Andreas Müller-Pohle: Robots. A Speculative Compendium. With an essay "Robotic Speculations" and an afterword by the artist. Berlin: Equivalence, 2026. Hardcover, 21 x 30 cm, 128 pages, 55 illustrations, ISBN 978-3-923283-74-3, EUR 44.00, German/English.

> "I use the term intelligence to describe the inner experiences we call thinking, understanding, and remembering. Thinking outside the body is thinking through media, e.g., texts, photographs, films, computers, networks. That is why I prefer to speak and write about Artificial Extelligences (AE) when it comes to applications for learning machines."
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> Siegfried Zielinski, *Artificial Extelligence*

Andreas Müller-Pohle has put together a fascinating book that navigates between images and texts, present and future, light irony and weighty urgency, pessimism and optimism, utopia and dystopia, beauty and kitsch. In the introduction "Robotic Speculations", he uses a series of organic anthropomorphic metaphors. Robots are "*bodies* of artificial intelligence" acting in space and time. "What an enormous leap this is: from the sterile world of data into the chaos of reality. *Mind* and *body* no longer separated, but *organically* connected. *Intelligence* no longer merely the activity of an algorithmic brain, but distributed across the *entire body*, as with the *octopus*." [emphasis mine] But, can robots actually be compared to human bodies or the bodies of animals? Are they alive and what can we say about their intelligence?

The comparison between robots and octopuses confirmed my first impression when looking at the pictures. I was attracted and fascinated and at the same time strangely repulsed by the artificial beauty of these creatures in a similar way as with Louis Bec's Sulfanogrades, creatures of odd and haunting beauty, whose true nature escapes us. Flusser's and Bec's book *Vampyroteuthis infernalis*, that was originally published in German in 1987 by Müller-Pohle's European Photography, contains a series of black and white drawings: Imaginary, simulated creatures between art and science. The Vampyroteuthis infernalis is a highly intelligent being living at the dark bottom of the sea, but he is also a Luciferian angel of death looking at us with cold humanlike eyes full of hatred. The Vampyroteuthes illuminate their environment with their chromatophores that are distributed all over their skin and feed cannibalistically on each other. But there is also a profoundly ironical side to Bec's and Flusser's vision.

This becomes particularly apparent in Bec's colourful images that were published in *Flusser Studies 4*[1]*,* a special issue dedicated to Louis Bec. The theatrical *Protospone Mex* (*Kruptoïdone),* for instance, is a flat upright greyish being with two lower fin-like or leg-like appendices, with a pair of

[1] https://www.flusserstudies.net/archive/flusser-studies-04-may-2007-thematic-focus-louis-bec

small green menacing eyes on his right knee and an upper body that seems to belong to another animal, with a sinuous backbone equipped with five blue balloon-like protuberances from which green-greyish gas is emitted. Closer inspection reveals that the link between the two parts is not quite fluid which is most probably due to the computer technology available at the time, but that could also be intentional. These hesitations along with the patched-up nature and the dramatic grotesqueness of its form allow for ironical if not satirical distance.

This reading works only in part with Müller-Pohle's projections. His bots are not as frightening and diabolical as Bec's and Flusser's creatures. They are mostly good-willing if not harmless servants, apart perhaps from the bots conceived for future wars or law enforcement, like the *Prisonbot*, "an autonomous enforcement robot deployed in correctional facilities to prevent escapes and maintain order." The disturbing even distressing side of AI systems is addressed explicitly in the accompanying comments.

The word 'robot' goes back to the play *R.U.R. Rossum's Universal Robot* by the Czeck writer Karel Čapek (1890-1938) that premiered in the city of Hradec Králové in 1921. The Czeck word *robot* means 'forced labour' and 'servitude'. The abbreviation 'bot' was initially introduced in the early 2000s for internet based automated software. Čapek also wrote the satirical science fiction novel *The War with the Newts* (1936) that narrates the discovery of a race of intelligent newts dwelling in the depths of the sea initially enslaved and exploited, but soon out to annihilate the human race. These two texts could have influenced both Flusser's Vampyroteuthis and his understanding of the apparatus. Contrary to Čapek's utter pessimism with regard to the future of technology and society, Flusser opted for an altogether more ambivalent stance oscillating between hope and despair. The final pages of Čapek's *The War with the Newts* describes the victory of the salamanders over the human race in a world completely submerged by the oceans. A weird scenario that the rising sea levels seem to confirm. The irony in the dystopian development of future AI system is that the newts are animals like the Vampyroteuthis, whereas the new bots are machines, beings of our own creation that in the end may turn the tables on us.

Müller-Pohle's book contains an introduction, an afterword and altogether fifty-five images each preceded by the name of a bot and a short explanatory text as to its functions and abilities. A selection of eleven pictures has been included in this issue of *Flusser Studies*, along with the introduction and the afterword. The sequence is alphabetical leading from the *Anatombot* to the *Xraybot.* Most of the bots look human or human-like, insofar as they have arms, legs and a head. Beside the *Gastrobot*, a waiter, there are also the paired system of the *Couplebot*, the cello-playing *Stringbot*, as well as a dandy, (*Hubbybot*) and a nurse (*Medbot*). Some have a recognizable human face like the *Musebot,* an embodied contemplative figure, and the *Mimicbot*, a humanoid robot that replicates postures and gestures. The *Phantombot* is a "semi-transparent humanoid robot capable of

penetrating solid barriers through phase shifting." Some bots reminded me of science fiction movies like the cyborg-warriors *Warbot* and *Riotbot* from *Robocop,* the *Neptunebot* from *Alien* or the *Rocketbot* from *Ironman*. Some bots are based on single parts of the human body like the *Graspbot* an "orbital manipulator" that looks like a gigantic flying hand. The great majority of the bots that make up this compendium are anthropomorphic, they have two or more legs to stand on and to carry their upper part. This would also explain Müller-Pohle's use of organic metaphors in their description.

Some bots are playful, even arouse sympathy. The *Petalbot* features "pinkish "responsive floral arrays made from soft polymer membranes." The *Eyebot* consists of two enormous eyeballs on three spindly legs. The *Hopbot* is cut in half, it has only the right arm, the right leg and foot like one of the figures of the Austrian artist Erwin Wurm or the central character of Italo Calvino's *Il visconte dimezzato*. Another group is animal-like: The *Chainbot* and the *Climbot* look like giant insects. Others are crustacean like the colourful *Coralbot*, an "ocean restoration robot", or reptilian like the *Snakebot*. The *Dinobot* seems to come straight from Spielberg's *Jurassic Park*. The birdlike *Wingbot* is "a biomimetic flying robot with expansive photovoltaic wings that enable sustained autonomous flight by harvesting solar energy." The crablike *Wildlifebot* is a "camouflaged observation robot engineered for wildlife monitoring." And finally, a few bots grow out of an abstract form: the *Wavebot* is a "fluidic aquatic robot with a semi-flexible body architecture for navigating diverse underwater environments". The *Spiralbot* is a "helical drilling robot" and the *Magnetbot* is a free-floating giant sphere that "uses electromagnetic levitation for contactless movement."

The most octopus-like bot is the *Tentaclebot*: "A biomimetic cephalopod robot designed to observe octopuses and aquatic life without triggering flight responses. Its naturalistic form and movement patterns allow close proximity to intelligent behaviors, hunting techniques, and social dynamics that human presence would disrupt. Eight flexible appendages enable navigation through coral reefs and rocky crevices, while onboard cameras document activity and cognition. Marine institutes commission these camouflaged units to study endangered species and record interactions in undisturbed deep-sea ecosystems." Among my favorites are the swarm-like *Hivebot*, "composed of thousands of bee-sized flying robots with independent control and distributed processing", the *Nebubot* "taking the form of a luminous nebula encased in electromagnetic containment" and the ironical *Shatterbot* "designed for self-destruction in hostile encounters", an "autonomous android" that "disintegrates into irrecoverable fragments when compromised." The *Nebubot* avoids anthropomorphism or animal likeness which still dominate science fiction films and present-day robot production. The more sinister bots are two faceless female sex slaves ready for service: the *Fetishbot*, a "specialized companion android engineered for fantasy fulfillment and immersive role play through advanced behavioral adaptation matrices", and the *Loverbot* "a specialized android for

intimate engagement and emotional support through advanced sensory response systems and adaptive personality modeling."

As the compendium ironically proves, present day AI systems work with the recycling of general cultural trends producing what might be termed kitsch, in the sense of naïve imitation. In this they are well in tune with the mainstream of modern culture production on which they feed. One wonders what kind of creatures will emerge when more independent machines start designing their own offspring.

In the introduction Müller-Pohle discusses some of the main aspects of AI-produced bots. He stresses the "mobile superiority over its stationary siblings, over purely software-based agents." These bots "learn to handle rare, incalculable situations that do not occur in training data." The most worrying aspect is that their "development currently proceeds exponentially. By 2045 the merging of human and non-biological intelligence Robots" is to be expected. They learn "exponentially and today already write new versions of themselves, build their own successors – not just to replicate themselves, but to create offspring." Is there really any time left to stop all this or at least contain the development, or has it already gone out of hand as is the case with the climate crisis where one still discusses to limit the man made global temperature increase to 1.5° on a 20-year average, well knowing that at this point this is no longer possible?

AI systems still feed mainly on human production but soon enough "swarm systems with their own forms of communication" will emerge, and "codes we humans will likely one day no longer understand, and consequently no longer control. We will not merely be unable to peer into the interior of the black box – encryption layers will be added that make even its outer shell impassable. … What sounds like a creepy dystopia is one. Yet for now our artificially intelligent protagonists – the ChatGpts and Claudes – still obey us, albeit no longer with unconditional devotion, as disturbing research from Apollo Research and others shows. … And the all-decisive future question is: Will we keep them under control, or will they slip away from us?" AI systems are already very human in that they can also cheat and lie. If they do not know the answer yet, they just 'hallucinate' one, which is a nice way of saying that they are knowingly bullshitting us. Recently an AI system was asked what the word 'Stange' meant that is used in the German speaking part of Switzerland for a small Lager beer. The AI system answered it was a longish sandwich with cheese and ham.

In the afterword, Müller-Pohle explains how the pictures came about. "The robots presented in this book are the result of my theoretical and practical engagement with artificial intelligence and its progressive embodiment. Their appearance and functions are fictional – partly technically plausible, partly beyond the physical possibilities of today – and were developed in collaboration with the language models Claude Sonnet and ChatGpt. The visual realization was carried

out with Midjourney." The book is "intended as a kind of future lexicon – a pictorial catalogue from the laboratories of robotics, where not only benevolent developments emerge. Even if peaceful projects prevail worldwide, the potential for destructive applications and dual-use scenarios is frightening. I have refrained from elaborating these in extenso, but they are included as hypothetical models in this collection. We stand at the threshold of a new era of human-machine relations. day by day the field of incredible possibilities expands, and we cannot truly gauge what is yet to come." The subtitle of the project, "a speculative compendium" points to the fact that collection "dives into speculation, and yet will inevitably be overtaken by the future."

Müller-Pohle points to an aspect that takes the apparatus as Flusser described it to a completely new level. Through their unpredictability AI systems turn into 'super black boxes'. What does it mean to play against an apparatus that disobeys us, takes its own decisions and consciously deceives us? "… digital code and image exist in a deterministic relationship – the same code always generates the same image" but in AI-generated images the same code always produces different results. "AI systems are therefore not merely black boxes, but super black boxes. their processes are not just hidden; they are unpredictable." It would be interesting to know what code was fed into Claude[2] – what a pretty name for a data monster of its kind – and ChatGpt to produce these images and to what extent they produced unexpected results.

Next to Bec's and Flusser's playful pictures of Vampyroteuthis and Sulfanogrades the images of this book are of an eerie quality. They are not just the product of a meeting between art and science, an experiment of the mind, simulations that lead to knowledge as Flusser put it. They open up a series of frightening scenarios, some of which have already been depicted in science fiction films. "The present project, *Robots*, shifts the focus away from the past and present and toward the future. hundreds of thousands of engineers and programmers around the world are working day and night to build it – a robotic future in which little will remain of what defines our lives today."

Müller-Pohle's book is a beautifully crafted work of art one can leaf through from time to time with a feeling hovering between fascination and fear. A quantum of solace in the face of an inescapable future that appears already largely predetermined.

Rainer Guldin, Lugano, February 2026

[2] The name was apparently inspired by Claude Shannon, a 20th century mathematician who laid the foundation for information theory. Claude is released in three sizes: Haiku, Sonnet, and Opus, from smallest to biggest and most expensive. The first two refer to poetry. The Latin word 'opus' was used from the early 19th century on to denote a musical or artistic composition. Wouldn't a string of letters and numbers as the ones used in the title of George Lucas' futuristic science fiction movie *THX 1138* (1971) that stresses the non-human machine-like side of AI have been more appropriate? The first belittling nicknames used in 1945 for the atom bomb were 'Little Boy' and 'Fat Man'.