京大過去問 2003年 第2問

次の文の下線をほどこした部分(1)~(4)を和訳せよ。

We live at a unique point in the history of planet Earth. After almost four billion years of evolution, a single species, Homo sapiens, has evolved with the capacity to think, to contemplate not only its place in the universe but also potentially to control its own destiny and that of other species as well. (1) What sets our species apart is our brains. We have the facility to absorb, process, and organize extraordinary amounts of information. With language, written and spoken, we can pass information from person to person, extending knowledge and experience from generation to generation across the ages. With art and literature we can stimulate the imaginations of our fellow humans. With science we can explore the complex processes that developed in the first few seconds of the universe, in the aftermath of the big bang. We can hope to understand the events that led to the production of the elemental subatomic building blocks of matter, the synthesis of the elements, and the eventual accretion of matter in orderly macroscopic structures we identify as planets, stars and galaxies. We can track the life cycle of a star from birth, to death, to rebirth. We can enumerate the factors that set our planet apart from other bodies of our solar system. We can reconstruct the history of the earth and speculate as to the events that led to the early appearance of life and the forces that shaped its subsequent evolution. We can hope to unravel the principles that govern life itself. And soon we may have the capacity to manipulate our genes, perhaps to eliminate disease or at least postpone its onset.

Yet there is a dark underside to this record of accomplishment. The achievements of our science are astounding, the future scarcely imaginable. (2)In a world of specialization there is a risk, though, that we may lose sight of our place in nature, that we may begin to view ourselves as above it all — as supernatural. We have developed an undeniable capacity to transform the earth, to alter, for example, the composition of the atmosphere on a global scale with uncertain but surely inauspicious implications for the climate. (3)We have the power to extinguish in an astronomical instant species that took billions of years to evolve. The critical question is whether we have the wisdom and ethical maturity to employ our scientific and technological skills with discretion. We have embarked on an unplanned global experiment and our ability to predict the consequences is deficient. (4)We need to step back and see where we stand if we are to avoid serious mistakes. We need a moral compass: there are ethical as well as technical issues to be addressed to chart a responsible course to the future.