Informatica per le Digital Humanities
Lecture 4
March 10 2025
Texts

Slides 2-10
Speaking of text encoding, here is the oldest document showing the very first text encoding that was proposed for a mass-market product by General Electric.
Starting with the name of the proposed standard, it is all a very US-centred endeavor. Notice how characters from other languages (e.g. é, à, ñ, ç) are missing.

Slides 11-23
The TermiNet 300 included a dot-matrix printer, which printed characters by means of a series of black dots obtained with heating up thermo-sensitive paper. Those dots may remind us of the beads of an abacus, but they are not there to be counted singularly, but to form a visual composition that has a specific effect on whoever is there to see it.

Slides 24-35
There are several shapes that we call "e", which present stark differences from one another. Still, we have grown and participated in a common cultural context that have shaped us into reacting in the same way when seeing these shapes.

Slides 36-47
If we get back to Magritte's artistic warning on the deceitful nature of images, we notice that these e's look like they belong to a different category with respect to the images of cats we saw in the previous lecture. Even among the cat images we can make some distinctions between realistic photographs and schematic icons. An "e" character, in that sense, is not depicting anything from a figurative sense: it is just a shape that we have learned to associate with a sound. From this perspective, it is not a treacherous image.

Slides 48-53
One interesting point that is worth raising is that, after all, text and images are both displayed on the screen. Actually, characters and the texts they form are a special kind of images. From a technological perspective, at least as long as their visualization is involved, they are treated in the same way. Digital images are images that are digital: the nature of digital entities will define how digital images are treated by means of computers.

Slide 102
Given that the digital treatment of images relies on standards, which are a set of agreements between people and companies who conceptualize, design, build, and deploy digital visualization tools, we understand that digitization is not only a technological effort, but also a social, economic, and political one. Scholars who embrace this perspective talk about sociotechnical systems.

Slides 103-107
According to these agreements and standards, whether texts or photographs, everything visualized with digital technology is comprised of a matrix of pixels made of red, green, and blue LEDs. When it comes to characters, they trigger the memory of a sound in our brains. Since sound is also an aspect of our lives that has been digitized, we will analyze digital sound next.