令 和 7 年 度

英 語

問題冊子



Ⅰ 次の文章を読んで、問1~問6に答えなさい。*の付された語句については下に注がある。

Galileo's researches in astronomy were more than original, they were unprecedented. Most of his work was concerned with two issues, the refutation of the Aristotelian and the defense of the Copernican "System of the World," and his originality lies not so much in what he found as in how he interpreted his discoveries. Even his discoveries with the telescope are of still greater interest for the conclusions that he drew from them, for nearly all of them could be [7] to the criticism of Aristotle* and the defense of Copernicus*. His initial discoveries and his initial interpretations, although not as far-reaching as the conclusions he reached in the *Dialogue on the Two Great Systems of the World*, were upsetting enough to anyone who was not already a friend of Copernicus.

By the beginning of 1610 Galileo had made a powerful telescope, but even before that he began making observations of the heavens. He began with the irregular surface of the Moon, went on to the uncountable number of the stars, and then in early January found the satellites of Jupiter, which made him resolve to publish quickly, before someone else had the bright idea of [\(\nabla \)] a telescope on Jupiter.

Galileo's latest observation is dated 2 March, and by 13 March the *Sidereal Messenger* appeared in Venice, dedicated to Cosimo II de' Medici*, Fourth Grand Duke of Tuscany*, after whom he named the four satellites of Jupiter the "Medicean Stars." This is particularly appropriate, he points out in the dedication, since at the time of Cosimo's birth Jupiter occupied the midheaven, and there are yet other pleasing astrological conceits to flatter the young Grand Duke's vanity.

Galileo's discoveries changed the world, but first they changed Galileo. He became the strongest proponent of Copernican theory in Italy and the most hostile critic of Aristotelian physics anywhere, and for the latter distinction there was no [A] of competition. And the transformation was immediate. In the *Sidereal Messenger* he states unequivocally that the planets move around the Sun. While it is true that Galileo's discoveries with the telescope do not by themselves prove Copernican theory—and he never quite claimed that they do, although he certainly believed they came very close—they did provide a great deal of evidence in its favor and remove a number of objections.

Just as important as their evidence for Copernican theory was the evidence his discoveries provided against the Aristotelian theory. And although the evidence for Copernicus now has the greater fame, it appears that to Galileo's contemporaries the evidence against Aristotle had the more disturbing effect. Truly, Galileo's discoveries changed the world, and it is not surprising that each one was received with everything from the greatest applause to the greatest [B].

On the one side was Kepler*, who responded with enthusiasm, and Galileo's students and friends, who were soon to be known as Galileists. On the other, the philosophers and the astronomers, who either refused to believe the observations or sought ways of explaining away their troubling consequences.

> (Noel M. Swerdlow, 'Galileo's Discoveries with the Telescope and Their Evidence for the Copernican Theory' 適宜改変)

[注]

Aristotle: アリストテレス(前 384-前 322)。古代ギリシアの哲学者。

Copernicus: コペルニクス (1473-1543)。ポーランドの聖職者, 天文学者。

Cosimo II de' Medici:メディチ家のコジモ 2 世 (1590-1621)。ルネサンス後期の文化・科学に 大きく貢献した。

Tuscany:イタリアのトスカナ地方。

Kepler:ケプラー (1571-1630)。ドイツの天文学者。

問 1 下線をほどこした部分(1)を和訳しなさい。

問 2 下線をほどこした部分(2)の内容を、日本語で説明しなさい。

問3 下線をほどこした部分(3)を和訳しなさい。

問 4 下線をほどこした部分(4)を 'troubling consequences' の内容を明らかにしながら和訳しなさ 11

問 5 空所[ア][イ]には同じ動詞の別々の変化形がはいる。その動詞の原形を記しなさ 110

問 6 空所[A][B]にはいるもっとも適切な単語を、それぞれ下の(ア)~(エ)の中から選び、 記号で答えなさい。

[A] (\mathrm{7}) credibility

(イ) doubt

(ウ) lack

(I) prestige

[B] (7) hostility (1) magnitude

(ウ) phenomenon

(I) susceptibility

Ⅲ 次の文章を読んで、空所[1]~[25]にはいるもっとも適切な単語を、下の(ア)~(ノ)の中から選び、記号で答えなさい。同じ記号は一度しか使えない。*の付された語句については下に注がある。

But maybe you don't need convincing, especially if you are under the age of twenty. People just want to be part of the dataflow, even if that means giving up their privacy, their autonomy and their individuality. Humanist art sanctifies the individual [1], so a Picasso's doodle on a napkin nets millions at Sotheby's*. Humanist science [2] the individual researcher, and every scholar dreams of putting his or her name at the top of a *Science** or *Nature** paper. But a growing number of artistic and scientific creations are nowadays produced by the ceaseless collaboration of 'everyone'. Who writes Wikipedia? All of [3].

The individual is becoming a tiny [4] inside a giant system that nobody really understands. Every day I absorb countless data bits through emails, phone calls and articles; process the data; and transmit back new bits through more emails, phone calls and articles. I don't really know where I fit into the greater [5] of things, or how my bits of data connect with the bits produced by billions of other humans and computers. I don't have [6] to find out, because I am too busy answering all the emails. And as I process more data more efficiently — answering more emails, making more phone calls and writing more [7] — so I flood the people around me with even more data.

This relentless flow of data sparks new inventions and [8] that nobody plans, controls or comprehends. No one understands how the global [9] functions or where global politics is heading. But no one needs to understand. All you need to do is answer your emails faster—and allow the system to read them. Just as free-market capitalists believe in the invisible hand of the market, so Dataists believe in the invisible hand of the dataflow.

As the global data-processing system becomes all-knowing and all-powerful, so [10] to the system becomes the source of all meaning. Humans want to [11] into the dataflow because when you are part of the dataflow you are part of something much bigger than yourself. Traditional religions assured you that your every word and action was part of some great cosmic plan, and that God watched you every minute and cared about all your thoughts and feelings. Data religion now says that your every word and action is part of the great dataflow, that the [12] are constantly watching you and that they care about everything you do and feel. Most people like this very much. For true-believers, to be disconnected from the dataflow [13] losing the very meaning of life. What's the [14] of doing or experiencing anything if nobody knows about it, and if it doesn't contribute something to the global exchange of information?

Humanism [15] that experiences occur inside us, and that we ought to find within ourselves the meaning of all that happens, thereby infusing the universe with meaning. Dataists believe that experiences are valueless if they are not [16], and that we need not—indeed cannot—find meaning within ourselves. We need only record and connect our experiences to the great dataflow, and the algorithms will discover their meaning and tell us what to do. Twenty years ago Japanese tourists were a universal laughingstock because they always carried cameras and took pictures of everything in [17]. Now everyone is doing it. If you go to India and see an elephant, you don't look at the elephant and ask yourself, 'What do I feel?'—you are too busy looking for your smartphone, taking a picture of the elephant, posting it on Facebook and then checking your account every two minutes to see how many [18] you got. Writing a private diary—a common humanist practice in previous generations—sounds to many present-day [19] utterly pointless. Why write anything if nobody else can read it? The new motto says: 'If you experience something—record it. If you record something—upload it. If you upload something—[20] it.'

Throughout this book we have repeatedly asked what makes humans superior to other animals. Dataism has a new and simple answer. In themselves human experiences are not superior at all to the experiences of wolves or [21]. One bit of data is as good as another. However, humans can write poems and blogs about their experiences and post them online, thereby enriching the global data-processing system. That makes their bits [22]. Wolves cannot do this. Hence all the experiences of wolves — as deep and complex as they may be — are [23]. No wonder we are so busy converting our experiences into data. It isn't a question of trendiness. It is a question of [24]. We must prove to ourselves and to the system that we still have value. And value lies not in having experiences, but in turning these experiences into free-flowing data.

(By the way, wolves — or at least their dog cousins — aren't a hopeless case. A company is developing a helmet for reading canine experiences. The helmet monitors the dog's brain waves, and uses computer algorithms to translate simple [25] such as 'I am angry' into human language. Your dog may soon have a Facebook or Twitter account of his own — perhaps with more Likes and followers than you.)

(Yuval Noah Harari, Homo Deus: A Brief History of Tomorrow 適宜改変)

[注]

Sotheby's: a famous auction house that specializes in selling art, antiques, jewelry, and other valuable items

Science, Nature: top scientific journals that publish research across various fields

(イ) articles (オ) count (7) algorithms (ウ) chip (I) connecting (カ) disruptions (‡) economy (ク) elephants (ケ) genius (¬) glorifies (y) holds シ) Likes (セ) point (ソ) risks (ス) merge (夕) scheme (f) sentiments (ツ) share (テ) shared (b) sight (=) time (ヌ) us () youngsters (+) survival (ネ) worthless

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"Let us go and sit in the shade," said Lord Henry. "If you stay any longer in this glare, you will be quite spoiled."

"What can it matter?" cried Dorian Gray, laughing, as he sat down on the seat at the end of the garden.

"It should matter everything to you, Mr. Gray."

"Why?"

"Because you have the most [1] youth, and youth is the one thing worth having."

"I don't feel that, Lord Henry."

"No, you don't feel it now. Some day, when you are old and wrinkled and [2], when thought has seared your forehead with its lines, and passion branded your lips with its hideous fires, you will feel it, you will feel it terribly. Now, wherever you go, you charm the world. Will it always be so? You have a wonderfully beautiful face, Mr. Gray. And beauty is a form of genius — is higher, indeed, than genius, as it needs no explanation. It is of the great facts of the world, like sunlight, or spring-time, or the reflection in dark waters of that silver shell we call the moon. It cannot be [3]. It has its divine right of sovereignty. It makes princes those who have it. People say sometimes that beauty is only superficial. That maybe so, but at least it is not so superficial as thought is. To me, beauty is the wonder of wonders. It is only shallow people who do not judge by appearances. The true mystery of the world is the visible, not the invisible.... You have only a few years in which to live really, perfectly, and fully. When your youth goes, your beauty will go with it, and then you will suddenly discover that there are no triumphs left for you, or have to content yourself with those mean triumphs that the memory of your past will make more bitter than defeats. Time is jealous of you, and makes war [5] your lilies and your roses. You will become sallow, and hollow-cheeked, and dull-eyed. You will suffer horribly.... Ah! Realize your youth while you have it. Live! Live the wonderful life that is in you! Be always searching for new sensations. Be afraid of nothing.... With your personality there is nothing you could not do. The world belongs to you for a season.... The moment I met you I saw that you were quite unconscious of what you really are, of what you really might be. There was so much in you that [6] me that I felt I must tell you something about yourself. I thought how tragic it would be if you were wasted. For there is such a little time that your youth will [7] — such a little time. The common hillflowers wither, but they blossom again. The laburnum* will be as yellow next June as it is now. In a month there will be purple stars on the clematis*, and year [8] year the green night of its leaves will hold its purple stars. But we never get back our youth. The pulse of joy that

beats in us [9] twenty becomes sluggish. Our limbs fail, our senses rot. Youth! Youth! There is absolutely nothing in the world but youth!"

Dorian Gray listened, open-eyed and wondering. The spray of lilac fell from his hand upon the gravel. A furry bee came and buzzed round it [10] a moment. Then it began to scramble all over the oval stellated globe of the tiny blossoms. He watched it with that strange interest in trivial things that we try to develop when things of high import make us afraid, or when we are stirred by some new emotion for which we cannot find expression, or when some thought that terrifies us suddenly surrounds the brain and calls on us to yield. After a time the bee flew away. He saw it creeping into the trumpet of a convolvulus*. The flower seemed to quiver, and then swayed gently to and fro.

(Oscar Wilde, The Picture of Dorian Gray 適宜改変)

[注]

laburnum: a small tree which has hanging clusters of yellow flowers

clematis: a climbing plant which bears purple flowers

convolvulus: a wild plant with trumpet-shaped flowers

問 1 下線をほどこした部分(A)を和訳しなさい。

問 2 下線をほどこした部分(B)を'it'の指示するものを明らかにしながら和訳しなさい。

問3 空所[1]~[10]にはいるもっとも適切な単語を、下の(ア)~(コ)の中から選び、記号で答えなさい。同じ記号は一度しか使えない。

(7) after (1) against (1) at (1) charmed (1) for

(カ) last (キ) marvellous (ク) of (ケ) questioned (コ) ugly

Ⅳ 次の文章を読んで、下線をほどこした部分(1)と(2)を英語で表現しなさい。

一般に数学は厳密な論理によって構成された学問であって、論理と同じではないとしても大体同(1) じようなものである、と思われている。しかし私の見るところでは、数学は高度に感覚的技術的な学問であって、数学を修得するには技術的な訓練が不可欠である。そして数学における技術で基本的なのは計算の技術である。

数の計算を教えるにはその原理を理解させなければならないが、技術というものは不思議なもの(2)で、原理の理解だけでは駄目である。それは、ピアノをうまく演奏するためには多年にわたる技術的機械的な訓練が欠かせないのに似ている。

(小平邦彦『怠け数学者の記』適宜改変)

問題は、このページで終わりである。





