

What are *studia digitalia*?

More than half a century ago an American professor of English literature, Joseph Raben, founded *Computers and the Humanities*, the first journal in the field. In the first article of its first issue Louis Milic wrote with uncommon clarity of vision that,

The true nature of the machine is unknown to us, but it is neither a human brain nor a mechanical clerk. The computer has a logic of its own, one which the scholar must master if he is to benefit from his relations with it. Its intelligence and ours must be made complementary, not antagonistic or subservient to each other.... The computer can be made an extension of man only if it opens avenues we have not suspected the existence of. (1966: 4)

Mimesis of human behaviour is not the goal, at least not for scholarship, he suggested. Testing the machine against a human benchmark (whatever that might be) to determine whether it has reached a state of 'artificial intelligence' isn't either, for by coming into contact with digital glimmerings of intelligence we realise that it is plural and that its plurality makes it a question. "Thinking in a new way", as such questioning demands, "is not an easy accomplishment", Milic wrote. "It means reorientation of all the coordinates of our existence." (1966: 5) Milic entitled his article "The Next Step". It is a step we have only taken, if at all, falteringly.

Meanwhile, thanks to astonishing technological prowess and extravagant engineering, Alan Turing's mathematical abstraction has materialised and diversified into the multi-layered, user-friendly appliances with which we are surrounded, adorned, even interpenetrated. These have become nearly ubiquitous and mostly invisible. One manifestation of our *studia digitalia*, seemingly the dominant one, promotes or goes along with the notion that we are in a 'post-digital' age, i.e. that as Brian Cantwell Smith argued in the 1990s, the genius of the digital is that it renders digitality irrelevant. The subject of study which follows is, then, the effects, the *impact* on us of these ever-so-user-friendly devices. That's one answer to the question I raise in my title.

But there are other "coordinates of our existence" that, I would argue, are more important and in some danger of being completely forgotten. They are more important because devotion solely to impact cuts us off from active participation in shaping the great engine of our century (and of the latter half of the previous one). What is the 'intelligence' that legions of very bright and clever computer scientists are implementing? Who is to say? Who is to bring millennia of deep thought about 'intelligence' to bear?

Let me return to Millic on this matter via the philosophy of experimental science. In his brilliant study, *Experiment and the Making of Meaning*, David Gooding wrote that,

The 'act' of observing something for the first time presupposes the activity that rendered it visible. Once you have learned how to see something, the activity becomes unimportant or second nature - it passes into what Polanyi called peripheral awareness. It is easy to suppose that the cases we are aware of - where we seem to 'see' first and then record what we then say we have observed - are typical of all seeing. Most of our seeing is like this because for most of what we experience, the perceptual stage is already set.... we have a repertoire of images and concepts which we bring to the task of selecting or depicting just those aspects of experience we wish to record or communicate. This repertoire is usually adequate to the task and its use is therefore usually tacit. The repertoire itself remains imperceptible until we encounter (or are asked to share) an experience which does not readily fit our available renderings. Novelty brings the repertoire into focal awareness. (1990: 74)

The question I would raise, then, is about what is novel, what is *different*, what is *strange* about how the machine artificially reasons. How does its binary, combinatorial way of doing that diverge from ours? How does it illumine our inherited "repertoire of images and concepts" with which we are only peripherally aware?

But, Millic might insist, it's not a mirror of the ordinary kind that we're dealing with. No invention is. The history of technology, the digital machine in particular, tells us that inventor and invention are co-involved in a developmental cycle of change. Some call it co-evolutionary. The imperative, I would think, is to be a conscious, active participant, and so have a chance of helping to make the developmental cycle virtuous rather than vicious, enabling rather than entrapping.

My brief argument is that we need, in much greater proportion than now, comparative studies of thought and action in human and machine, especially those that bring out the differences (which, being differences, imply the likenesses with which they contrast). In "An Essay for S. I. Witkiewicz" (1935), the Polish artist and writer Bruno Schulz wrote that "The role of art is to be a probe sunk into the nameless." Let the digital machine be considered a work of human art with exactly that role.

What are *studia digitalia*, then? To answer in a quite literal-minded, prepositionally centric way, they are, or could be, studies *of* the digital, in the sense that we say a person is 'of fine stock', and not merely *about* something 'out there', observed from a safe distance. Let them open up those "avenues we have not suspected the existence of".

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