

I

次の文の下線をほどこした部分(1), (2), (3)を和訳しなさい。

(50点)

One day I was struck by the admittedly obvious but also incredible realization that, ever since *Homo sapiens* evolved, every single member of the human race must have possessed a completely unique brain, never duplicated in over tens of thousands of years. How else could each human being have been unique? As every single one of our predecessors has lived out their particular life story, a variety of experiences have literally left their mark on each and every brain. And as each of our predecessors has followed their own<sup>(1)</sup> particular narrative, so the accumulation of events has in turn acted as an ongoing frame of reference for evaluating whatever comes along next. Could this be the key to unlocking that most controversial of issues: the physical basis of the mind?

Sometimes human beings lose their minds—be they drunk, drugged, ecstatic or simply mad. All are very different conditions, but with this one crucial factor in common: something very special is missing. But what is it exactly that has vanished? Certainly not consciousness, that first-hand, subjective experience of the world. After all, in mindless moments our brains<sup>(2)</sup> still function: all senses are present if not entirely correct, as the final perspective on what is happening around you is a little distorted compared with 'normal'. Not only that, but you can move your muscles, even if with a little less control or with greater hesitancy. So 'loss' of mind is not the same as loss of the most basic brain functions of senses-input, movement-output. And the converse holds: a paralyzed patient still has a mind comparable to that of anyone else, even if crucial brain functions for interfacing with the outside world are not operational.

What then is this 'mind', which is so bound up with the physical brain but so intuitively distinct from it? In the past philosophers, indeed most people, liked to think separately of the generic 'brain' as though it was a very different

entity from 'mind' — a 'physical' thing as opposed to a 'mental' something. So<sup>(3)</sup>  
while no one has ever had a problem with what and where the brain was, and  
with perceiving it as an obvious physical object, the very concept of 'mental'  
events has caused unresolved intellectual conflict for centuries.

**II**

次の文の下線をほどこした部分(1), (2), (3)を和訳しなさい。

(50 点)

Many of the most common things that we encounter in everyday life are also among the most elegant solutions in fitting form to function. Thus the familiar paper clip has long been widely admired by architects and designers for being a graceful loop-within-a-loop spring that silently does its job. The sewing needle, with its sharp, elongated point balanced by its soft oval eye, is a classic example of opposites united in a manufactured product. But such things, being made of steel, are many times removed from the raw materials from which they begin. These are not things easily made from scratch by a single person. Small things made of wood are more organic, closer to nature and formable by an individual with little more than a sharp knife and a patient hand.

My vote for the simplest object of all goes to one that is made of a single material, has a single part and is intended (at least originally) for a single purpose, from which it gets its name. This simple object is the toothpick. This humble tool, so familiar as to be generally unremarkable, can be made by an idle boy with a stick and a knife. Each example would bear the individuality of its maker and the uniqueness of its circumstances. But in the latter part of the 19th century, toothpick making — like virtually everything else — began to be mechanized, producing a product whose shape could be reliably replicated.

Anthropologists believe, based on the existence of nearly 2-million-year-old fossil teeth bearing distinct grooves, that picking the teeth, one of the earliest uses of a tool, is mankind's oldest habit. The marks may have resulted from the repeated and prolonged use of grass stalks containing hard particles. With the development of civilization, toothpicks began to be deliberately fabricated from other materials. In ancient times, metallic toothpicks were used and shown off by privileged classes and provided the principal means of caring for one's teeth. Even in modern times, a gold or silver toothpick kept in a case in

one's pocket or purse has been a constant companion to some of the more fastidious. The more common wooden toothpick, perhaps made from a broken branch, was an alternative to the metallic kind. The production of wooden toothpicks as a cottage industry dates from the 16th century.

## Ⅲ

次の文(1), (2)を英訳しなさい。

(50点)

- (1) 冗談を言う人間は低俗な奴と響<sup>やっ</sup>聲<sup>ひんしやく</sup>を買うことがある。しかし、人間関係における一種の潤滑油としてのユーモアの効用については、もっと認識されて良いのではないだろうか。ユーモアのわかる人間となるためには、幅広い知識と柔軟な思考法、それに豊かな感受性が必要だ。ユーモアのセンスがあると言われることは、最高の褒<sup>ほ</sup>め言葉である。
- (2) 我が家の古いピアノには懐かしい思い出がたくさん詰まっている。5歳からピアノを始めた娘たちもすっかり大人になり、今やだれも弾<sup>ひ</sup>かなくなった。しかし、なかなか処分する気にはなれない。そういうピアノを買い取って再生させる会社があるらしい。プロの手で修理すれば、また美しい音を奏<sup>かな</sup>でることができるという。

総合人間学部及び医学部(医学科)志願者以外の問題は、このページで終わりである。

以下は、総合人間学部及び医学部(医学科)志願者のみの問題である。

**IV** テープを聞いて、セクション1, 2の問題に答えなさい。

総合人間学部(50点)

医学部(医学科)(30点)

セクション 1

セクション 2

- (1) For how long have scientists understood how genes work?
- (2) What have scientists at the University of Pennsylvania used to treat an eye disease?
- (3) What is the name of the researcher at the Howard Hughes Medical Institute?
- (4) When was the first human gene-therapy trial held?
- (5) How many patients have benefited from the new treatment for SCID?

問題は、このページで終わりである。