Mariposa, John, Henry and Caroline Appleby are in the common room.

"Can I ask your comments about something not to do with work that I have been looking at at home in the evenings please?" asks Mariposa.

There is general agreement to proceed.

"I saw a presentation on the web about what are termed abstract emoji. Some of them, which caught my interest first off, are for personal pronouns, such as 'I', 'we', 'you', 'she' and so on.

"The thing is, as they are abstract they may not be eligible for encoding as emoji in the character map, but it seems to me that they could be useful for mixing in with emoji in messages, because they go through the language barrier and are independent of any of the scripts used for ordinary languages.

"There are also other ones for such things as differentiating between an emoji used as the subject of a sentence or the object of a sentence. I've also had some ideas for some of my own too, such as an abstract emoji for the word that in English is 'however'.

"So it seems to me that if they are not eligible for encoding in the character map as such, maybe I could encode them using .... well, I don't know whether it is a markup system, or a language, or an auxiliary encoding, or whatever, but it occurs to me that if it is done in such a way such that not only do people know what it means by reading it but also that a smart font could use it to do a glyph substitution, then that would be good."

"That is interesting", opines Henry, "you could just call it 'The Mariposa System' without being specific as to how it is classified."

"I like that, 'The Mariposa System' as the name", opines John.

Caroline agrees.

"To use the system with glyphs one would need an appropriate smart font installed, so that will take time to achieve, but as a language, people could start using the codes now if they choose to do so, mixing them in with emoji", adds Henry.

"Have you any ideas of how to do the encoding?" asks Caroline.

"Yes, I am thinking to start each code with a percent sign and then add two digits, ordinary digits. For example, %11 for 'I', %12 for 'we', the 1 in %12 is for first person and the 2 is for plural. Though a person would read %12 in his or her own language - someone whose native language is French would read %12 as 'nous'.

"Though it quickly gets more complicated, because there are glyphs for inclusive 'we' and exclusive 'we', and then for 'we two' and 'we three or more' and so on.

"Then when we get to 'you', we get another issue, the way that some languages in some situations use the plural form in the singular. Like the French 'vous'. But to start with there are three glyphs for 'you', one for the plural form used in the singular, like 'vous' in French, one for the plural form as such, and one for the informal singular, like the French 'tu'. Then there are glyphs for 'you two' and 'you three or more'.

"But I am using %22 for the ordinary plural use of you, where the number of people is not indicated."

"What happens with third person, when there is 'he', 'she', 'it'?" asks Henry.

"Actually, I gave that quite a lot of thought. Eventually I decided that %31 should be for the singular 'they' in English - I know that there is discussion about using it, but that is what I decided to do."

"Ah!"

"As it happens the collection of glyphs that I found on the web did not have a glyph for singular 'they', ... so I designed one and made an image file for it myself, ... but I used the same size and the same colours as used for the original collection and I tried to design it in the same style.

"Third person singular also has glyphs for 'it', 'he', 'she', and 'one', so I have encoded those too, but I kept %32 for the ordinary plural 'they', so that the six basic everyday ones are using the basic pattern of a percent sign followed by the person number followed by 1 for singular and 2 for plural.

"I encoded 'it', 'he', 'she', and 'one' from %33 to %36 in that order. I put 'it' first because it is the basic design and the glyphs for 'he' and 'she' are based upon it. .... The glyph for singular 'they' is also based upon the glyph for 'it', and that is listed with a lower code number than the glyph for 'it', but that is just how it has worked out. The glyph for 'one' is a bit different, but I suppose that with a limited format and trying to pack in a variety of glyphs that is what needed to be done with the design."

"What about the plural 'they'? Are there separate glyphs for what in French are 'ils' and 'elles'?"

"Yes," says Mariposa, "indeed there is also a glyph for 'they' when there is a mixture of males and females, as well as a glyph for when the genders of the group are not specified, so four glyphs for basic plural 'they' in all.

"I say 'basic' because there are also glyphs for 'they two' and 'they three or more' and with indications of which genders within those groups as well."

"That is interesting", opines Henry.

Mariposa continues, "Looking at the collection of glyphs in the original collection, it looks as though care has been taken so that if they are mirrored horizontally then there is no ambiguity of meaning amongst them, and also so that even in monochrome they are unambiguously distinguishable from one another.

"I have prepared a one page document showing the singular personal pronoun glyphs and the codes that I have used for them."

"Excellent, thank you", says Henry as he looks at the document that Mariposa has handed to him.

"But apart from the coding, I am wondering if the Secretary-General would be happy for me doing it and publishing it, at home, not linked to work at all?" adds Mariposa.

"Well, I'll ask her if you like", says John.

"Yes please, thank you."

John is telling Edith about Mariposa's ideas and of her wondering if it is alright to publish it, from home, not linked to work.

"Well, she is entitled to do whatever lawful activity she chooses when she is off duty, and I don't mind you all discussing it in the common room in breaks, but only in breaks and in the common room. Please make sure that none of the others get fascinated and want to start doing things with it at other times when they are here. Also, if she publishes it, no mention of this establishment at all, because of the risk of people conflating what we do with emoji, when the two are different topics."

"I'll make that clear to her and them."

"But it is all quite interesting as a development as it does involve communication through the language barrier to some extent, so please keep me informed as to any progress that you learn of about it all."

"Right."

"Oh, and if there is a novel about the story of her doing it, a separate novel from the novels about our work here, and I hope that there will not be any mention of the name of this establishment in any such spin-off novel."

"I am sure that that can be arranged."

Edith smiles.

The Mariposa System

Personal pronouns, singular
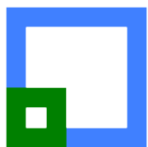
%11   I

%21   You (singular, formal)
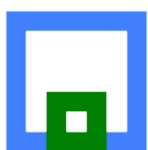
%29   You (singular, informal)

%31   They (singular, not gender specific)

%33   It

%34   He

%35   She

%36   One