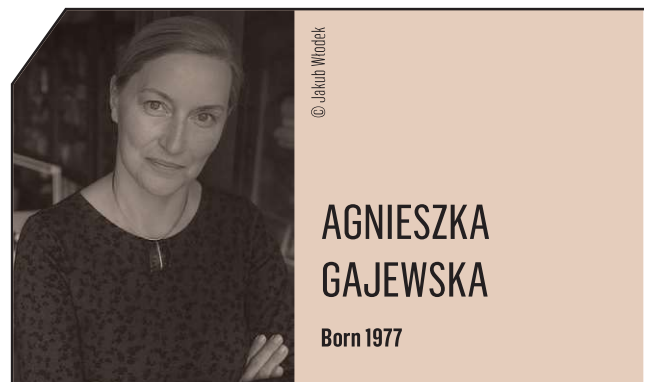


**H**is reading on cybernetics led also to an interest in the topic of artificial intelligence and the development of quasi-animate cells with ambiguous ontological status, designed by calculating machines. Biotechnology has a significant place in his writing; after all, he lived in the era of the discovery of DNA and the rise of huge hopes related to our ability to decipher the human genome. He appreciated the value of genetic discoveries, the fact that they would enable us to fight certain illnesses or make food production more effective. As time went by, his optimism about genetic engineering dimmed: he recognised the dangers posed by big capital business, which commercialised even genomes. Nonetheless, he still perceived the development of biotechnology in a larger context, and his pessimism resulted from a worry about political and financial misuse.

What fascinated him the most about the changes within life sciences was the moving boundary between the natural and the artificial, because he realised that biotechnology would eventually have to challenge these binary divisions. If ever more advanced artificial entities come into being, we must not ignore the possibility that they might develop a consciousness, or at least sensitivity to pain. As one of the characters in *His Master's Voice*, Saul Rappaport, put it: “[...] the difference between ‘artificial’ and ‘natural’ was not entirely objective, not an absolute given, but a relative thing and dependent on the cognitive frame of reference [translated by Michael Kandel, Northwestern University Press, Illinois, 1999].” The ability to create semi-sentient beings holds a prominent position both in Lem’s essays and in his novels and short stories. In “Prognoza rozwoju biologii do roku 2040” [“A Prognosis for the Development of Biology Until the Year 2040”], written in May 1981, he tried to predict the direction in which techno-biological ideas for evolution would develop, with an unusually optimistic scenario for the future. In this essay, he predicted the modern ontological problems stemming from our ability to design entities partially similar to living organisms, and that it would be philosophers rather than engineers struggling to classify them. “These classification problems will emerge especially when genetic engineering and molecular biology produce a lateral offshoot in the form of materials, often with cellular structure, which will clearly display characteristics of life, but only some of them, for example only self-re-

pairing or self-replicating abilities, or metabolism variants unseen in other species. [...] The enormous void between animate and inanimate matter will be filled so thoroughly that any attempts to determine the unambiguously biological or abiological nature of these new creations will become pointless and only testify to our intellectual inertia.” And although Lem didn’t yet use the terms symbionts, liminal life, synthetic life, *in silico*, *in vitro*, to describe these physical beings, the perspective of their arrival filled him not with fear, but rather curiosity about how philosophy and legislative practice would handle them.

Excerpt translated by Marta Dziurosz



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#### Selected books

*Zagłada i gwiazdy. Przeszłość w prozie Stanisława Lema*, 2016

*Hasło: Feminizm*, 2008

#### Selected awards

Gdynia Literary Prize (2022) – nomination (2022)

Nike Literary Award (2022) – nomination (2022)