

Date: Oct. 30, 2011  
 To: Unicode Technical Committee  
 Subject: Further emoji distinctions and issues  
 From: Peter Edberg, with input from Asmus Freytag, Ned Holbrook, Yasuo Kida, Mark Davis, Kat Momoi, Murray Sargent, and Ken Lunde (though I don't claim that they agree with this document or that it accurately represents their input).

The material in this section is not part of the Emoji Variation Sequences proposal (and the suggestions here are beyond the scope of that proposal), but is provided to capture additional points raised in preliminary discussion of that proposal.

It has been suggested that there may be a need, at least in some cases,

- to distinguish among different emoji currently mapped to the same Unicode characters, by using additional “emoji-style” variation selectors for certain characters;
- to alter the Unicode encoding for certain emoji.

It is important to note that the different representations among emoji given below do not normally co-exist on the same platform; each platform typically uses only one of the emoji representations.

Also note that proposal L2/10-458 of November 2010 from Ken Lunde and Sairus Patel suggested using variation sequences as “a way to standardize the recording of subtle differences in emoji” such as differences between carrier representations for the same emoji.

## 1. The zodiac signs

The Unicode Standard has since version 1.1 included a set of zodiac symbols U+2648..U+2653: ♈, ♉, ... , ♎, ♏. The corresponding DoCoMo and Softbank emoji glyphs are color versions of these symbols. The KDDI glyphs are figures depicting what the symbols represent: ram 🐏, bull 🐮, ..., water carrier 🧑‍🚰, fish 🐟. The KDDI SJIS codes for these form a contiguous range of 12 and are clearly intended to represent the zodiac signs. However, it is possible (for example) that a KDDI user may use the emoji for zodiac sign pisces to represent a fish, not the zodiac sign.

The possibility of using a second “emoji-style” variation selector to indicate the figure (as in KDDI) was raised. However, Asmus feels that the use of variation selectors for cases like this would be “inappropriate...the variations are a reflection not of different ‘Glyph Variations’ but of ‘different symbols’”

Asmus: “In particular, unification of zodiac SYMBOLS with zodiac PICTURES is in my view totally inappropriate. The traditional symbolic representations may have fixed semantics that are limited to the zodiac but the pictures do not. Unifying these on the CHARACTER level means asserting that their semantic range is the same - that is clearly not even approximately the same.

“In isolation 🏹 or 🐟 could stand for some totally different things, from cupid to



animals.



“Here, the UTC needs to rectify a mistake. Compounding this mistake by using variation selectors would introduce true pseudo-coding.”

Disunification of the zodiac figures would presumably introduce a parallel set of 12 zodiac figures, including a fish for pisces. However, this could lead to other problems. For example, `1F41F;FISH` already exists as a separate character (which does not exist in the KDDI set, and for which the KDDI pisces figure is already a fallback mapping).



## 2. Other unified emoji glyph differences that may communicate different ideas

The issues are similar to those with the zodiac signs.

`26F3;FLAG IN HOLE` (generically golf): DoCoMo , KDDI/Softbank 

`26FD;FUEL PUMP` (generically gas station): DoCoMo , KDDI/Softbank 


## 3. Emoji unifications that may have identity issues


`267B;BLACK UNIVERSAL RECYCLING SYMBOL: TUS` , DoCoMo/KDDI 


Asmus: “The ‘recycling’ emojis, being two arrows, are incorrectly unified with 267B. That symbol is strictly limited to a design using three arrows in a triangle. Overloading this to mean ‘any kind of recycling symbol’ is changing its semantics in ways that should have been recognized by UTC as unacceptable.

“The two arrow design is often used as indicator for ‘refresh’ or ‘reload’ while the traditional 267B cannot be used for that semantic.”

## 4. Non-unified emoji glyph differences that may communicate different ideas

One example is for `1F393;GRADUATION CAP`, for which the Unicode standard has the glyph .

For KDDI, the glyph is , a graduation cap - an uncommon style but used by some colleges / universities.

For Softbank, the glyph is , a high school uniform with heart marks, which suggests graduation from high school (girls ask for buttons from the uniform of graduating boys). However, Softbank has not suggested that there is an issue with the difference between their glyph and the TUS glyph.

## 5. Unified emoji glyph differences that likely do not communicate different ideas

There is a wide range of emoji representation for two Dingbats symbols.

`2733;EIGHT SPOKED ASTERISK: KDDI` , Softbank , Apple 

2734;EIGHT POINTED BLACK STAR: KDDI ✨, Softbank ✨, Apple 🍏

The different representations do not appear to fall into categories that could have different communicative intent.

## 6. Framed versus unframed glyphs

Some emoji differ across representations in whether they have a frame/enclosure/background. Examples:

267F;WHEELCHAIR SYMBOL: DoCoMo / KDDI ♿ ♿, Softbank ♿

2665;BLACK HEART SUIT: DoCoMo / KDDI / Softbank ❤️ ❤️ ❤️, Apple 📱❤️

25B6;BLACK RIGHT-POINTING TRIANGLE: KDDI / Softbank ▶️ ▶️, Apple 📱▶️

## 7. Black cloud, white cloud (not an emoji-related issue)

The TUS glyph for 2601;CLOUD was changed in Unicode 6.0 from a black cloud to a white cloud.

Asmus: “Because a black cloud has specific semantics, replacing the glyph as was done recently with a white cloud improperly affects the identify (semantics) of the character. The original character may not have been meant to signify a black cloud, but it could have been used for this purpose by anyone. Updated fonts, tracking the glyph change, would then change the meaning.

“This needs to be backed out, and the two variations encoded separately.”