How to Trigger the Evolution of full Emoji Language

Visualising abstract terms like *I* and *you*, *have* and *want*...

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Abstract: *It's the economy that has overcome hieroglyphics, and it's the digital technology that enables the economic visualisation of words, for instance when typing Chinese or entering emojis via the keyboard on WhatsApp. In this evolution of visual writing, emojis represent the current state-of-the-art, but their realistic style restricts the vocabulary to epitomes, to concrete terms like House, Hotel, and Hospital. Language, however, needs both concrete and abstract terms; in other words, visual language needs emojis and pictograms. Experimental practice therefore anticipates the further development of visual writing with letter-sized pictograms, and their use along with emojis, or as emojis, or rather "pictomojis". This allows for visual phrases and full sentences, while demonstrating the feasibility of a hybrid pictorial font that works as easy and fast as any letter font, but is easier, faster and more attractive to read. What's more, just a few "pictomojis", such as those for I and You, are likely to trigger the development of a virtually world-wide emoji language in emails and chats, comparable to the development of a natural language, all starting with: I love you.*

Pictograms 🧩&🧩 Emojis

For different reasons, pictograms and emojis are still on the threshold of visual script. Although Otto Neurath has developed a pictogram-based script called *Isotype*[1] almost a century ago, it is only the pictogram that gained international acceptance, not the script and its grammar. What it essentially lacked is evident only today in the use of emojis via the keyboard. Emoji, in turn, means e-image moji-character in Japanese, but we still use emojis like emoticons, without the vision of a pictorial script. Even though emojis represent a vocabulary from *Apple* and *Bus* to *Yoga* and *Zebra*, they hardly allow for a regular sentence; not even a kind of emoji pidgin has evolved. That's because near-photorealistic emojis can't represent abstract terms. Take the word "human", for example, or the possessive pronouns "I" and "You". How should emojis embody these concepts? With what sex, age, colour, clothes, hairstyle, etc.? For that, they would have to ignore all individual characteristics, but they cannot, otherwise they would become pictograms. So isn't it time to think of pictograms and emojis alike as visual characters, and treat them as matching puzzle pieces, each with its own advantages in the following areas:

🧩 *Technology:* Unlike pictograms, emojis are pre-installed in a digital font, ready to use in all operating systems, just like letters. So far, however, not all text applications allow you to write emojis by typing words that have the "same" meaning, but this is only a matter of time.

🧩 *Handling:* Retrieving more and more emojis (and pictograms) from areas like *Animals & Nature, Food & Drink*, etc. takes time and is full of pitfalls. For example, the emoji *tractor* can only be found under *Travel & Places*. The best solution to this problem can be seen when typing Chinese or entering emojis via the keyboard on WhatsApp. In both cases, a menu bar suggests not only different words, but also "synonymous" emojis that can be inserted into the text with a click of the mouse or a tap of the finger. As this *emoji-typing*[2] is linked to words, the user gradually gets used to visual concepts representing verbal terms.

🧩 *Economy:* Egyptian hieroglyphs were beautiful, but took time and expensive material. It was therefore the economy that overcame the alphabet. Letterpress printing then also rationalised the reproduction of images, opening up the prospect of a new visual script in the form of pictograms, see *Isotype*[1]. But even when printed, pictograms required a great deal of effort, and with the advent of the mechanical typewriter, they fell behind the technical progress of writing. It’s only now that computers are also working as "typewriters" for visual signs, for emojis, as you can see, and for pictograms, if you like.

🧩 *Typography:* Realistic images in the size of letters, known as emojis, are an achievement of computer graphics. They are attractive and self-evident, but unlike abstract pictograms, their typography limits the visualisation to concrete terms, to epitomes such as those for *House, Hotel,* and *Hospital*. Pictograms, on the other hand, are not yet explicitly designed to fit into a line along with letters.

🧩 *Semantics:* In their own way, pictograms and emojis embody the dialectical unity of the abstract and the concrete, the rational and the emotional, yet we keep them strictly separate: pictograms in user manuals, emojis in personal chats. But since language includes both, visual writing can only be created with emojis and pictograms side by side. Moreover, pictograms could expand the visual vocabulary not only with abstract terms, but also with already familiar characters, which already outnumber the vocabulary of emojis many times over.

🧩 *Grammar:* Unless visual writing follows the rules of verbal language, the formation of concepts and sentences is generally based on the conditions of human perception, not to say the laws of Gestalt. Thus, visual grammar appears in similar ways throughout the history of pictorial script, as in the use of metaphors, epitomes, and determinatives. In modern times, visual grammar has also been represented by pictograms in various versions from *Isotype*[1] 1946 to *Pictoperanto*[3] 2011.

🖼️ All in all, the puzzle pieces apparently fit together, showing the blueprint for a visual font that is as easy and fast to use as any letter font[4]. What's still missing are letter-sized pictograms, or emojis that are as abstract as pictograms. In a word, *pictomojis*.

Pictomojis: Pictograms in Letter Size as Characters

Since the advent of computers, it is the digital "techno-*logic*" that has driven the visualisation of ideas, messages and concepts, of thoughts and feelings, and that will eventually lead to the visualisation of writing, according to Vilém Flusser in his book *Does Writing Have a Future?*[5], published decades before the rise of emojis. The experimental design of the time resulted in letter-sized pictograms that could be embedded as visual characters in digital fonts such as Times or Helvetica. On a Macintosh computer, however, the state-of-the-art only allowed pictograms[6] to be 24 pixels high, the same height as early letter fonts. (Fig.1 shows a coloured version)

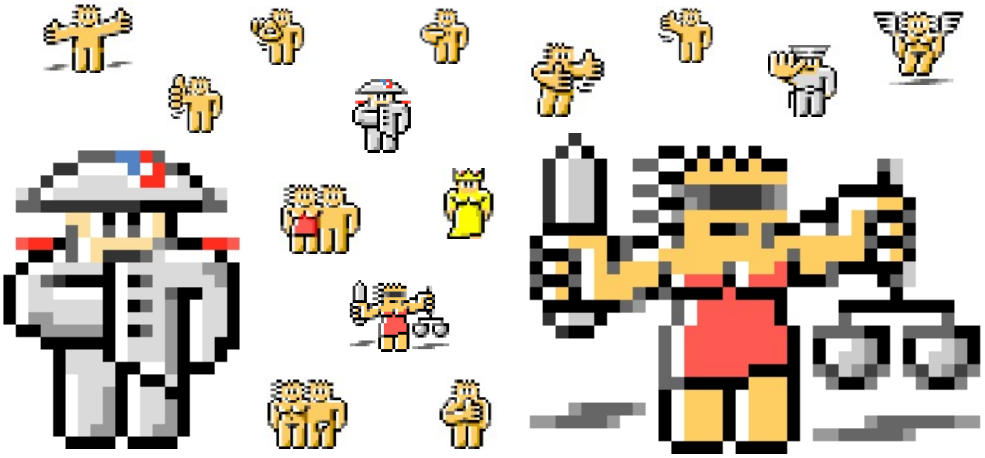
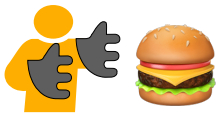


Fig. 1: Letter-sized pictograms 1988

As we know, it was not the body language of pictograms but the facial expressions of emoticons and emojis, that were introduced into email and chat, not least because they are easy to recognise in a line of letters. Subsequently, ever-increasing pixel density has favoured the realistic style of emojis over abstract pictograms, especially at Apple, where the current emoji font has only four pictograms, or rather *pictomojis*: 🗣👤👥🫂. But the key question now is how, and in what form, further pictograms can be used to visualise grammatical concepts and thus trigger regular sentence building. This question can only be answered tentatively and illustrated by examples (Fig. 2).



In the future, complex and therefore larger pictograms will probably be given more space between the lines, depending on how significant they become. Within today's standards, however, only the upper body is recommended for humans 👤👤, preferably with oversized hands and four fingers 🫷🫸🫰🫵 like Donald Duck. In this design, pictograms allow visual phrases such as: *See you soon* 👁️🫸👁️ ⚖️⌚, and whole sentences like: *I love you so much* 🫵❤️🫸🫸, or *I want you to kiss me:* 🫵🫵🫸💋🫰. What remains to be discussed is the graphic design, its style, and its target groups. One point of reference may be a current trend promoted by Adobe under the slogan "*Icons that catch the eye*"[7]. This style may not be to everyone's taste, or for every occasion, but why shouldn't the typography of visual characters become as varied and sophisticated as the typography of the letters? So, graphics and style aside, the current combination of experimental pictograms and emojis essentially illustrates the following observation and conclusion: The modern evolution of visual writing, which dates back to printing and the mechanical reproduction of pictograms, has split up after the digital revolution into a separate vocabulary of abstract pictograms and realistic emojis, but together, they now meet all the requirements for a hybrid pictorial font that is as easy and fast to use as any alphabetic font, but easier, faster and more attractive to read in any language. But how does the stone get rolling?

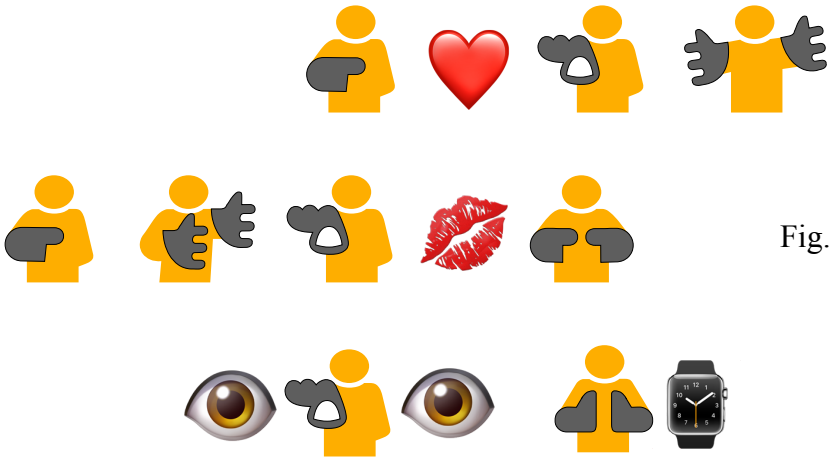


Fig. 2: Visualising key terms.

I and You get the Rosetta Stone Rolling

Thesis and experiment

The YouTube video[9] *Learning English with Pictograms and Emojis* is about using just a few pictograms to illustrate many common phrases and basic sentences, along with the vocabulary of emojis. This supports the assumption that just a dozen pictograms - once they are generally available like emojis or as emojis - will trigger a kind of grassroots movement in which linguistic structures will emerge, as in the development of a natural language. However, the project of actually introducing a new pictorial script requires a fundamental rethinking of the current way pictograms and emojis are designed and used. This usually happens very slowly or only after a run-up, even if the time is right. A good example is the history of emojis, where three, four or five simple emoticons first popularised the use of visual signs in emails and chats before Apple, Google & Co could risk jumping on the bandwagon. For now, however, the question is whether the next step across the threshold to visual writing will or can be similar. One way to try this out is to use a free font[10] with pictograms for: *I*, *you*, *we*, *me*, *not*, *no*, *cordial*, *want*, *small, little*, *big, great* and *make*. Then, already known pictograms for abstract concepts[3] could be reviewed, for example, the auxiliary verb *have*, which resembles the Chinese pictogram for *have* 有 (hand on meat). This character not only allows sentences like: *I have money*, it also explains the personal pronouns *my*, *your*, *our*, and the genitive, as in: *Grandma's cat is dead*. Further examples of are shown in a fictional email (Fig. 3).

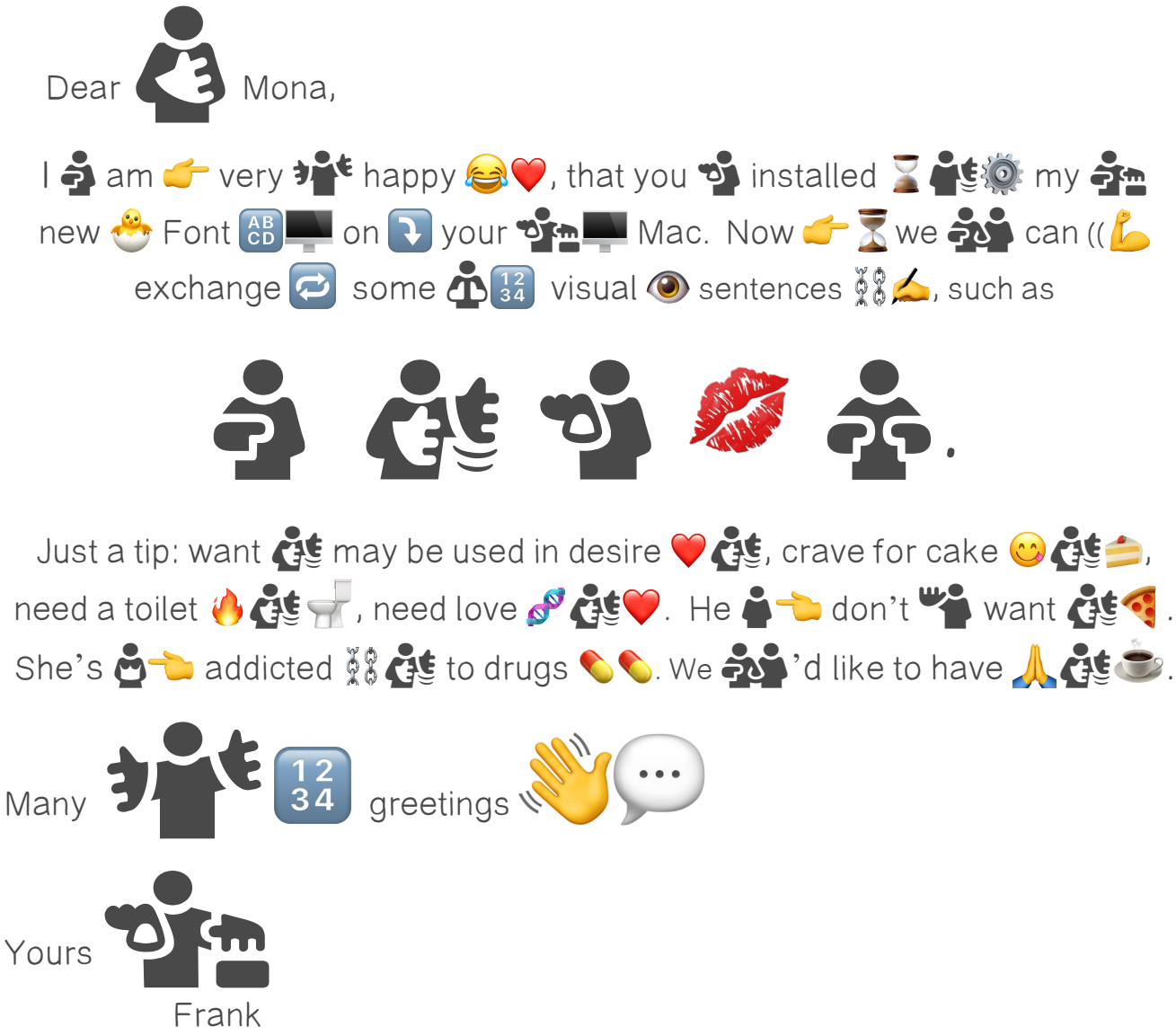


Fig. 3: Email with an experimental pictogram font[10].

Writing Transcends Language

A triad of characters

Fig. 4: Triad of characters

Now that it is no longer a technical problem to extend a digital font with any number of pictograms, combine them with emojis and use them by keyboard, the question is: how will we use the extended vocabulary of visual characters, and in what context? Email or chat? News or advertising? Writing for the illiterate or for speed readers? Children's books or novels? In theory, a vocabulary of visual characters that adds colour, nuance and multiple connotations to verbal language, alongside the alphabet, should lead to an emotionally and cognitively expanded concept of education. This may be hard to imagine in the face of childish emojis and experimental pictograms, yet the development of visual writing seems to amount to an increasingly significant interaction of at least three semantic categories: pictograms, emojis, and letters (Fig. 4). Not to mention the future of animated and audibly determined characters. In summary, writing goes beyond language until one day it can be said: "Whereof we cannot speak, thereof we must remain silent" – or write about it. Sometimes even with non-linear sentences (Fig. 5).

Fig. 5
Non-linear writing

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