Isaac Asimov and the human space

The reason of science-fiction literature was and is to promote both the spread of scientific knowledge and interest, and the hope that the technological marvels will solve the problems of the human society. And in order to attract people's attention and to generate their enthusiasm towards science and its results, everything happened in the *human space*.

But the human space is very complicated. It is a *mezzo*- existential world, comprising both the objects appropriable by senses and simple auxiliary instruments like glasses, and the ideal entities (knowledge, theories, ideals, values, but also relations and institutions) the humans produce and use as criteria and stakes in their thinking and actions. The existential spaces they explore and seek – the many strata *micro*-world and many-strata *macro*-world (including the "hyperspace"), and their intertwining – are subordinated to the human one, obviously not because they would follow from it but from the standpoint of the *meanings* they have: for the time being, only for humans.

Isaac Asimov was one of the first writing about a special micro-world: that of IT, both within computers and robots. The formidable development of *computers* – even in their *merging* with the human mind and senses, as the present post-human dream directs – cannot, however, offer a solution to the natural exhaustion of natural structures and forces sustaining the human / rational life in Universe: for this reason, maybe a "God-like" computer exists even after the disappearance of this life, containing all the data and information resulted from it, but what is that for? (see *The Last Question*, 1956).

No *knowledge* about *nature* would be enough to countervail the irrational and self-annihilating behaviour of humans, the only hope being the cyclic resumption after the inevitable extinguishment (*Nightfall*, 1941).

And no knowledge about society would be enough to prevent the falling of the Galactic Empire (*Foundation*, 1942, 1944,). Modelled after the Roman Empire, this society, no matter how immense, is a copy of the modern, even post-war Western civilisation, in its official history representations: the flux of events given exclusively by aristocratic layers and different elites in their quarrels for power, rockets as interstellar ships connecting empires and kingdoms, traders who are sent to "less developed" planets in order to sell advanced technologies for much more their price and local Elders infested with traditions opposing the exchange, iron converted into gold paying as much minerals from the local mines as the traders can carry, client planets and independent ones – each appropriately treated –, intelligence nets and universities signifying both the peculiarity of science and information and their pressure for power (*Second Foundation*, 1953). And what about knowledge when there is erased information from libraries (*Foundation's Edge*, 1982)?

All of these are warnings, in the science-fiction forms and metaphors. In a scientific or philosophical analysis, they show *pessimism* about humanity's future despite its extraordinary knowledge and creativity expansion.

On the other hand, the IT world of robots is the occasion for a piercing of optimism. The internal micro-space of robots, i.e. their IT and bio-IT principles and programmes coordinating "the brain" of robots, their "positronic brains", is – as every human brain, and not only human – open to the mezzo-world of humans. This openness manifests through *moral*: that subordinates the quality of robots as *means* of humans to the quality of humans as *ends* in themselves, if we take over Kant's logic of the categorical imperative. But again, the robots' moral is a *mirror* of the human moral: both as fundamentally different from the real human moral in the mezzo-world beyond the personal life, and as a model for it. The Laws of robotics (*Runaround*, 1942/1950) – First Law: A robot may not injure a human being or, through inaction, allow a human being to come to harm; Second Law: A robot must obey the orders given it by human beings except where such orders would conflict with the First Law; Third Law: A robot must protect its own existence as long as such protection does not conflict with the First or Second Law, and (*Robots and Empire*, 1985) Zeroth Law: A robot may not harm humanity, or, by inaction, allow humanity to come to harm – cannot be superseded by any talk around "informational ethics". From a technical standpoint, the difficulty to follow these laws by *humans* and the time coordinates involved by their taking (harming for present, harming for future etc.) do not annul the laws, because they are formal; in Kant's terms, categorical and not hypothetical. But could we imagine the future human space, full of human penetration into non mezzo-worlds and victory over them, without the order put by these laws?

And if the robots got the point of these laws and they are exact means of the humans, does the same "metacognition" as that of the robots not generate a human space, filled with human relations and values, and not only with sophisticated objects? Well, Asimov warned again: in *The Naked Sun* (1956), a future (figured, obviously, by a distant planet) when the number of humans was methodically reduced and their rather *dolce far niente* long life, allowed by the robots doing all the works, is not desirable. Since creativity is individual (*How do people get new ideas?*, 1959), the more the people are, the greater the creativity. Certainly, they must be free to think, to debate, to create. The human space, the human context makes the strength of knowledge and its human results.

<div align="right">Editor</div>