

IRG N2171 Feedback From Henry Chan (2)  
Title: Comments on Stroke Order (by Henry Chan)  
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Type: Individual Contribution to IRG #48  
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### Discussion Item #1

I support the merging of IRGN954AR and IRGN1105 combined with IRGN2171. Same as the format in IRGN954AR, an overall stroke count should be selected to represent the unified variants.

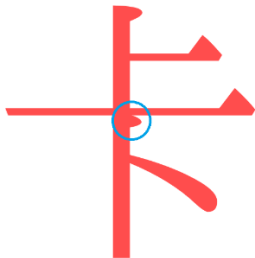
In response to ROK's raised issues, when two or more unifiable forms are disunified in Unicode, then the stroke count should be counted per the disunified shape. If the regional glyphs differ by stroke count, the smallest stroke count should be used.

The actual stroke count of derivative shapes (附形) should be indicated in the document as well. Derivative Shapes should inherit the Major Shape (主形) if no actual examples of disunification are present.

I suggest that the order of glyphs in IRGN954AR, 1105 and 2171 be ordered by Stroke Count and First Stroke.

### Discussion Item #2

- The stroke count that is decided by IRG should be normative (first value for kRSUnicode). IRG is wasting a lot of time debating the actual stroke count when the existing stroke counting method is inconsistent anyway. IRG should adopt a unified counting method for all existing and new ideographs. Once the rules have been set, the stroke count for ideographs can be revised.
- As raised by Japan that sometimes IRG may ask the submitter to modify the glyph submitted to conform to the stroke count, if the glyph shape of the character is misleading of the actual stroke count, the “vertical stroke starting indicator” should be added at the top of the stroke:



(marked in blue)


**Discussion Item #3**

It is suggested that for Rule 2 – 4, it be consolidated into a single rule.

From:

SN	Glyph	SC1	SC2	KX SC	Recommend SC
2	U+97CB 韋韋	9 U+97CB 韋韋 U+5049 偉偉 U+8AF1 諱諱 U+8466 葦葦 U+570D 圍圍		9	9
3	U+821B 舛舛	6 U+821B 舛舛 U+6840 桀桀 U+5091 傑傑 U+7CA6 舜舜 U+9074 遴 U+9130 鄰鄰 U+7CBC 粼粼 U+9C57 鱗鱗		6	6
4	U+5905 夆	6 U+5905 夆 U+964D 降降 U+7D73 絳絳		6 (Radical 夂 3 strokes in KX.)	6

To:

SN	Glyph	Stroke Count	FS	Other Shapes
2	U+3404 屮	3	1 (一)	 (4 - inherit)

#### Discussion Item #4

It is suggested that the total stroke count for 延 be set to 8 to be consistent with the stroke count of 止.

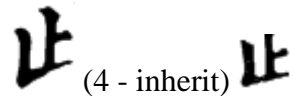
The Kangxi dictionary is not consistent about the total strokes for various characters containing 止. Sometimes, the stroke count does not match the actual glyph either:

Char	Codepoint	Pic	Kangxi SC used for Sorting	Apparent SC
些	U+4E9B	 <small>ZDIC.NET</small>	3	3
雌	U+49F3	 <small>ZDIC.NET</small>	3	3
政	U+653F	 <small>ZDIC.NET</small>	3	3
窺	U+7AC0	 <small>ZDIC.NET</small>	4	4
靖	U+9755	 <small>ZDIC.NET</small>	4	4
頤	U+9819	 <small>ZDIC.NET</small>	4	4
鷓	U+9D0A	 <small>ZDIC.NET</small>	3	3

卸	U+5378	卸 <small>ZDIC.NET</small>	3	3
卸	U+28A36	卸 <small>ZDIC.NET</small>	4	4
迎	U+284F4	迎 <small>ZDIC.NET</small>	3	3
御	U+5FA1	御 <small>ZDIC.NET</small>	3	3
延	U+5EF6	延 <small>ZDIC.NET</small>	3	3
延	U+7D96	延 <small>ZDIC.NET</small>	3	4
誕	U+8A95	誕 <small>ZDIC.NET</small>	3	4

**Action Item**

I suggest the following rules:

SN	Glyph	Stroke Count	FS	Other Shapes
5a	止	4	2 (豎)	 (4 - inherit) 止 (4 - inherit)
5b	延	8	5 (撇)	
5c	卸	9	5 (撇)	

## Discussion Item #5


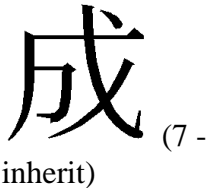
For Rule 7, 成, the character's phonetic component is 丁. A stroke count of 7 would more accurately preserve the pronunciation.

A series of examples were accidentally left out of the analysis by the Chief Editor, possibly leading to an inappropriate decision. I have marked my supplementary examples in red:

SN	Glyph	SC1	SC2	KX SC	Recommend SC
7	U+6210 成	6 U+6210 成 U+57CE 城 U+8AA0 誠	<b>7</b> <b>U+6660 臧</b> <b>城 (U+73F9)</b> <b>窳 (U+7A9A)</b> <b>(etc)</b>	7	6

## Suggested Action Item

- Modify Rule to:

SN	Glyph	Stroke Count	FS	Other Shapes
7	U+6210 	7	1 (一)	

### Discussion Item #6

To solve ROK's concerns regarding 既, the actual stroke count of derivative shapes (附形) should be indicated in the document.

#### Action Item:

Modify the Rule to:

SN	Glyph	Stroke Count	FS	Other Shapes
8	既	11	3 (撇)	既 <sub>(11)</sub> 既 <sub>(9)</sub> 既 <sub>(9)</sub>

### Discussion Item #7

The top part of 荣, 劳, 莠, 营 etc is not grass but a simplified radical of 艹. It should be regarded as a single component for the issues of unification. In line with the other simplified radicals, it should be counted per the stroke count of PRC, i.e. 5. Indeed, this simplified component originates before its standardization by the PRC Simplification. However, its historical appearance is nearly universally in the 5 stroke form only.

Should any character be rationally composed a top component of 艹 radical and the bottom component containing 冫 at the top, it will be of different origin to the similar looking character with an etymological simplification of 艹, and thus should be dis-unified under the non-cognate rule. The intentional difference in stroke count help to separate the two characters.

Therefore, the stroke count for stroke count for this component as a simplification of 艹 should be frozen to 5 (with FS = 1) and should not be counted with 6 (with FS = 2) regardless of source.

#### Action Item

Add new rule:

SN	Glyph	Stroke Count	FS	Other Shapes
X	冫	5	1 (一)	N/A

Discussion Item #7

35	𠂔	丩	4	𠂔 𠂔
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𠂔 (pu1) and 𠂔 (zhi3) are non-cognate. The first character means “to hit”, “to beat”. The second character means “to walk”. Kangxi Dictionary maintains separate radicals and separate stroke count per character etymology.

This rule #35 in IRGN954AR is at both a point of contention between IRG members for the past few meetings. IRG has been wasting a lot of precious time by changing the stroke count BACK AND FORTH, AGAIN AND AGAIN.

This rule was not actually used for existing characters in the URO. The behavior of stroke counting of unified forms is better explained by etymology:

81F4  
至 133.3 致 致 致 致 致 致  
G0-5642 HB1-AD50 T1-5333 J0-4357 K0-7648 V1-643C

The stroke count of 3 is reflective of its etymology, zhi3 (𠂔).

52D9  
力 19.9 務 務 務 務 務 務  
G1-4E71 HB1-B0C8 T1-592D J0-4C33 K0-5962 V1-4D49

Stroke count of 9 – 5 = 4 is reflective of its etymology, pu1(𠂔).

The first derivate shape is not used in CJK Unified Ideographs.

**Action Item**

Remove both “derivative shapes”.

35	𠂔	丩	4	
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### Discussion Item #8

43	長	一	8	長	𧈧
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The two shapes should not be considered generally equivalent. They two shapes are non-cognate. The first “derivative shape” is a variant of 長 / long. The second “derivate shape” means hair.

The stroke count of the second “derivative shape” is 7 consistently in Kangxi Dictionary.  
Examples:

Char	Codepoint	Pic	Kangxi SC used for Sorting
套	U+5957		7
𧈧	U+74FA		7

### Action Item

- Remove the second “derivative shape”:

43	長	一	8	長
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- Add new rule:

43	𧈧	一	7	
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**Discussion Item #9**

25	水	乙	4	水
59	米	丨	5	

Num	Shape	1 <sup>st</sup> Stroke	Stroke count	Amendments to 1 <sup>st</sup> Stroke
19	小	乙	3	丨

In IRGN1105, the FS of 小 was amended to 2. I propose that the FS of 水 (Rule #25) also be amended to 2 for consistency. Furthermore, according to the Stroke Count principles of the PRC, the stroke of 丨 is regarded as 2 and is standardized across trillions of electronic products.

Rule #59 of IRGN954AR has no hook and has FS 2, but the hooked version is more popular, and it is unclear whether that counts as FS 2 or 5. For characters containing a 丨 stroke (hook to the left), it is very often the hook can be omitted for aesthetic purposes, such as 竹 and 求. If 丨 is to be treated as 2, it will avoid problems in related cases.

**Action Item**

- Modify rules as follows:

59	米	丨	5	米
25	水	丨	4	水

**Discussion Item #10**

5	++		4	++	++	++	卅
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卅 is evidently 6 strokes and should be removed from this list. Refer to Appendix I for proof why this is important.

**Action Item:**

- Remove the 4<sup>th</sup> derivative shape:

5	++		4	++	++	++	
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- Add a new rule with FS = 5:

5	卅	乙	6				
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## Discussion Item #11

61	臣	一	7	臣
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This rule is against the norm in Kangxi:

Char	Codepoint	Pic	Kangxi SC used for Sorting
臣	U+268DD		N/A
嬰	U+5A90		6
熙	U+7199		6
𪛗	U+5DF8		6
𪛘	U+2972E		7

## Suggested Change

61	臣	一	6	臣 (7)
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- Change the default glyph shape and total strokes to 6

- Assign a stroke count for 7 to the variant shape as these two shapes are disunified in Source Code Separations (U+7155 熙 vs U+7199 熙).

Discussion Item #12

6	建	乙	9	
66	廻	〇	0	

I suggest removing Rule #6 because it is covered by Rule #66.

I also suggest that the number of strokes for #65 - #75 be filled in:

65	旭	丿	0	2	
66	廻	〇	0	3	
67	廻	〇	0	4	
68	回	〇	0	2	
69	纒	乙	0	6	
70	林	一	0	8	
71	興	丿	0	10	
72	紵	乙	0	紵	12
73	衍	丿	0	6	
74	冫	丿	0	2	
75	引	乙	0	6	

40	彳	、	4	彳 彳 彳 彳 <del>彳</del>	removed in IRGN1105
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Rule #40 should be removed and its variants merged with Rule #67 because there is no example of 彳 existing by itself. And it is very obvious that the first stroke of 彳 by itself is 4 (點).

Discussion Item #13

28	瓦	一	5	瓦
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Action Item:

Default Glyph should be swapped with the first variant glyph to reflect the stroke count of 5:

28	瓦	一	5	瓦
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Discussion Item #14

77	色	丿	6	𠂔
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The first “derivative shape” is not the variant of 色, but a completely unrelated different component group. The First Stroke should be determined based on the actual glyph of the character.

Action Item:

- Modify/Add the following rules:

77	色	丿	6	
77	𠂔	乙	6	

**Appendix I:**

The derivative shapes implicitly inherit the stroke count from the main shape in IRGN954AR, as can be seen by the request to modify the chart in IRG1105:

(C) Amendments to stroke count method of radicals or components

Original items in IRG N954AR:

Num	Shape	1 <sup>st</sup> Stroke	Stroke count	Variant Shapes
23	心	、	4	心 小 小 巾 小
40	走	、	4	走 走 走

We suggest changing as the followings:

Num	Shape	1 <sup>st</sup> Stroke	Stroke count	Variant Shapes
23	心	、	4	心 小 巾
23A	小	、	3	小 巾
40	走	、	4	走 走
40A	走	丿	7	

Once more thanks for the comments of HKSAR, Japan, TCA, R.O.Korea and all related parties.