Throughout history, religions and ideologies did not sanctify life itself. They always sanctified something above or beyond earthly existence, and were consequently quite tolerant of death. Indeed, some of them have been downright fond of the Grim Reaper. Because Christianity, Islam and Hinduism insisted that the meaning of our existence depended on our fate in the afterlife, they viewed death as a vital and positive part of the world. Humans died because God decreed it, and their moment of death was a sacred metaphysical experience exploding with meaning. When a human was about to breathe his last, this was the time to call priests, rabbis and shamans, to draw out the balance of life, and to embrace one's true role in the universe. Just try to imagine Christianity, Islam or Hinduism in a world without death – which is also a world without heaven, hell or reincarnation.

Modern science and modern culture have an entirely different take on life and death. They don't think of death as a metaphysical mystery, and they certainly don't view death as the source of life's meaning. Rather, for modern people death is a technical problem that we can and should solve.

How exactly do humans die? Medieval fairy tales depicted Death as a figure in a hooded black cloak, his hand gripping a large scythe. A man lives his life, worrying about this and that, running here and there, when suddenly the Grim Reaper appears before him, taps him on the shoulder with a bony finger and says, 'Come!' And the man implores: 'No, please! Wait just a year, a month, a day!' But the hooded figure hisses: 'No! You must come NOW!' And this is how we die.

In reality, however, humans don't die because a figure in a black cloak taps them on the shoulder, or because God decreed it, or because mortality is an essential part of some great cosmic plan. Humans always die due to some technical glitch. The heart stops pumping blood. The main artery is clogged by fatty deposits. Cancerous cells spread in the liver. Germs multiply in the lungs. And what is responsible for all these technical problems? Other technical problems. The heart stops pumping blood because not enough oxygen reaches the heart muscle. Cancerous cells spread because a chance genetic mutation

rewrote their instructions. Germs settled in my lungs because somebody sneezed on the subway. Nothing metaphysical about it. It is all technical problems.

Death personified as the Grim Reaper in medieval art.

'Death and dying' from 14th-century French manuscript: Pilgrimage of the Human Life, Bodleian Library, Oxford © Art Media/Print Collector/Getty Images.

And every technical problem has a technical solution. We don't need to wait for the Second Coming in order to overcome death. A couple of geeks in a lab can do it. If traditionally death was the speciality of priests and theologians, now the engineers are taking over. We can kill the cancerous cells with chemotherapy or nano-robots. We can exterminate the germs in the lungs with antibiotics. If the heart stops pumping, we can reinvigorate it with medicines and electric shocks — and if that doesn't work, we can implant a new heart. True, at present we don't have solutions to all technical problems. But this is precisely why we invest so much time and money in researching cancer, germs, genetics and nanotechnology.

Even ordinary people, who are not engaged in scientific research, have become used to thinking about death as a technical problem. When a woman goes to her physician and asks, 'Doctor, what's wrong with me?' the doctor is likely to say, 'Well, you have the flu,' or 'You have tuberculosis,' or 'You have cancer.' But the doctor will never say, 'You have death.' And we are all under the impression that flu, tuberculosis and cancer are technical problems, to which we might someday find a technical solution.

Even when people die in a hurricane, a car accident or a war, we tend to view it as a technical failure that could and should have been prevented. If the government had only adopted a better policy; if the municipality had done its job properly; and if the military commander had taken a wiser decision, death would have been avoided. Death has become an almost automatic reason for lawsuits and investigations. 'How could they have died? Somebody somewhere must

have screwed up.'

The vast majority of scientists, doctors and scholars still distance themselves from outright dreams of immortality, claiming that they are trying to overcome only this or that particular problem. Yet because old age and death are the outcome of nothing but particular problems, there is no point at which doctors and scientists are going to stop and declare: 'Thus far, and not another step. We have overcome tuberculosis and cancer, but we won't lift a finger to fight Alzheimer's. People can go on dying from that.' The Universal Declaration of Human Rights does not say that humans have 'the right to life until the age of ninety'. It says that every human has a right to life, period. That right isn't limited by any expiry date.

An increasing minority of scientists and thinkers consequently speak more openly these days, and state that the flagship enterprise of modern science is to defeat death and grant humans eternal youth. Notable examples are the gerontologist Aubrey de Grey and the polymath and inventor Ray Kurzweil (winner of the 1999 US National Medal of Technology and Innovation). In 2012 Kurzweil was appointed a director of engineering at Google, and a year later Google launched a sub-company called Calico whose stated mission is 'to solve death'.26 Google has recently appointed another immortality true-believer, Bill Maris, to preside over the Google Ventures investment fund. In a January 2015 interview, Maris said, 'If you ask me today, is it possible to live to be 500, the answer is yes.' Maris backs up his brave words with a lot of hard cash. Google Ventures is investing 36 per cent of its \$2 billion portfolio in life sciences startups, including several ambitious life-extending projects. Using an American

football analogy, Maris explained that in the fight against death, 'We aren't trying to gain a few yards. We are trying to win the game.' Why? Because, says Maris,

'it is better to live than to die'.27

Such dreams are shared by other Silicon Valley luminaries. PayPal cofounder Peter Thiel has recently confessed that he aims to live for ever. 'I think

there are probably three main modes of approaching [death],' he explained.

'You can accept it, you can deny it or you can fight it. I think our society is dominated by people who are into denial or acceptance, and I prefer to fight it.' Many people are likely to dismiss such statements as teenage fantasies. Yet Thiel is somebody to be taken very seriously. He is one of the most successful and influential entrepreneurs in Silicon Valley with a private fortune estimated at \$2.2 billion.28 The writing is on the wall: equality is out – immortality is in.