
IMMORTALITY

JOHANNES BORGSTEIN

Chiron, being offered immortality, chose rather to die than be troubled with the same thing always.

Erasmus, Praise of Folly

The vast lie of personal immortality destroys all reason.

Nietzsche, Antichrist

...To know deep down that we are immortal and that sooner or later all men will do and know all things.

Borges, The Immortal

It is perhaps the ultimate paradox of human life that as a race we know ourselves to be immortal and strive only to achieve destruction and oblivion, while as individuals we know ourselves to be mortal and struggle to prolong life, to achieve immortality at any cost.

The search for immortality regularly appears in the media or the journals in one form or another. Medicine has of course always held out a subtle promise of prolonged life, but it seems that is no longer sufficient; now, we will not be satisfied with anything short of complete immortality. A good proportion of molecular biology research seems to be directed at finding the "mortality gene," the scientific equivalent of the fountain of youth, that subtle section of DNA which is supposed to switch our immortal cells into planned destruction after a mere century of life. Other scientists are desperately trying to clone human beings to produce exact replicas, or at least spare parts.

The habits of the very old are eagerly analyzed, and if an enclave of ancients is discovered anywhere in the world, a legion of anthropologists is dispatched to discover their secrets. Lamentably, these arcanes rarely turn out to be anything more disquieting than a balanced, unrefined and somewhat restricted diet and regular, but not too strenuous, physical exercise. There is never a shortage of funding for such projects, for we seem to find the attraction of interminable life as irresistible as the idea of

the philosopher's stone or 'El Dorado' in previous centuries. The promise of eternal life easily loosens the purse strings of even the most stringent foundation, though we rarely seem to pause and reflect on the awesome, and as we shall see awful, implications if even one of these ambitious projects should ever bear fruit. "Be careful what you wish for," goes the old proverb, but we have been careless and greedy with our wishes, and so far there has always been a sting. We wished for infinite power and received nuclear waste, oil spills and the greenhouse effect. Infinite wealth led to escalating consumerism, poverty and slums. Infinite wisdom ends in religious violence and some of the worst forms of cruelty ever devised. So where may the wish for infinite life lead us, apart from the hope for all the others combined? What about overpopulation, and food supply and raw materials, energy, pollution? Or shall we restrict immortality to a few carefully selected individuals? Will these be certain especially talented individuals, or merely those with a proven talent for accumulating wealth? Who then will sit impartially on the selection committees?

Immortality is not a new concept. It has been analyzed and speculated in literature and religion for as long as we have records, though the speculations must have existed from the beginning of language, when the awareness of death, or the possibility of our own death became a conscious reflection. In some ways, mortality is the price we pay for consciousness, or at least for the rational consciousness which makes us so different from other animals. Before language we were, like all animals, immortal.

Religious mythology involves a fruit tasted by Eve and passed on to Adam followed by the development of awareness or consciousness that turn out in the expulsion from a fairly idyllic animal existence. The fruit is clearly a symbol of language which only develops by the interaction of two persons at least, while the snake signifies perhaps the linear progression of thoughts and words which make up language, and the arrow of time from past to future which language makes possible. The price we pay for this language is not death, for death is an essential part of life, but the (conscious) realization of mortality, the realization that death is inevitable.

Before science, religion seemed to bring immortality almost within our grasp; it was attributed to the gods, and its possible implications analyzed, from the bored playfulness of the Greek pantheon to the stern omniscience of the monotheist religions that now dominate the world. Odysseus was on several occasions offered or tempted with immortality, but found the price unacceptable and turned it down—Circe would have made him immortal, but he would have been stuck with her for all eternity, something he clearly considered a fate worse than death.

Many writers have analyzed the concept of immortality, though few as effectively as Jorge Luis Borges, who has a delightful short story subtly titled "The immortal," in which the hero goes in search of and eventually

finds the fabled river of immortality. Alongside stands the labyrinthine city of the immortals, built in the first enthusiastic centuries of their immortality, and long since abandoned for a life of ennui inhabiting the caves surrounding the little muddy stream that had granted their condition. Withdrawing from the world and abandoning the language and conscious reflection which made their condition close to unbearable, the immortals maintained a basic animal existence as "troglodytes." The narrator eventually leaves to search for the river of mortality which he logically concludes must also exist somewhere in the world. The ultimate desire of an immortal, the only desire he has left, is to find mortality, to die.

Leaving aside for a moment this aspect of immortality which has been analyzed in literature, what would be the practical implications of a considerable prolongation of life?

When the human genome was almost unraveled, there were enthusiastic declarations by politicians and prominent scientists that we would soon be able to prevent cancer and prolong all human life for at least 1 400 years—how this number was arrived at remains somehow vague. Now, given that the majority of people—those not directly concerned with finding enough to eat every day—do not really know what to do with themselves on a rainy Sunday afternoon, should we assume they will suddenly become wildly creative at the prospect of having perhaps an additional 1 320 years of Sundays (roughly 70 000) to fill?

Can we also assume that the brain and memory processes will continue to function properly, so we do not become progressively more senile, as the immortals encountered by Gulliver on his travels? The few centenarians I have met who were in fairly good physical health did not have the mental agility to match and, what is worse perhaps, were aware of this.

Then what about the problem of over-population? Where will we keep all the additional people, or should we assume that the reproductive drive would simply vanish as soon as immortality is confirmed? If, as Freud maintained, sexuality is the drive of all creativity, would creativity vanish also, and if it did, would it still be a life worth living, or a version of living hell? Sartre toyed with this concept in his play *No Exit*.

Cloning is not likely to confer the desired immortality either, for while a clone may be physically very similar, it does not share our consciousness and can never continue our existence. Using clones for spare parts and organ transplants will only slightly defer the inevitable, and is based on several important Cartesian misconceptions: that the body is solely a machine, so that a damaged organ may be considered independently from the rest of the organism and neither results from nor induces problems in its other components. This idea also assumes that a clone has no rights over its own organs and may be sacrificed for the good of the original

body. This question opens a whole hornets nest of insolvable ethical considerations, for a clone will have the same human rights as everyone else, and will be as unwilling as anyone else to sacrifice an essential organ, unless it is proposed that such a desire can also be genetically installed. The growth of solitary organs is much further ahead than cloning, for we understand very little of the “environmental” factors that determine cellular differentiation to convince cells of essentially identical genetic composition to “decide” and develop into a liver or a cornea. These environmental factors may be chemicals, hormones, electromagnetic fields or any combination of gradients of these, which make little sense except in the integrated organism, and would be almost impossible to imitate. Without this knowledge we are unlikely to achieve more than clumps or sheets of repeated cells with little or no integrated function.

Cancer may be seen in this respect as a communication failure on various possible levels, from flawed information reaching the cell to damaged mechanisms within the cell that fail to interpret the environmental information correctly.

Finally, if the human genome is like a code, what exactly is reading and interpreting that code? Genetics will have us believe that DNA is an auto-interpreting system, but does it have any meaning?

Physically we are already part of an immortal system; our cells and genes are in direct continuity with the first human and further back even with the first biological cells. Culturally there is also a continuity, transmitted via oral traditions and example over millennia, and considerably refined since the invention of writing, to be fossilized by the modern communication methods which ensure unfailing repetition and secure archiving of practically any information we might wish to preserve and much of what we do not.

Biological systems are self-regulating and immortal. Only man has the power to terminate them from within, to materialize the final dream of the immortal and find oblivion.