

**Extend the EquivalentUnifiedIdeograph property to three Suzhou numerals and give formal aliases to all Suzhou numerals and 12 unified ideographs.**

**Eduardo Marín Silva**

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**Extension to EquivalentUnifiedIdeograph:** In version 10 of the standard, this property was added in order to guide implementers whenever they found a radical or a stroke in an IDS sequence to the most closely associated unified ideograph. Here I propose to add three characters to complete the set:

- 十 (3038) HANGZHOU NUMERAL TEN → 十 CJK UNIFIED IDEOGRAPH-5341
- 廿 (3039) HANGZHOU NUMERAL TWENTY → 廿 CJK UNIFIED IDEOGRAPH-5344
- 卅 (303A) HANGZHOU NUMERAL THIRTY → 卅 CJK UNIFIED IDEOGRAPH-5345

This makes sense since unlike the other Suzhou numerals, these were encoded out of compatibility in an ad-hoc way, when in reality the ideographs themselves should have sufficed, since they have the same meaning and glyph. The only difference is that these characters already have a compatibility mapping with their respective ideograph, which makes my proposal somewhat redundant, but having redundancy is a great way to avoid unexpected errors. If a text editor wants to avoid homoglyphs, they can use the EUI property to do the proper mapping, and so adding these three characters in, will make their lives a bit simpler, since in no other situation is an ideograph mapped to its homoglyph via compatibility sequence.

The other Suzhou numerals may look similar to other ideographs however since the nine digits form a coherent set that has clear distinct genealogical roots than any ideograph, they must remain as their proper entities.

**Formal aliases for Suzhou numerals.** It is known that the consortium, for a reason that will forever remain a mystery, misnamed the Suzhou numerals as “Hangzhou”, and due to the stability policy, the names remain unchanged. There are other characters that have misnamed through the history of the standard and so the consortium implemented a workaround: formal aliases.

While they have other uses, the main utility of a formal alias is to be able to map a corrected name for an otherwise misnamed character, in a way all implementers can agree on. For example (ಃ) KANNADA LETTER FA is a know mistake for KANNADA LETTER LLLA, and in order to avoid confusion over which name to use in what context, defining the second name as a formal alias means that the names are interchangeable and so people familiar with the correct name, do not have to bother even knowing that the official name is wrong.

The same treatment has not been done to the Suzhou numerals, even though the rationale is exactly the same.

| Character | Current name         | Formal alias       |
|-----------|----------------------|--------------------|
| 丨 3021    | HANGZHOU NUMERAL ONE | SUZHOU NUMERAL ONE |
| 3022      | HANGZHOU NUMERAL TWO | SUZHOU NUMERAL TWO |

|        |                         |                       |
|--------|-------------------------|-----------------------|
| 三 3023 | HANGZHOU NUMERAL THREE  | SUZHOU NUMERAL THREE  |
| 𠄎 3024 | HANGZHOU NUMERAL FOUR   | SUZHOU NUMERAL FOUR   |
| 𠄎 3025 | HANGZHOU NUMERAL FIVE   | SUZHOU NUMERAL FIVE   |
| 𠄎 3026 | HANGZHOU NUMERAL SIX    | SUZHOU NUMERAL SIX    |
| 𠄎 3027 | HANGZHOU NUMERAL SEVEN  | SUZHOU NUMERAL SEVEN  |
| 𠄎 3028 | HANGZHOU NUMERAL EIGHT  | SUZHOU NUMERAL EIGHT  |
| 𠄎 3029 | HANGZHOU NUMERAL NINE   | SUZHOU NUMERAL NINE   |
| 十 3038 | HANGZHOU NUMERAL TEN    | SUZHOU NUMERAL TEN    |
| 廿 3039 | HANGZHOU NUMERAL TWENTY | SUZHOU NUMERAL TWENTY |
| 卅 303A | HANGZHOU NUMERAL THIRTY | SUZHOU NUMERAL THIRTY |

In the code-charts, it suffices to just specify in the heading that all Suzhou numerals have a formal alias and have the numeral one as an example in the subheading.

**Formal aliases for twelve unified ideographs.** Unicode includes a set of duplicated ideographs for the sake of compatibility with older standards. These are identified by being found on a different block and having different names. However, twelve of those characters were wrongly assigned the “compatibility” name and position even though they have no unified duplicates and therefore should be treated as unified ideographs.

All of this is greatly documented, but I propose assigning them a formal alias so that implementors do not have to read the history behind these characters, to not freak out when they see the different name pop up in their data. This solidifies even further their true nature.

| Character | Current name                     | Formal alias               |
|-----------|----------------------------------|----------------------------|
| 夔         | CJK COMPATIBILITY IDEOGRAPH-FA0E | CJK UNIFIED IDEOGRAPH-FA0E |
| 塔         | CJK COMPATIBILITY IDEOGRAPH-FA0F | CJK UNIFIED IDEOGRAPH-FA0F |
| 崎         | CJK COMPATIBILITY IDEOGRAPH-FA11 | CJK UNIFIED IDEOGRAPH-FA11 |
| 栳         | CJK COMPATIBILITY IDEOGRAPH-FA13 | CJK UNIFIED IDEOGRAPH-FA13 |
| 桴         | CJK COMPATIBILITY IDEOGRAPH-FA14 | CJK UNIFIED IDEOGRAPH-FA14 |
| 藎         | CJK COMPATIBILITY IDEOGRAPH-FA1F | CJK UNIFIED IDEOGRAPH-FA1F |
| 蚌         | CJK COMPATIBILITY IDEOGRAPH-FA21 | CJK UNIFIED IDEOGRAPH-FA21 |
| 赳         | CJK COMPATIBILITY IDEOGRAPH-FA23 | CJK UNIFIED IDEOGRAPH-FA23 |
| 返         | CJK COMPATIBILITY IDEOGRAPH-FA24 | CJK UNIFIED IDEOGRAPH-FA24 |
| 鏊         | CJK COMPATIBILITY IDEOGRAPH-FA27 | CJK UNIFIED IDEOGRAPH-FA27 |
| 鏊         | CJK COMPATIBILITY IDEOGRAPH-FA28 | CJK UNIFIED IDEOGRAPH-FA28 |
| 隄         | CJK COMPATIBILITY IDEOGRAPH-FA29 | CJK UNIFIED IDEOGRAPH-FA29 |