Proposal for New Emoji

David P. Kendal

August 19, 2017

It is proposed to add new modifier characters to Unicode to allow objects depicted in emoji to appear in different colours. This generally applies to inanimate objects such as bicycles, plain coloured flags, as well as to clothes, but animals and abstract shapes may also be coloured.

1 Identification

Twelve combining characters each having a Unicode name of the form:

EMOJI MODIFIER COLOUR <name>

And CLDR name

colour <name>

And keywords

colour | <name>

One for each of the following colour names:

- red
- orange
- yellow
- green
- dark blue
- light blue
- pink
- purple
- brown
- black
- grey
- white

2   Images

Images of the 'bare' forms of the modifiers, as well as examples of how they would work to modify U+1F3F4 WAVING BLACK FLAG, can be downloaded from `http://dpk.io/bctproposal.zip`.

I have designed the bare forms myself and I hereby release them to the public domain.

The example flag images are taken from Wikimedia Commons, where they were uploaded by their designers under the usernames Nikodemos, Wereon, and Rocket000 and released to the public domain. They are thus completely free for all purposes.

3   Selection factors — inclusion

A. Compatibility

No compatibility concerns.

B. Expected usage level

1. Frequency
Given the wide range of possible meanings (documented below), frequent use seems likely.
2. Multiple usages
Each of the colours proposed for encoding has multiple usages and symbology, varying across cultures.

Black, for instance, is a colour used to symbolize death and mourning in many countries. When using clothes emojis in the context of discussing plans for a funeral, the brightly-coloured default appearances of U+1F457 DRESS or U+1F697 AUTOMOBILE would not be appropriate. With an EMOJI MODIFIER COLOUR BLACK applied, the former would be appropriate attire for a traditional funeral, and the automobile could represent a hearse.

In combination with certain animals, a combiner could represent an animal with a particular colour of skin or fur. U+1F404 COW with a brown modifier applied could be a brown cow.

The proposal is particularly relevant for flag emojis. Flags of different colours are used to represent different political ideologies: a red flag for socialism, a yellow flag for liberalism, etc. (See e.g. the Wikimedia Commons pages for waving flag icons,[1] many of which have descriptions of their political symbology.) (They would be combined with U+1F3F4 WAVING BLACK FLAG to create the different colours.)
3. Use in sequences
Proposal is for combiners.

Could be used in combination with images of people, such as U+1F57A MAN DANCING, to select the colour of the depicted person's clothes.
4. Breaking new ground
There is currently no way to do this.

---

[1] `https://commons.wikimedia.org/wiki/Category:Waving_flag_icons`

C. Image distinctiveness

Not especially relevant for this proposal, as it covers combiners applying to other characters. However, the colours would be prominent and distinctive parts of each character they applied to, as explained above.

D. Completeness

There are already different-coloured versions of some emoji, e.g. U+1F3F3 WAVING WHITE FLAG and U+1F3F4 WAVING BLACK FLAG, as well as several different colours of heart shape and book. It would complete these nicely to be able to apply any colour to any object.

E. Frequently requested

I am not privy to the requests that Unicode Consortium member companies receive for emojis, but I have wished on many occasions for versions of emojis in different colours, and I'm sure I'm not the only one. Requests for different colours of objects have presumably been received.

4 Selection factors — exclusion

F. Overly specific

The modifier characters would apply to many different kinds of emoji (mostly those representing inanimate objects) and thus cannot be said to be overly specific.

    The shades chosen are based on the maximum linguistic categories of basic colours that have been found.

G. Open-ended

The twelve colours selected are the 'basic colour terms' identified by Berlin and Kay (1969),[2] whose most well-known appearance together in a single language is in Russian.

    They are the colours likely to be perceived as distinct by people across many different languages. Berlin and Kay's work suggests that any language with 12 colour terms will have words for these shades, and any language with around 8 or 9 colour terms will have reasonably concise ways of distinguishing between them. (English has eleven, for example, lacking only distinction between light and dark blue.)

    (N.B. Some of Berlin and Kay's findings have been disputed by other scholars. However, the findings that relevant to this proposal are that (a) twelve is the maximum number of basic colour terms and (b) the twelve terms are those listed here. These two findings are essentially uncontroversial, as far as I know.)

---

[2]`https://en.wikipedia.org/wiki/Basic_Color_Terms:_Their_Universality_and_Evolution`

H. Already representable

With the exception of those emoji which already have multiple colour variants encoded, there is no way to have items in different colours.

I. Logos, brands, UI icons, signage, specific people, deities

No problems.

J. Transient

The meanings of colours may change over time; the colours themselves do not.

K. Faulty comparison

The proposal is based on the existing modifiers for skin tone and gender. It could reasonably argued that those addressed a pressing need to represent human diversity while the colour of inanimate objects or clothes is of secondary importance.

I would agree with the premise of such an argument, but I think the inclusion of object colours is also important.

The presence of e.g. the multiple colours of heart could also be seen as a faulty comparison, since they were (afaict) originally added for compatibility reasons. I think extending these with modifiers to cover a larger variety of emoji would avoid a lot of discussion in the future about whether to encode different colours of the same object.

5   Sort location

New category (object-colour) sorting immediately after the category skin-tone, ordering as listed above under 'Identification'.

6   Design considerations

Particularly dedicated designers might want to change the shape emoji items to match colours, as well as performing a palette swap. For instance, U+1F4EE POSTBOX might be yellow (Germany, France, Spain, etc) or blue (USA, etc) and rectangular by default, but when coloured red might transform into a British pillar-box. That would be up to the individual emoji font designer. The design change could also be to make particular elements of the design easier to make out at size when printed in a particular hue.

Dark blue is intended to be closer to medium blue than navy or steel blue (i.e. it is 'dark' in the sense of 'not pale' — and consequently not too low on the Munsell Value scale).

7   Additional notes

If the subcommittee feels that twelve is too many colours, it would be reasonable to pare this proposal down to just the six primaries of Hering: black, white, red, yellow, green, and blue.

However, this presents problems, the first of which is related to compatibility. There are already U+1F49C PURPLE HEART and U+1F4D9 ORANGE BOOK characters, and possibly other existing coloured emoji which I missed while compiling this proposal, which have colours which are not in the basic primaries. This would cause the proposal to fail the 'completeness' selection factor if adopted. An exception could be made for these two (and and other) colours not otherwise represented in the primaries. However, users might then reasonably wonder why there is purple but no pink, and orange but no grey.

Equally, speakers of languages with large numbers of distinctions are likely to be annoyed by colours they perceive to be missing. While English speakers might not mind there only being one blue combiner, Russian speakers would rightly want light and dark blue separately, just English speakers would find it unnatural for the 'red' modifier to produce pink.