心	rishshinben		left	8
	心	shitagokoro		bottom	12
62	戈	kanohoko	spear	standard	3462
63	戶	tobiranoto	door	standard	2950
	戶	tobiranoto	enclosure	enclosure	1930
64	手	te	hand	standard	3456
	手	tehen		left	3414
65	支	shinyō, jūmata	branch	standard	1980
	支	shinyō, jūmata		right	1979
66	攴	bokuzukuri, tomata	strike	standard	1981
	攴	nobun		right	1985
67	文	bun, bunnyō	pattern	standard	1966
	文	bun, bunnyō		variant	1962
68	斗	tomasu	measure	standard	2953
69	斤	ono	ax	standard	2949
70	方	kata	square	standard	1963
71	无	munyō	without	standard	3443
	无	sudenotsukuri		right	3444
	无	sudenotsukuri		right	3487
72	日	hi	sun	standard	3028
	日	hi		variant	3027
73	日	hirabi	say	standard	3025
	日	hirabi		variant	3026
74	月	tsuki	moon	standard	2959
	月	tsuki		variant	2956
	月	tsuki		variant	2957
75	木	ki	tree	standard	3450
	木	kihen		left	—
76	欠	akubi	yawn	standard	1987
77	止	tomeru	stop	standard	2941
	止	tomehen		left	—
78	止	gatsuhēn	death	standard	3445
79	夕	rumata, hokozukuri	club	standard	1978
	夕	rumata, hokozukuri		variant	3446
80	母	haha, nakare	mother	standard	3447
	母	haha, nakare		variant	—

Radical	Radical Name		English Name	Form	Number
	母	variant not used as radical			3475
81	比	kuraberu, hi	compare	standard	26
82	毛	ke	hair	standard	3453
83	氏	uji	family name	standard	2951
84	气	kigamae	vapor	standard	1986
85	水	mizu	water	standard	10
	水	sanzei		left	1925
	水	shitamizu		bottom	37
86	火	hi	fire	standard	3463
	火	rekka		bottom	13
87	爪	tsume	claw	standard	3024
	爪	notsu		top	1934
	爪	tsumekanmuri		top	1935
88	父	chichi	father	standard	1975
	父	variant not used as radical			1973
89	交	meme	crisscross	standard	1988
	交	meme		variant	1989
90	片	shōhen	stand	standard	3468
91	片	kata	board	standard	3461
92	牙	kiba	sharp tooth	standard	3435
	牙	kiba		left	3488
93	牛	ushi	cattle	standard	3452
	牛	ushihen		left	3458
94	犬	inu	dog	standard	3464
	犬	kemonohen		left	3428
5 STROKES					
95	玄	gen	dark	standard	1991
96	玉	tama	gem	standard	3477
	玉	tamahan		left	3448
97	瓜	uri	gourd	standard	3038
98	瓦	kawara	tile	standard	3476
99	甘	amai	sweet	standard	3494
100	生	umareru	birth	standard	3497
101	用	mochiuru	use	standard	2976
102	田	ta	field	standard	3041
103	疋	hiki	animal counter	standard	3480
	疋	hikihen		left	3489
104	疋	yamaidare	illness	standard	3512
105	疋	hatsugashira	spread legs	standard	40
106	白	shiro	white	standard	3493
107	皮	kegawa	skin	standard	3037
108	皿	sara	dish	standard	3474
109	目	me	eye	standard	3043
110	矛	hoko	lance	standard	2008

Radical	Radical Name		English Name	Form	Number
111 矢	ya	矢	arrow	standard	2009
	yahen	矢偏		left	—
112 石	ishi	石	stone	standard	2971
	ishihen	石偏		left	—
113 示	shimesu	示	deity	standard	1936
	nehen, shimesuhen	示偏, 示偏		left	3469
	shimesuhen	示偏		left	—
114 廌	gūnoashi	廌	track	standard	3470
	nogi	廌偏	growing grain	standard	3503
115 禾	nogihen	禾偏		left	—
	ana	禾偏	hole	standard	2161
116 宀	anakanmuri	宀	top	top	2160
	variant not used as radical	宀偏		top	2159
117 立	tatsu	立	stand	standard	1992
	tatsuhen	立偏		left	—

6 STROKES

118 竹	take	竹	bamboo	standard	228
	takekanmuri	竹冠		top	229
119 米	kome	米	rice	standard	3529
	komehen	米偏		left	—
120 糸	ito	糸	thread	standard	2179
	itohen	糸偏		left	—
121 缶	hotogi	缶	earthenware	standard	2032
122 网	amigashira	網頭	net	standard	2988
	yonkashira	四頭		top	3045
	yonkashira	四頭		top	1977
123 羊	hitsuji	羊	sheep	standard	2183
	hitsujikanmuri	羊冠		top	2184
	hitsujihen	羊偏		left	—
124 羽	hane	羽	wing	standard	227
	hane	羽		variant	226
125 老	oi	老	old person	standard	3197
	oikanmuri, oigashira	老冠, 老頭		top	3471
126 而	shikashite	而して	beard	standard	2027
127 耒	raisuki	耒	plow	standard	3532
	raihen	耒偏		left	—
	sukihen	耒偏		left	—
128 耳	mimi	耳	ear	standard	3516
	mimihen	耳偏		left	—
129 聿	fudezukuri	聿	brush	standard	3533
130 肉	niku	肉	flesh	standard	3200
	nikuzuki	肉月		variant	2958
131 臣	shin	臣	retainer	standard	2991
	shin	臣		left	3068

Radical	Radical Name		English Name	Form	Number
132 自	mizukara	自	self	standard	3525
133 至	itaru	至	arrive	standard	2182
134 臼	usu	臼	mortar	standard	3528
	usu	臼		variant	845
135 舌	shita	舌	tongue	standard	2186
	shitahen	舌偏		left	—
136 舛	masu	舛	dancing	standard	205
	maishi	舛		bottom	237
137 舟	fune	舟	ship	standard	3538
	funehen	舟偏		left	—
138 艮	kon, ushitora	艮	northeast	standard	3517
	kon, ushitora	艮		variant	—
139 色	iro	色	color	standard	2029
	irozukuri	色旁		right	—
140 艸	kusa	草	plants	standard	209
	kusakanmuri	草冠		top	3415
	kusakanmuri	草冠		top	24
	kusakanmuri	草冠		top	29
141 虍	torakanmuri	虎冠	tiger	standard	3198
142 虫	mushi	虫	bug	standard	3530
	mushihen	虫偏		left	—
143 血	chi	血	blood	standard	3526
	chihen	血偏		left	—
144 行	gyō	行	road	standard	212
	gyōgamae	行構		enclosure	213
145 衣	koromo	衣	clothes	standard	2013
	koromohen	衣偏		left	3513
	koromo	衣		variant	2017
146 西	nishi	西	cover	standard	3522
	nishi	西		top	3523
	variant not used as radical				3520

7 STROKES

147 見	miru	見	see	standard	2544
148 角	tsuno	角	horn	standard	2047
	tsunohen	角偏		left	—
149 言	kotoba	言葉	speech	standard	1941
	gonben	言偏		left	—
150 谷	tani	谷	valley	standard	2043
	tanihen	谷偏		left	—
151 豆	mame	豆	ritual vessel	standard	1943
	mamehen	豆偏		left	—
152 豕	inoko	豕	pig	standard	3543
	inokohen	豕偏		variant	—
153 豸	mujina	豸	wild animal	standard	2401

Radical	Radical Name	English Name	Form	Number
154	貝 kai	貝	cowry	standard 2543
	kaihen	貝偏		variant —
155	赤 aka	赤	red	standard 2193
	akahen	赤偏		left —
156	走 hashiru	走	run	standard 2194
	sōnyō	走繞		enclosure 2195
157	足 ashi	足	foot	standard 2188
	ashihen	足偏		left 2191
158	身 mi	身	body	standard 3553
	mihen	身偏		left —
159	車 kuruma	車	vehicle	standard 3552
	kurumahen	車偏		left —
160	辛 karai	辛	acrid	standard 2038
	karai	辛		left —
161	辰 shinnotatsu	辰の辰	the Dragon	standard 2992
162	之 shinnyō, shinnyū	之繞	advance	standard 1945
	shinnyō, shinnyū	之繞		enclosure 1926
	shinnyō, shinnyū	之繞		enclosure 1932
163	邑 mura	邑	city	standard 2190
	ōzato	大里		right 3398
164	酉 hiyominotori	日読みの酉	wine	standard 3544
	torihen	酉偏		left —
165	采 nogome	ノ米	separate	standard 3555
	nogomehen	ノ米偏		left —
166	里 sato	里	hamlet	standard 3542
	satohen	里偏		left —
8 STROKES				
167	金 kane	金	metal	standard 2057
	kanehen	金偏		left —
168	長 nagai	長	long	standard 2556
	nagai	長		left 2550
169	門 mon, mongamae	門, 門構	gate	standard 888
170	阜 gifunofu	岐阜の阜	mound	standard 2628
	kozatohen	阜偏		left 3399
171	隸 reizukuri	隸旁	capture	standard 3569
172	佳 furutori	佳	small bird	standard 3566
173	雨 ame	雨	rain	standard 3561
	amekanmuri	雨冠		top 3562
174	青 ao	青	blue	standard 2431
	ao	青		variant 2430
175	非 arazu	非	not	standard 889

Radical	Radical Name	English Name	Form	Number
9 STROKES				
176	面 men	面	face	standard 2087
177	革 kawa	革	rawhide	standard 2448
	kawahen	革偏		left —
178	韃 nameshigawa	韃革	leather	standard 2268
	nameshigawa	韃革		variant 2287
179	韭 nira	韭	leek	standard 3574
180	音 oto	音	sound	standard 1948
	oto	音		variant 2070
181	頁 ōgai	大貝	head	standard 2086
182	風 kaze	風	wind	standard 3007
	kaze	風		left —
183	飛 tobu	飛	fly	standard 3572
184	食 shoku	食	food	standard 2077
	shokuhen	食偏		left 2061
	shokuhen	食偏		left 2076
	shoku	食		variant 2075
185	首 kubi	首	neck	standard 2265
186	香 noikō	匂い香	fragrance	standard 2568
10 STROKES				
187	馬 uma	馬	horse	standard 3296
	umahen	馬偏		left —
188	骨 hone	骨	bone	standard 2654
	honehen	骨偏		left —
189	高 takai	高	high	standard 2097
190	髻 kamikanmuri	髮冠	hair	standard 1464
191	鬥 tōgamae	鬪構	fight	standard 1165
192	鬯 chō	鬯	fragrant wine	standard 2758
193	鬲 kaku	鬲	ritual tripod	standard 1951
	kaku	鬲		variant —
194	鬼 oni	鬼	ghost	standard 2657
	kinyō	鬼繞		enclosure —
11 STROKES				
195	魚 uo	魚	fish	standard 2127
	uohen	魚偏		left —
196	鳥 tori	鳥	bird	standard 3312
	tori	鳥		right —
197	鹵 ro	鹵	salt	standard 2125
198	鹿 shika	鹿	deer	standard 3126
199	麥 baku	麥	wheat	standard 2767
	bakunyō	麥繞		enclosure 2766
	variant not used as radical			2408

Radical	Radical Name		English Name	Form	Number
200 麻	asa	麻	hemp	standard	3130
	asakanmuri	麻冠		enclosure	3129
	asakanmuri	麻冠		enclosure	—
	variant not used as radical				3125

12 STROKES

201 黃	kiiro	黃色	yellow	standard	2487
	variant not used as radical				2468
202 黍	kibi	黍	millet	standard	2597
203 黑	kuroi	黑	black	standard	2787
	kuroi	黑		variant	2740
204 黹	futsu	黹	embroidery	standard	2605

13 STROKES

205 黾	ben	黾	frog	standard	3584
206 鼎	kanae	鼎	ritual cauldron	standard	3585
207 鼓	tsuzumi	鼓	drum	standard	1786
208 鼠	nezumi	鼠	rat	standard	2693
	nezuminyō	鼠繞		enclosure	—

14 STROKES

209 鼻	hana	鼻	nose	standard	2707
	hanahen	鼻偏		left	—
	variant not used as radical				2706
210 齊	sei	齊	uniform	standard	2142
	sei	齊		variant	2054

15 STROKES

211 齒	ha	齒	tooth	standard	2516
	hahen	齒偏		left	—
	hahen	齒偏		left	—
	ha	齒		variant	2476

16 STROKES

212 龍	tatsu	竜	dragon	standard	1801
	variant not used as radical				2099
213 龜	variant not used as radical		tortoise		1800
	kame	龜		standard	2147
	kame	龜		variant	2150
	variant not used as radical				2128

17 STROKES

214 龠	yaku	龠	flute	standard	2149
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