

I

次の文章を読み、下の設問(1)~(3)に答えなさい。

(50点)

That man should have dominion “over all the earth, and over every creeping thing that creepeth upon the earth,” is a prophecy that has hardened into fact. Choose just about any metric you want and it tells the same story. People have, by now, directly transformed more than half the ice-free land on earth — some twenty-seven million square miles — and indirectly half of what remains. We have dammed or diverted most of the world’s major rivers. Our fertilizer plants and legume crops fix more nitrogen than all terrestrial ecosystems combined, and our planes, cars, and power stations emit about a hundred times more carbon dioxide than volcanoes do. In terms of sheer biomass, the numbers are stark-staring: today people outweigh wild mammals by a ratio of more than eight to one. Add in the weight of our domesticated animals — mostly cows and pigs — and that ratio climbs to twenty-two to one. “In fact,” as a recent paper in the *Proceedings of the National Academy of Sciences* observed, “humans and livestock outweigh all vertebrates combined, with the exception of fish.” We have become the major driver of extinction and also, probably, of creation of species. So pervasive is man’s impact, it is said that we live in a new geological epoch — the Anthropocene. In the age of man, there is nowhere to go, and this includes the deepest trenches of the oceans and the middle of the Antarctic ice sheet, that does not already bear our Friday-like* footprints.

An obvious lesson to draw from this turn of events is: be careful what you wish for. Atmospheric warming, ocean warming, ocean acidification, sea-level rise, deglaciation, desertification, eutrophication — these are just some of the by-products of our species’s success. Such is the pace of what is blandly labeled “global change” that there are only a handful of comparable examples in earth’s history, the most recent being the asteroid impact that ended the

reign of the dinosaurs, sixty-six million years ago. Humans are producing no-analog climates, no-analog ecosystems, a whole no-analog future. At this point it might be prudent to scale back our commitments and reduce our impacts. But there are so many of us — as of this writing nearly eight billion — and we are stepped in so far, return seems impracticable.

And so we face a no-analog predicament. If there is to be an answer to the problem of control, it's going to be more control. ^(c) Only now what's got to be managed is not a nature that exists — or is imagined to exist — apart from the human. Instead, the new effort begins with a planet remade and spirals back on itself — not so much the control of nature as the *control of the control of nature.*

*Friday-like: Friday is the name of a character in Daniel Defoe's novel *Robinson Crusoe* (1719).

- (1) 下線部(a) the Anthropocene について、本文に即して日本語で説明しなさい。ただし、本文中に列挙された具体的な特徴から 4 つを選んで解答に含めること。
- (2) 下線部(b)を和訳しなさい。
- (3) 下線部(c)を和訳しなさい。

II 次の文章を読み、下の設問(1)~(3)に答えなさい。

(50 点)

In examining the history of libraries and the way their collections have evolved over time we are, in many ways, telling the story of the survival of knowledge itself. Every individual book that exists now in these institutions, all the collections that together build up into larger bodies of knowledge, are survivors.

Until the advent of digital information, libraries and archives had well-developed strategies for preserving their collections: paper. The institutions shared the responsibility with their readers. All new users of the Bodleian Library at Oxford University, for example, are still required to formally swear “not to bring into the Library, or kindle therein, any fire or flame,” as they have done for over four hundred years. Stable levels of temperature and relative humidity, avoidance of flood and fire, and well-organized shelving were at the heart of preservation strategies. Digital information is inherently less stable and requires a much more proactive approach, not just to the technology itself (such as file formats, operating systems and software). This instability has been amplified by the widespread adoption of online services provided by major technology companies, especially those in the world of social media, for whom preservation of knowledge is a purely commercial consideration.

As more and more of the world’s memory is placed online we are effectively outsourcing that memory to the major technology companies that now control the internet. The phrase “Look it up” used to mean searching in the index of a printed book, or going to the right alphabetical entry in an encyclopedia or dictionary. Now it just means typing a word, term or question into a search box, and letting the computer do the rest. Society used to value the training of personal memory, even devising sophisticated exercises for improving the act of memorizing. Those days are gone. There are dangers in the convenience of the internet, however, as the control exercised by the major

technology companies over our digital memory is huge. Some organizations, including libraries and archives, are now trying hard to take back control through independently preserving websites, blog posts, social media, even email and other personal digital collections.

“We are drowning in information, but are starved of knowledge,” John ^(b)Naisbitt pointed out as early as 1982 in his book *Megatrends*. A concept of “digital abundance” has since been coined to help understand one important aspect of the digital world, one which my daily life as a librarian brings me to consider often. The amount of digital information available to any user with a computer and an internet connection is overwhelmingly large, too large to be able to comprehend. Librarians and archivists are now deeply concerned with how to search effectively across the mass of available knowledge.

The digital world is full of contradictions. On the one hand the creation of knowledge has never been easier, nor has it been easier to copy texts, images and other forms of information. Storage of digital information on a vast scale is now not only possible but surprisingly inexpensive. Yet storage is not the same thing as preservation. The knowledge stored online is at risk of being lost, as digital information is surprisingly vulnerable to neglect as well as deliberate destruction. There is also the problem that the knowledge we create ^(c)through our daily online interactions is invisible to most of us, but it can be manipulated and used against society for commercial and political gain. Having it destroyed may be a desirable short-term outcome for many people worried about invasions of privacy but this might ultimately be to the detriment of society.

- (1) 下線部(a)を和訳しなさい。
- (2) 下線部(b)を和訳したうえで、具体的にどのようなことを指しているかを、本文に即して説明しなさい。
- (3) 下線部(c)を和訳しなさい。

Ⅲ 次の文章を英訳しなさい。

(25 点)

数ある旅の楽しみのなかで、車窓からの眺めというのもまた捨てがたい。そこに美しい自然が広がっていれば、ただただ目の保養になる。でも、ありふれた田舎や街並みを眺めているのも悪くない。そこに見かける、きつこの先出会うこともなさそうな人々は、みなそれぞれにその人なりの喜びや悲しみとともに暮らしている。そう思うと、自分の悩み事もどこか遠くに感じられて、心がふっと軽くなる気がするのだ。

Ⅳ 大学で研究をするうえであなたが最も重要と考えることを一つ挙げ、その理由を 2 点に絞って 100 語程度の英語で具体的に説明しなさい。

(25 点)

問題は、このページで終わりである。