

Universal Multiple-Octet Coded Character Set
International Organization for Standardization
Organisation internationale de normalisation
Международная организация по стандартизации

Doc Type: Working Group Document

Title: Towards dealing with hair styles and colouring in the UCS

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Action: For consideration by JTC1/SC2/WG2 and UTC

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1. The problem. Four characters have been added to the ballot in order to allow sequencing to permit colour alterations of a variety of base characters encoded as graphic characters and used as emojis.

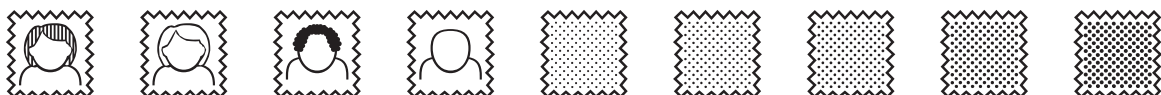
1F9B0 TOP OF HEAD WITH RED HAIR
1F9B1 TOP OF HEAD WITH CURLY HAIR
1F9B2 TOP OF HEAD WITH NO HAIR
1F9B3 TOP OF HEAD WITH WHITE HAIR

These are, no matter what anyone wants to pretend, disembodied human scalps, and scalping is the barbarous act of cutting or tearing a part of the human scalp, with hair attached, from the head of an enemy as a trophy. If we encode these four characters as-is, they *will* be found and misused (even if not put on keyboards), and that sort of hateful thing is something which we can avoid if we simply examine the issue further. There appear to be two reasonable solutions to this problem. One is an immediate fix; the other could solve a more comprehensive problem.

1. Emoji hair-specific modifiers. Rename the four characters and change their glyphs similar to the way recommended by Charlotte Buff in L2/17-376 (I have modified the character names to conform to the pattern set by the Fitzpatrick modifiers):

1F9B0 EMOJI MODIFIER RED-COLOURED HAIR
1F9B1 EMOJI MODIFIER WHITE-COLOURED HAIR
1F9B2 EMOJI MODIFIER CURLY HAIR
1F9B3 EMOJI MODIFIER BALD OR THINNING HAIR

The following glyphs would be reasonable, also following the pattern of the Fitzpatrick modifiers (shown for comparison):

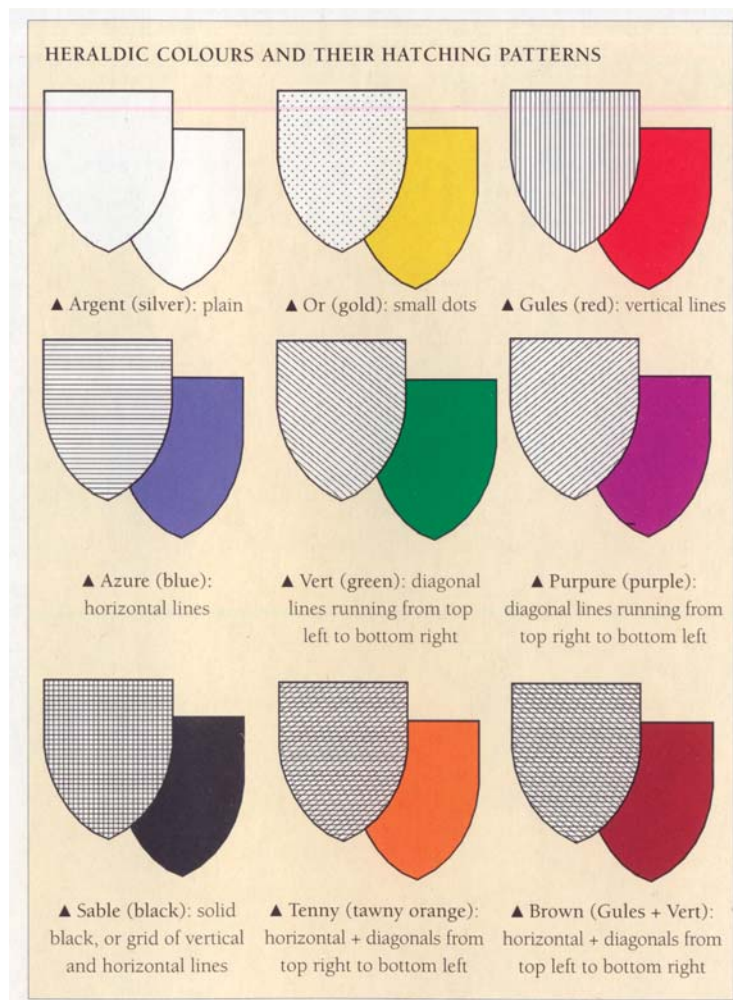


What this does not respond to is the question of the representation of grey hair, or blond hair, or brown or black hair, or hair that has been dyed various colours. *At a minimum the names and glyphs currently on the ballot should be changed to these.* There is however another option.








2. Emoji colour-specific modifiers. There have from time to time been requests to add colour-specific modifiers to the UCS. A set of hatchings deriving from medieval heraldry have already been used to distinguish in black-and-white a number of colours, in glyphs such as U+1F34E 🍏 RED APPLE and U+1F34F 🍏 GREEN APPLE, U+1F3D7 📖 GREEN BOOK, U+1F3D8 📖 BLUE BOOK, U+1F3D9 📖 ORANGE BOOK, U+1F499 💙 BLUE HEART, U+1F49A 💚 GREEN HEART, U+1F49B 💛 YELLOW HEART, U+1F49C 💜 PURPLE HEART, U+1F9E1 🧡 ORANGE HEART:









Recently in L2/17-355 David P. Kendal proposed a set of 12 emoji colour modifiers, which could, subject to specific agreements, be used to specify the colour of characters. In 2011, document N4011 (L2/11-094) proposed a number of additions to augment an existing set of square boxes with a variety of hatchings in them, since seven of these were encoded long ago in the UCS in the Geometric Shapes block at U+25A2 and U+25A4..25A9. The UCS character names list does not give any information as to their original intended purpose, but they do correspond to traditional hatching patterns. Taking Kendal’s proposal at face value, it might be sensible not to add a whole set of new characters, but to take existing hatching characters that map to them and then to add some additional hatched geometric shapes to fill the gaps.



Kendal requests emoji modifiers for 12 colours: *red*, orange, yellow, *green*, *dark blue*, light blue, pink, *purple*, brown, *black*, grey, *white*. Of these, 6 are encoded (the 7th, used for murrey, is given for completeness) and 6 would need to be encoded:

- 
25A1 WHITE SQUARE
 - used in heraldic hatching for argent or silver or white
- 
25A4 SQUARE WITH HORIZONTAL FILL
 - used in heraldic hatching for azure or blue
- 
25A5 SQUARE WITH VERTICAL FILL
 - used in heraldic hatching for gules or red
- 
25A6 SQUARE WITH ORTHOGONAL CROSSHATCH FILL
 - used in heraldic hatching for sable or black
- 
25A7 SQUARE WITH UPPER LEFT TO LOWER RIGHT FILL
 - used in heraldic hatching for vert or green
- 
25A8 SQUARE WITH UPPER RIGHT TO LOWER LEFT FILL
 - used in heraldic hatching for purpure or purple
- 
25A9 SQUARE WITH DIAGONAL CROSSHATCH FILL
 - used in English heraldic hatching for murrey or reddish purple

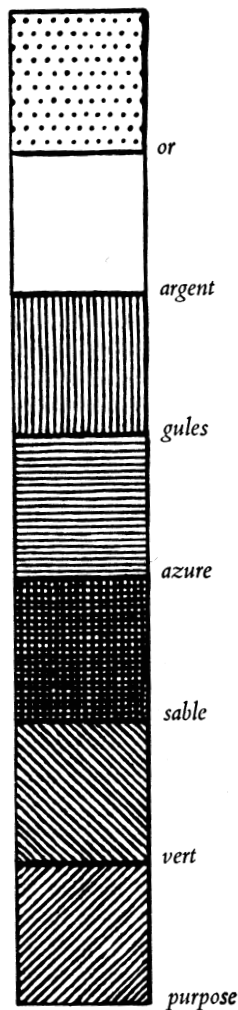
These are already in the standard. The idea then would be to add these:

- 
1F7D9 SQUARE WITH VERTICAL LINE AND DOT FILL
 - used in heraldic hatching for orange
- 
1F7DA SQUARE WITH DOTTED FILL
 - used in English heraldic hatching for Or or gold or yellow
 - the dots in this glyph will need to be made larger
- 
1F7DB SQUARE WITH HORIZONTAL LINE AND DOT FILL
 - used in English heraldic hatching for bleu celeste or light blue
- 
1F7DC SQUARE WITH OFFSET VERTICAL LINE FILL
 - used in German heraldic hatching for carnation
- 
1F7DD SQUARE WITH VERTICAL AND UPPER LEFT TO LOWER RIGHT FILL
 - used in English heraldic hatching for tenné or tawny, a light brown
- 
1F7DE SQUARE WITH ALTERNATING HORIZONTAL AND VERTICAL LINE FILL
 - used in German heraldic hatching for ashen grey

This taxonomy would cater adequately to the demand for colour modifiers in general. For hair curliness a pictogram of a coiled spring, could be added; for baldness, a safety razor could be added.



Perhaps conflating hair colour and other colours would not be a good idea, in which case both of the schemes presented here would be adequate to represent the two sets of requirements.



35.

it should be depicted in its really correct tones or tints, without any attempt to assimilate these with any heraldic tincture. It will not be found in the very ancient coats of arms, and its use is not to be encouraged. When a natural animal is found existing in various colours it is usual to so describe it, for the term 'proper' alone would leave uncertainty. For instance, the crest of the Lane family, which was granted to commemorate the ride of King Charles II behind Mistress Jane Lane as her servant, in his perilous escape to the coast after the disastrous Battle of Worcester, is blazoned 'a strawberry roan horse, coupé at the flanks proper, bridled sable, and holding between the feet an Imperial crown also proper'. Lord Cowper's supporters were, on either side of the escutcheon, 'a light dun horse proper, with a large blaze down the face, the mane close shorn except a tuft on the withers, a black list down the back, a bob tail, and the near fore-foot and both hind feet white'. Another instance that might be quoted are the supporters of Lord Newlands, which are: 'On either side a dapple-grey horse proper, gorged with a riband and suspended therefrom an escutcheon gules, charged with three bezants in chevron.' The crest of the family of Bewes, of St Neots, Cornwall, is: 'On a chapeau gules, turned up ermine, a pegasus rearing on his hind legs of a bay colour, the mane and tail sable, winged or, and holding in the mouth a sprig of laurel proper.'

There are and were always many occasions in which it was desired to represent armorial bearings in black and white, or where from the nature of the handicraft it was impossible to make use of actual colour. But it should always be pointedly remembered that unless the right colours of the arms could be used the tinctures were entirely ignored in all matters of handicraft until the seventeenth century. Various schemes of hatchings, however, were adopted for the purpose of indicating the real heraldic colours when arms were represented and the real colours could not be employed, the earliest being that of Francquart in Belgium, circa 1623. Woodward says this was succeeded by the systems of Butkens, 1626; Petra Sancta, 1638; Lobkowitz, 1639; Gelenius; and De Rouck, 1645; but all these systems differed from each other, and were for a time the cause of confusion and not of order. Eventually, however, the system of Petra Sancta (the author of *Tesseræ Gentilitia*) superseded all the others, and has remained in use up to the present time.

Upon this point Herr Ströhl in his *Heraldischer Atlas* remarks: 'The system of hatching used by Marcus Vulson de la Colombière, 1639, in the course of time found acceptance everywhere, and has maintained itself in use unaltered until the present day; these are shown in 35, only that later, hatchings have been invented for brown, grey, &c.; which, however, seems rather a superfluous enriching.' None of these later creations, by the way, have ever been used in this country. For the sake of completeness, however, let them be mentioned (see 36): *a*, brown; *b*, blood-red; *c*, earth-colour; *d*, iron-grey; *e*, water-colour; *f*, flesh-colour; *g*, ashen-grey; *h*, orange; and *i*, colour of nature. In English armory 'tenné' is represented by a combination of horizontal (as azure) lines with diagonal lines from sinister to dexter (as purpure), and sanguine or murrey by a combination of diagonal lines from dexter to sinister (as vert), and from sinister to dexter (as purpure).

The hatchings of the shield and its charges always accommodate themselves

Figure 1. Text from Fox-Davies 1985 describing tincturing and showing various styles of hatching. (This is one of the most authoritative of texts on heraldry.)

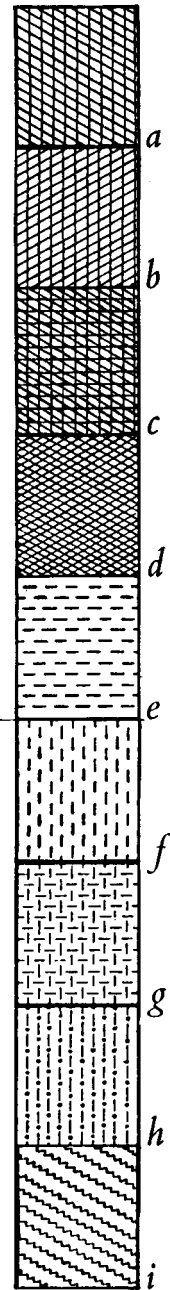
to the angle at which the shield is placed, those of the crest to the angle of the helmet. A curious difficulty, however, occurs when a shield, as is so often the case in this country, forms a part of the crest. Such a shield is seldom depicted quite upright upon the wreath. Are the tincture lines to follow the angle of the smaller shield in the crest or the angle of the helmet? Opinion is by no means agreed upon the point.

But though this system of representing colours by 'hatching' has been adopted and extensively made use of, it is questionable whether it has ever received official sanction, at any rate in Great Britain. It certainly has never been made use of in any official record or document in the College of Arms. Most of the records are in colour. The remainder are all without exception 'tricked', that is, drawn in outline, the colours being added in writing in the following contracted forms: 'O', or 'or', for or; 'A', 'ar', or 'arg', for argent; 'G', or 'gu', for gules; 'Az', or 'B' (for blue, owing to the likelihood of confusion between 'ar' and 'az', 'B' being almost universally used in old trickings), for azure; 'S', or 'sa', for sable; 'Vt' for vert, and 'Purp' for purpure. It is unlikely that any change will be made in the future, for the use of tincture lines is now very rapidly being discarded by all good heraldic artists in this country. With the reversion to older and better forms and methods these hatchings become an anachronism, and save that sable is represented by solid black they will probably be unused and forgotten before very long.

The plain, simple names of colours, such as red and green, seemed so unpoetical and unostentatious to the heralds and poets of the Middle Ages, that they substituted for gold, topaz; for silver, pearl or 'meergries'; for red, ruby; for blue, sapphire; for green, emerald; and for black, diamond or 'zobel' (sable, the animal, whence the word 'sable'). Let the following blazonment from the grant of arms to Mödling bei Wien in 1458 serve as example of the same: 'Mit namen ain Schilt gleich getailt in fasse, des ober und maister tail von Rubin auch mit ainer fasse von Berlein, der under thail von grunt des Schilts von Schamaragaden, darinneain Pantel von Silber in Rampant'—(lit. 'Namely, a shield equally divided in fess, the upper and greater part of ruby, also with a fess of pearl, the under part of the field of the shield of emerald, therein a panther of silver, rampant'); that is, 'Per fess gules and vert, in chief a fess argent, in base a panther rampant of the last.'

Even the planets, and, as abbreviations, their astronomical signs, are occasionally employed: thus, the *sun* for gold, the *moon* for silver, *Mars* for red, *Jupiter* for blue, *Venus* for green, *Saturn* for black, and *Mercury* for purple. This aberration of intellect on the part of medieval heraldic writers, for it really amounted to little more, had very little, if indeed it had any, English official recognition. No one dreams of using such blazon at the present time, and it might have been entirely disregarded were it not that Guillim sanctions its use; and he being the high priest of English armory to so many, his example has given the system a certain currency. I am not myself aware of any instance of the use of these terms in an English patent of arms.

The furs known to heraldry are now many, but originally they were only two, 'ermine' and 'vair'. Ermine, as every one knows, is of white covered with black spots, intended to represent the tails of the animal. From ermine has been evolved the following variations, viz. ermines, erminois, pean, and erminites. 'Ermines' is



36.

Figure 2. Text from Fox-Davies 1985 describing tincturing and showing various styles of hatching.

(This is one of the most authoritative of texts on heraldry.)