

## CHRISTIAN BÖK / The Extremophile

1.

Astronauts fear it. Biologists fear it. It is not human. It lives in isolation. It grows in complete darkness. It derives no energy from the Sun. It feeds on asbestos. It feeds on concrete. It inhabits a seam of gold on Level 104 of the Mponeng Mine in Johannesburg. It lives in alkaline lakelets full of arsenic. It grows in lagoons of boiling asphalt. It thrives in a deadly miasma of hydrogen sulphide. It breathes iron. It breathes rust. It needs no oxygen to live. It can survive for a decade without water. It can withstand temperatures of 323 °K, hot enough to melt rubidium. It can sleep for 100 millennia inside a crystal of salt, buried in Death Valley. It does not die in the hellish infernos at the Stadtbibliothek during the firebombing of Dresden. It does not burn when exposed to ultraviolet rays. It does not reproduce via the use of DNA. It breeds, unseen, inside canisters of hairspray.

2.

It feeds on polyethylene. It feeds on hydrocarbons. It inhabits caustic geysers of steam near the Grand Prismatic Spring in Yellowstone National Park. It thrives in the acidic runoff from heavy-metal mines, depleted of their zinc. It abides in the shallows of the Dead Sea. It breathes methane. It can withstand temperatures of 333 °K, hot enough to melt phosphorus. It resides in a fumarole of scalding seawater, deep in the bathyal fathoms of the Mid-Atlantic Ridge. It can endure pressures equivalent to 45 tons of force per square inch, six times greater than the pressure at the nadir of the ocean, one sixteenth of the pressure required to crush graphite into diamond. It lives in the muck at the bottom of the Mariana Trench. It is ideally adapted to devour the wreck of the Titanic. It does not die during its own immolation in the Nazi bonfires at the Opernplatz in Berlin. It eats jet fuel.

3.

It feeds on nylon byproducts. It feeds on stainless steel. It inhabits an extinct volcano in the xeric waste of the Atacama Desert, where the rain falls only once per century. It dwells in a tide pool of battery acid. It blooms in a barren salina, ten times saltier than the sea. It breathes hydrogen. It resides inside micropores of superdense granite, crushed down 3000 metres below the bedrock of the Earth. It can withstand temperatures of 343 °K, hotter than the flash point of aerosolized kerosene. It is ideally adapted to devour the rubber tubing in the engines of the F-22 Raptor. It does not die in the explosion that disintegrates the Space Shuttle *Columbia* during orbital reentry. It does not die among the tornados of hellfire, raging, unchecked, in the oil fields of Kuwait during the Persian Gulf War. It gorges on plumes of petroleum, venting from the wellhead of the Deepwater Horizon.

6.

It resides in a soda lake, whose pH level equals the alkalinity of lye. It can survive superheated blasts of steam for ten hours inside autoclaves used to disinfect surgical scalpels. It can withstand temperatures of 393 °K, hot enough to melt sulphur. It can lie dormant for 40 million years, hibernating inside the gut of a honeybee, shrouded in a jewel of amber. It evades its predators by hiding in the firmware of the Intel Pentium 3 microchip. It propagates itself through the use of networked computers. It can survive direct blasts of cosmic rays from solar flares. It is, in fact, the only known organism to survive being shot, point-blank, by the proton beam in a U-70 Synchrotron. It does not die in the incineration of Hiroshima. It does not die in the planetary firestorm after the impact of the Chicxulub meteor. It does not die.

7.

It survives. It persists. It resides inside the robot scoop of the Viking 1 Lander during tests for perchlorates on Mars. It can live through exposure to supercoolant temperatures at the brink of absolute zero. It can hibernate for 250 million years, living as a spore, encased in a halite nodule found in the Caverns of Carlsbad. It can withstand temperatures of 423 °K, hotter than the nose cone of the Concorde in supersonic flight. It can endure multiple, meteor impacts. It can endure multiple, atomic attacks. It lives nowhere on Earth, except in one petri dish of agar agar, locked in a fridge at a Level-4 biocontainment facility. It is totally inhuman. It does not love you. It does not need you. It does not even know that you exist. It is invincible. It is unkillable. It has lived through five mass extinctions. It is the only known organism to have ever lived on the Moon. It awaits your experiments.