Pictomoji

Emoji-Sized-Pictograms, Key to Visual Language Evolution

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Abstract

Since most emojis can be read as nouns, compound terms such as *cookbook*, and verbs illustrated by speed lines as in a comic book can easily expand the vocabulary many times over. However, representing abstract terms requires abstract visual characters like pictograms. This is especially true for the key words of sentence building, which are above all "I" and "you". Nevertheless, before we can use pictograms like emojis, alongside emojis or as emojis, they need a redesign in letter-size. Following this roadmap to visual writing, this paper presents a YouTube language course that illustrates English sentences using emojis if possible and pictograms if not. The aim is to explore the graphics and semantics of pictograms and emojis in parallel with English, and as a regular visual language, as *Pictomoji.*

1 The Emoji Vocabulary at Hand

Apart from emoticons in the form of yellow smileys, almost all emojis can be regarded as part of a *pasigraphy*, a writing system where each symbol represents a notion. Emojis depicting notions such as key 🔑, bee 🐝 or hamburger 🍔 already match this kind of language, and further extensions only require some basic rules of visual grammar, as outlined in *Pictoperanto* (Gros, 2011). The most frequent pattern of any language building is the creation of compound terms like *e-car* 🔌🚗 and *solar energy* ☀️🔌 including compound terms that have their own names in English, such as *pork* 🐖🥩 and *beef* 🐄🥩. Doubling a noun depicts the plural, as in the Chinese writing of *tree* 木🌳, *trees* 林 🌳🌳, and *woods* 森 🌳🌳🌳. Comics have coined key images, such as for *word* 💬, *bark* 🐶💬, *think* 💭, and *dream* 😴💭. Multiple epitomes used, for example, to represent *weather* 🌦️ could depict *farming* 🌾🚜🐄, or *junk food* 🌭🍕🍔. Speed lines showing motion and thus defining, for example, the verb *wave* 👋 can be applied to many emojis, even using ordinary parentheses to show verbs such as *ring* ((🔔 or *burn* ((🔥. The present and past tense may be illustrated with hourglasses, as in *burning* ((🔥⏳ and *burnt* ((🔥⌛. An upside-down hourglass could then signify the future. Regular sentence building, however, also requires pictograms formatted like emojis, as shown in the following.

2 Pictomoji

Since the advent of emojis, we need to rethink pictograms because emojis embody a fundamentally new state-of-the-art for visual characters. Yet emojis also appear in a new light when viewed as just a new member in the family of visual characters. This approach highlights the differences and respective advantages of emojis and pictograms. Most obvious is the difference between the *realistic* style of (Apple) emojis and the *abstract* design of (Otl Aicher) pictograms. This difference is not least due to technology and has led to different applications. Pictograms date back to the limited possibilities of printing, and their abstract shape favors functional use in manuals and information systems. Emojis, on the other hand, embody the new potential of digital graphics with realistic details and an unprecedented way of writing visual characters into a line. Thus, pictograms, predominantly represent concepts on material products and emojis in the written text. Both are not the only members of the visual sign family (Walthert 2019), but pictograms and emojis are the most significant sign systems currently used

around the world. Emojis are certainly part of the digital avant-garde, but the age-old pictogram is still more advanced in theory and experimental practice of sentence building. Thus, on the further road to visual writing, it seems most realistic to address the challenge of sentence building by combining pictograms and emojis. Pictograms offer a rich vocabulary that goes far beyond that of emojis; they look serious where emojis seem childish, and they are best suited for representing abstract concepts. Not to mention that a century ago pictograms were introduced as the "new hieroglyphics" and inspired a "new pictorial script" in theory and experimental practice from *ISOTPE* (Neurath, 1991) to *Pictoperanto* (Gros, 2011). In other words, the development and gradual introduction of a visual language today should combine emojis and pictograms in a hybrid character system that is best expressed by an aesthetic of contrast. The prerequisite for this is letter-sized pictograms.

3 Letter-Sized-Pictograms

The quest for pictograms that are still recognizable when reduced to letter-size began more than thirty years ago on the Macintosh computer with male and female figures that were only 24 pixels tall. This design was driven by the intention to develop an *icon-language* (Gros, 2006) based on digital fonts such as Times and Helvetica. A history of these beginnings and ever-improving ways of designing letter-sized pictograms is shown in the video *On the Digital Road to Visual Writing* https://youtu.be/wgl_xZxB14U. This video also refers to *icon.black* (Gros, 2006b), a vector font with essentially classic pictograms (Fig.1) whose typography strictly follows the conditions of extreme downsizing, such as reduced height, large spacing, and oversized hands, like those of Donald Duck.

Fig.1: *Pictomoji.*

Letter-sized pictograms reflect a shift from natural proportions to primary use as characters. In this process, the form first follows the function, that is, pictograms as visual characters largely become an expression of new typographic parameters – of course with the option for graphical variations and different semantic connotations. It may take some time to get used to pictograms formed by such new parameters (Fig.2), but they are precondition to use pictograms in a line of text

Fig. 2: Personal Pronouns.

Pictograms could also help answer this crucial question: Why are we still unable to write emoji sentences? Why has not at least emerged a kind of emoji pidgin? It's the photorealistic style that prevents emojis from representing abstract concepts. In this style, it is simply impossible to create, for example, an emoji for „me". But how could you do that? What gender, age, hairstyle, color, or clothing should such an emoji have? Since abstract terms must disregard individual characteristics, emojis without individual characteristics inevitably become a kind of pictogram. Thus, the visualization of abstract concepts actually leads beyond the style of emojis and towards pictograms. This step seems worth trying because just three personal pronouns could trigger an avalanche of visual sentences, right after users are able to visualize "I love you". Then, additional pictograms may expand the vocabulary, as in Fig.3.

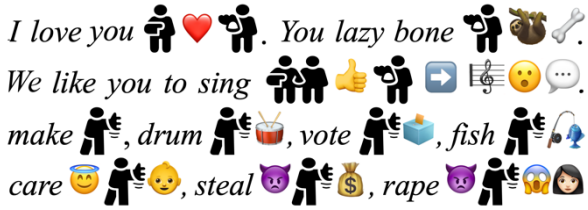

Fig.3: *Pictomoji*

Higher complexity in visual sentence building can be achieved with pictograms representing auxiliary verbs such as *have* and *want*. This possibility is now demonstrated by the author's experimental YouTube English course, which "translates" sentences word by word with emojis if possible and pictograms if not.

4 English 🔁 Pictomoji

Learning English with pictograms and emojis means, conversely, learning *Pictomoji* with English. So, the following project not only shows a new way to learn a foreign language, but also explores the semantics of emojis and pictograms in a regular language system. A suitable medium for this is YouTube because it allows feedback between the verbal, alphabetic and visual representation of sentences and optionally offers subtitles in any native language. *Illustrated YouTube language courses are common, but they do not visualize sentences word by word, and certainly not with a combination of emojis and pictograms that follow a consistent grammar*. A simultaneous presentation of verbal and visual words may be of interest to teachers if it improves learning, understanding, and retaining of a foreign language. The author sees the project rather as an example of applied science in the field of visual language, whose introduction is drawing closer since visual characters can be entered via a keyboard. This method means that after typing a word, emojis appear in a menu bar and can be replaced with a finger tap or mouse click. Thus, *sign-typing* (Gros, 2021) represents nothing less than a quantum leap, which overcomes all previous technical and economic disadvantages of hieroglyphics. The author's videos can of course only contribute to this development, and this article can only give an impression of the project by showing screenshots. The videos themselves with sample sentences, including animated emojis and pictograms, are available on the YouTube channel *Learning English with Pictograms and Emojis*.

4.1 #hello

This language course so far includes three five-minute lessons: #hello, #have, and #want. In its current demo version, the original pictograms and emojis are modified with the Comic Filter to honor the pioneering role of comics and point to a future where visual language is available with as many fonts in different styles as there are different fonts for letters. The first video introduces personal pronouns and animated verbs (Fig.3).

Fig. 3: https://youtu.be/at6ytwySykY

4.2 #have

Auxiliary verbs enable more complex sentences, but how can you think of terms like *have* and *want*? There is an archetypal image of a proud car owner resting his hand on his car. The same type of hand posture is used in the Chinese character for *have, own, possess* 有, which shows a hand on meat. The symbolism of this hand position seems to be universal, but instead of concrete examples like car and meat, a cube, the most abstract object next to the sphere, might be graphically and semantically more appropriate in this context.

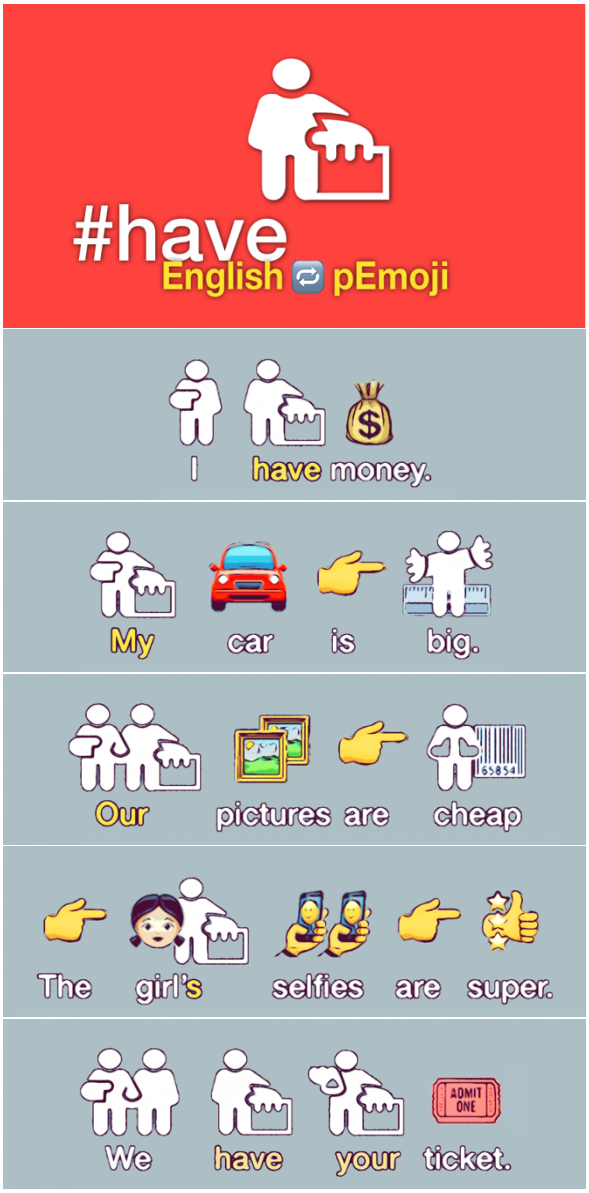

Fig. 4: https://youtu.be/2L9_evkLgRc

Figure 5: https://youtu.be/sITA3oW9-KI

4.3 #want

As already stated, only a pictogram can represent the widely known gesture for "want". Emojis, in contrast, are better suited to further determine this gesture because of their obviousness and attractiveness. Take, for example, the compound character for *need*, *crave*, or *longing*. Here again it makes no real difference in which graphic style a pictogram is designed. As with letters in different typography, pictograms and emojis in different styles basically should express the same notations, but different connotations.

5 Conclusiones

Emojis show great semantic potential when used as part of a visual language, as a partial vocabulary. However, they also show a fundamental limitation in terms of representing abstract concepts, especially key concepts in sentence building, which can only be represented by pictograms. This is demonstrated in a YouTube English course, where words are visualized with emojis if possible and pictograms if not. At least the background of this work, the project of a hybrid *pasigraphy*, seems realistic, because words today can be replaced by visual characters via the keyboard and a menu bar, as for example in WhatsApp or the Chinese input system. However, it remains unclear whether and how abstract characters such as

pictograms can be designed to be even more compact in pixel-based emoji fonts, for example by using outlines or relief.

Subsequent Note

The context of this paper, the author's previous and complementary work, is outlined at https://emoji-language.com. This website also offers answers to the final question of the paper about emoji-sized pictograms, such as in the form of this draft:

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