Icon-Language, from Vision to Icon-Typing

Abstract: Old dreams of a "new picture-language" failed almost a century ago, but turned out as origin of the modern pictogram. Today however these dreams might have a second chance: maybe as vision of a "new iconlanguage" including a renewed grammar and the design of icon-fonts.

OpenType as well as AutoCorrect fonts enable us, to type words and get icons — even animated icons as in OpenOffice. But what's the use of these fonts? One approach is already made in the field of language-learning. Another, introduced below, is going further on the way, but definitely beyond Smilies and Emoticons.

Although these examples are in fact initial and makeshift steps from vision to practice, they should demonstrate at least new methods of typing pictures in line with words.

Key Words: Icon-Language, Icon-Font, Icon-Typing, OpenType, AutoCorrect, Emoticons, Movicons, Smileyman



Almost a century ago Otto Neurath, a philosopher, together with Gerd Arntz, a graphic designer, made fundamental efforts to develop something like a "new picture language" [1]. Both are still famous as fathers of the modern pictogram, but their dream largely failed, not at least, because it was too complicated to write "new hieroglyphics" with self-explaining shapes, much more detailed than Chinese characters.

But now, we absolutely might have a second look at this meanwhile rather old dream of a "new picture language". Actually there are complex backgrounds: from age old conflicts in Christian and Muslim religions about the use of pictures instead of words, up to our present experience, how picture messages could gain speed and emotion.

But these backgrounds are not the main issue here. Instead, I'll zoom in on the fact, that new technologies enable us to "write" pictures as easy as characters. In other words, I'll zoom in on the feasibility of a "new picture language".

Being aware of all the pictograms and icons around us, some people call this already a new international picture language. But without really nameable elements of a visual grammar, that's not even a pidgin or Creole language.

- So, I'll first sketch out some basics of visual grammar,
- then exemplify the design and programming of icon-fonts,
- and finally demonstrate how icon-typing works in different applications, including, animated icons in OpenOffice.

Grammar in general provides rules how to built notions and sentences. Only in visual grammar these "rules" are very simple, almost self-evident. And they really pay off, expanding or even multiplying our pictogram- and icon vocabulary [2].







2. Adjectives / Determinatives





3. Verbs





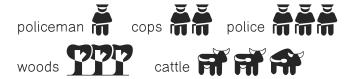
4. Compound Icons





5. Plural





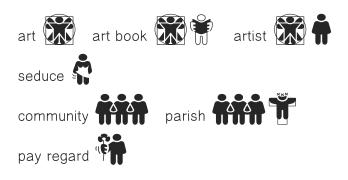


Higher levels of visual abstraction are possible with epitomes and metaphors. Epitomes are typical examples, representing a category. But even, if we don't find a single and really striking example, there is an age old solution: the same as in Chinese, where "sun" and "moon" together are defining "light". So, multiple epitomes are probably the most powerful method to visualize abstract notions – properly defined.

Nevertheless there is also a great potential in visual metaphors. Starting with pictograms of already incorporated figures like the Statue of Freedom.



6. Epitomes





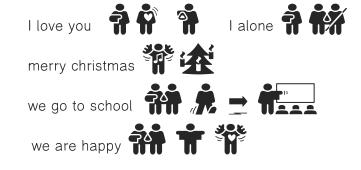
7. Multiple Epitomes







8. Icon-Pidgin?





Icon-Fonts enable icon-typing. They enable us, to just write pictures with a keyboard. Visual grammar might be a first step from dream to vision, but icon-fonts are now providing the tool, to go on from vision to practice.

And there are two completely different ways to type words and display icons. First, the common TrueType or OpenType system, employed to create Times, Helvetica or Chinese fonts. Secondly, I'll propose the AutoCorrect mode, as provided in Word and OpenOffice.

OpenType is not yet explicitly prepared to create icon-fonts, but there is everything we need: the potential to embed thousands of icons in a single font and a simple feature for programming the relation between typed characters and displayed icons. Although this feature was only designed to allow "dependent ligatures" (a special form of typography), the code is open, to substitute for instance "w o m a n" by an icon named "woman".



feature dlig {

sub w o m a n by woman; sub 女人 by woman;

} dlig;

At first however, to avoid unwillingly typing icons, we might add perhaps a marker like "+". So we are only replacing words such as woman, by typing "woman+".



feature dlig {

sub w o m a n plus by woman; sub 女人 plus by woman;

} dlig;

Unfortunately, these OpenType fonts are to use only, if a text editor features "dependent ligatures" and – besides InDesign and QuarkExpress – this feature is at present only available in Apple "Pages" and "TextEdit", not yet in "Word" or "OpenOffice". In return they have better AutoCorrect tools.

AutoCorrect "fonts" are – so far – the result of a makeshift method, but they are easy to create: just feed the AutoCorrect tool with icons and type in alphabetic or Chinese characters in order to replace the words. To transfer these "fonts" from one PC to another, you only have to exchange the files, in which they are stored.

for OpenOffice: acor_en-US.dat

for Word: Normal.dotm

In contrast to OpenType, AutoCorrect fonts have certainly disadvantages, as the need of different fonts for each size and each text editor. But there are not only advantages, such as color and motion.

Maybe most important: everyone can change the script; everyone has full control over all relations between the input of words and the output of icons; everyone is free to add new icons, even self designed ones. So, AutoCorrect fonts might actually end up as kind of open-source for everyone.

typing: woman+ displaying

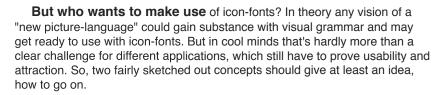
typing: woman



typing: happy+ displaying:





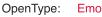


Most advanced, the Japanese linguist Miyoko Yasui [3] is presenting a new concept at the upcoming conference for e-learning in Kyoto: "Advantages of icon-fonts in e-learning for language education/training" [4].

Less specific in icon-linguistics, but hopefully moving closer to popular use, I have prepared four demo-versions of an icon-font with around 300 pictures, to use like "emoticons", but to display with names (and "+"). These fonts should not only demonstrate the OpenType and AutoCorrect approach, but also illustrate different forms of icon-typography.

Yet, unlike present emoticons, Smilies here got hands and feet, in order to show gestures, body language and even sex, so to say as Smileyman and Smileywoman.

All fonts are to download and free for personal use [5].



Emoticons.black.US.ttf Emoticons.line.US.ttf

AutoCorrect: Emoticons29.pix.US

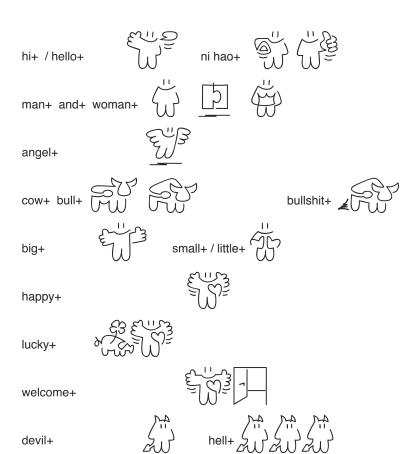
(for Word: Normal.dotm)

Emoticons29.pixmov.US (for OpenOffice: acor_en-US.dat)



Emoticons.line.US.ttf. Since the "Emoticons.black" font is already displayed with visual grammar, "Emoticons.lineUS.ttf" may now illustrate possible looks in the tradition of Emoticons.













in love+





Some icons are dispalyed as context dependent. So you may get even six dif-



big love+



make love+











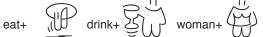












party+





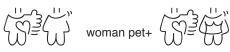








pet+





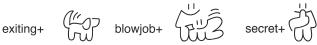
petting+























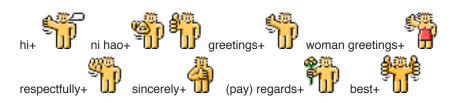




Emoticons29.pix.US (for Word: Normal.dotm) Emoticons29.pixmov.US (for OpenOffice: acor_en-US.dat)

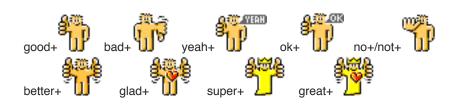
These AutoCorrect fonts have the same vocabulary and the same graphics, only the second one is moving in OpenOffice. Besides you may see the figures really moving on their website [6] – or just try to imagine the moves, which are frozen in this PDF.

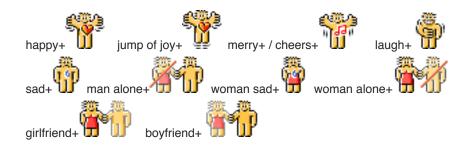
Please note: The correct spelling to display icons is coming together with the download of particular AutoCorrect fonts.

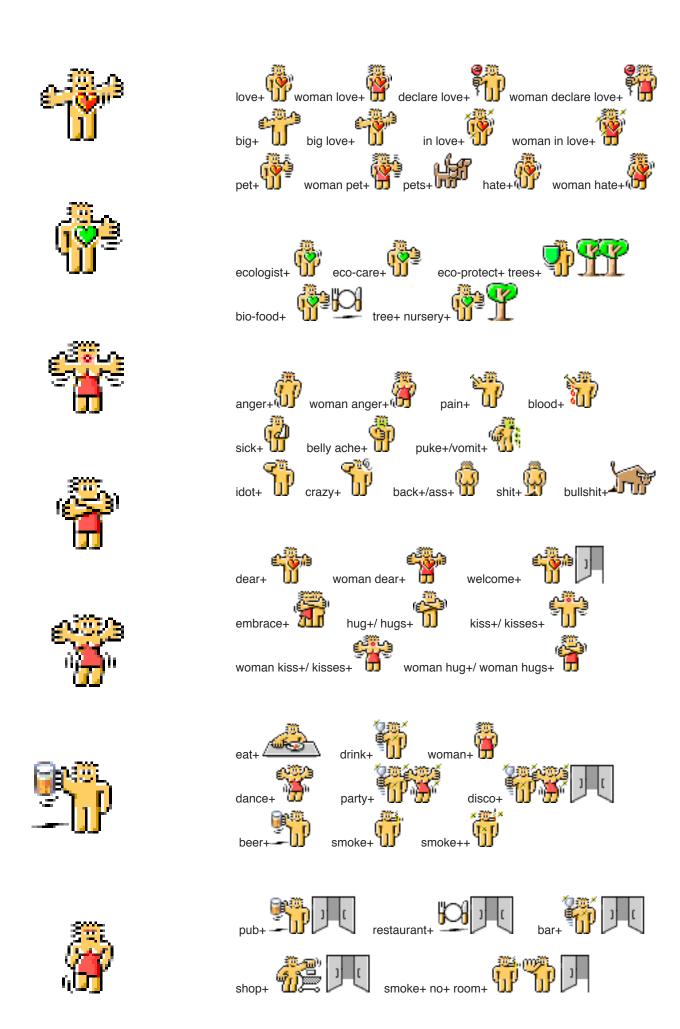


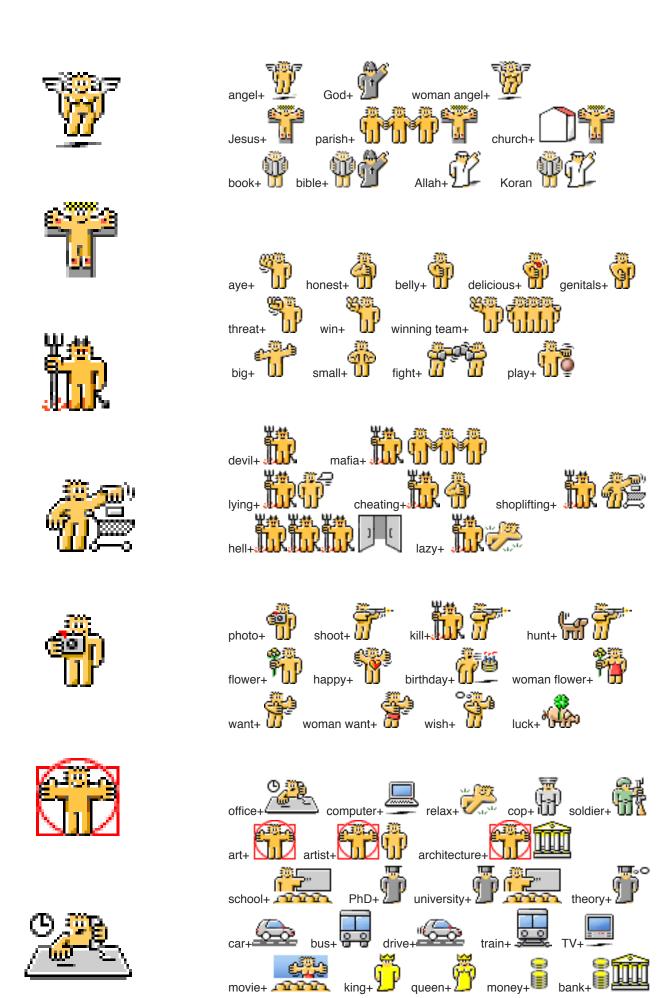


















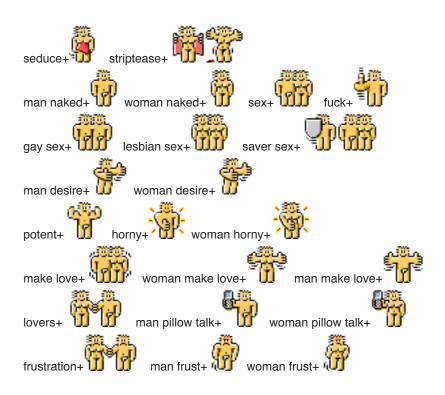




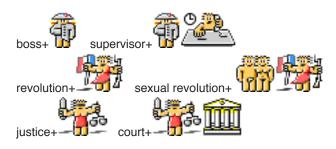




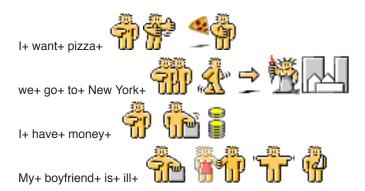
Eroticons are the climax of emoticons. So, if it really comes to emotion, you can't skip erotic icons (impossible anyway in private use). But again: most emotional are these pixels only as moving icons or movicons.



 $\label{prop:constraint} \textbf{Experimental design} \ \ \text{beyond emoticons may finally introduce} \\ \ \ \text{metaphors}.$



Icon-Pidgin elements, possible already with "Emoticon" fonts, may last not least announce next steps on the long, long way to a "icon-language".



Conclusion: Visual grammar and icon-fonts are certainly pre-conditions for any step by step development of different designs, which altogether may point out to something like a "new icon-language".

At first however, initial and makeshift solutions may open a wide range of experimental icon-fonts: to extend and sharpen graphic user interfaces, to improve language-learning, or to upgrade – as sketched out here – the common use of emotional icons or emoticons. In principle, it's all part of the question, how to express ourselves side by side in words and visual concepts – at hand in any text editor.

From this point of view OpenOffice has two major advantages: animated icons and moreover, the open source philosophy.

But it could also provide advanced OpenType features and even better solutions for creating and installing AutoCorrect fonts.

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- [5] Icon-fonts to download: <http://www.icon-font.com>
- [6] <http://www.smileyman.icon-font.com>
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 <http://www.icon-message.com>

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