

大阪医科大学

平成30年度入学試験問題(前期)

英 語

注 意

1. 合図があるまで表紙をあげないこと。
2. 受験票は机上に出しておくこと。

I 以下の英文を読み、下線部(1)~(4)を和訳せよ。ただし、(1)の“they”と(4)の“Both”が何を指すかを明らかにして訳すこと。

Thought, or reflection, is the mental act of discerning the relation between what we try to do and what happens in consequence. No experience having a meaning is possible without some element of thought. But we may contrast two types of experience according to the proportion of reflection found in them. All our experiences have a phase of “cut and try” in them — what psychologists call the method of trial and error. We simply do something, and when it fails, we do something else, and keep on trying till we hit upon something which works, and then we adopt that method as a rule-of-thumb*¹ measure in subsequent procedure. Some experiences have very little else in them than this process. In these cases, we see *that* a certain way of acting and a certain consequence are connected, but we do not see *how* they are. We do not see the details of the connection; the links are missing. Our discernment is very gross.

In other cases we push our observation farther. We analyze to see just what lies between so as to bind together cause and effect, activity and consequence. This extension of our insight makes foresight more accurate and comprehensive. The action which depends simply upon the trial and error method is at the mercy of circumstances; they may change so that the act performed does not operate in the way it was expected to. But if we know in detail upon what the result depends, we can look to see whether the required conditions are there. This method extends our practical control. For if some of the conditions are missing, we may, if we know what the needed conditions for an effect are, set to work to supply them; or, if they are likely to produce undesirable effects, we may eliminate some of the superfluous*² causes and economize effort.

In discovery of the detailed connections of our activities and what happens in consequence, the thought implied in cut and try experience is made explicit. Its quantity increases so that its proportionate value is very different. Hence the quality of the experience changes; the change is so significant that we may call this type of experience “reflective”. The deliberate cultivation of this phase of thought constitutes “thinking”. Thinking, in other words, is the intentional endeavor to discover specific connections between something which we do and the consequences which result, so that the two become continuous. The occurrence is now understood; it is explained; it is reasonable, as we say, that the thing should happen as it does.

Thinking is thus equivalent to an explicit rendering of the intelligent element in our experience. It makes it possible to act with an end in view. It is the condition of our having aims. As soon as an infant begins to expect he begins to use something which is now going on as a sign of something to follow; he is, in however simple a fashion, judging. For he takes one thing as evidence of something else, and so recognizes a relationship. Any future development, however elaborate it may be, is only an extending and a refining of this simple act of inference. All that the wisest man can do is to observe what is going on more widely and more closely and then select more carefully from what is noted just those factors which point to something to happen. The opposites to thoughtful action are routine and capricious*³ behavior. The former accepts what has been customary as a full measure of possibility and omits to take into account the connections of the particular things done (it says, in effect, “let things continue just as I have found them in the past”). The latter makes the momentary act a measure of value, and ignores the connections of our personal action with the energies of the environment (it says, virtually, “things are to be just as I happen to like them at this instant”). Both refuse to acknowledge responsibility for the future consequences which flow from present action. Reflection is the acceptance of such responsibility.

(出典：John Dewey, *Democracy and Education: An Introduction to the Philosophy of Education*. The Macmillan Company. 1916. 一部変更あり)

*¹rule-of-thumb: based on practice rather than theory

*²superfluous: more than sufficient or required

*³capricious: likely to change one's mood or behavior unexpectedly

II 以下の英文を読み、下線部を和訳せよ。

Humans are unlikely to ever blow out more than 125 candles on their birthday cake, according to research that suggests that our lifespan has already hit its natural limit.

The oldest human who ever lived, according to official records, was 122-year-old Frenchwoman Jeanne Louise Calment, who died in 1997. Now a team of American researchers suggests she is unlikely to lose the top spot any time soon, as their research shows that though more people reach old age each year, the ceiling for human lifespan appears to be stuck at around 115 years. ⁽¹⁾ “The chances are very high that we have really reached our maximum allotted lifespan for the first time,” said Jan Vijg, co-author of the research.

Some scientists have previously claimed that the first person to reach 1,000 years old is likely to be alive today. But the new study suggests that is highly unlikely. The upshot, says Vijg, is that people should focus on enjoying life and staying healthy for as long as possible; “That’s where we have to invest our money.”

The notion of extending the human lifespan has captured imaginations for millennia. Among scientists, enthusiasm for the idea has grown in recent years with a host of Silicon Valley companies springing up to join academic institutions in making various attempts to work on issue of longevity.

But the new study describes how analysis of records from a number of international databases suggests there is a limit to human lifespan, and that we have already hit it. Using data for 41 countries and territories from the Human Mortality Database, the team found that life expectancy at birth has increased over the last century. That is due to a number of factors, including advances in childbirth and maternity care, clean water, the development of antibiotics and vaccines and other health measures. But while the proportion of people surviving to 70 and over has risen since 1900, the rate of improvements in survival differ greatly between levels of old age. Large gains are seen for ages 70 and up, but for ages 100 or more the rate of improvement drops rapidly. “For the oldest old people, we are still not very good at reducing their mortality rates,” said Vijg.

The researchers also found that the maximum reported age at death rapidly increased between 1970 and the early 1990s, rising by around 0.15 years every year, but it has remained stable at around 115 years since the mid-90s. ⁽²⁾ The apparent limit to human lifespan, the authors say, is not due to a set of biological processes specifically acting to call time on ^{*1} life. Rather, it is a byproduct of a range of genetic programmes that control processes such as growth and development.

Henne Holstege from VU University, Amsterdam, who works on ageing of centenarians ^{*2}, says the new study suggests “there seems to be a wall of mortality that modern medicine cannot overcome”. “If you die from heart disease at 70, then the rest of your body might still be in relatively good health. So, a medical intervention to overcome heart disease can significantly prolong your lifespan,” she said. “However, in centenarians not just the heart, but all bodily systems, have become aged and frail. If you do not die from heart disease, you die from something else.” Medical interventions, she says, cannot solve the problem of overall decline, with the only promising approach lying in slowing down the ageing process itself. ⁽³⁾ But, she added, “It is however not yet clear if and how this can be accomplished.”

(出典：The Guardian, 5 October 2016. 一部変更あり)

^{*1}call time on ... : decide that it is time to end ...

^{*2}centenarian: a person who is 100 years old or older

III 下線部を英訳せよ。

我々は、様々なメディアを通じて、毎日のように新しい科学的発見のニュースに接している。メディアによる科学への注目が高まっていることは、我々の科学的知識の向上に役立っていると思われるかもしれない。 ⁽¹⁾ しかし、最近発表されたある研究によれば、こうしたニュースのほぼ半数が、実験結果を誇張しているということだ。 ⁽²⁾ したがって、科学ニュースを無批判に受け入れれば受け入れるほど、私たちは本来の科学的思考から遠ざかってしまう恐れがあることを自覚しなくてはならない。 ⁽³⁾