

令和 4 年 度

英 語

問 題 冊 子

I 次の文章を読んで、問1～問5に答えなさい。*の付された語については下に注がある。

There is a view about laws of nature that is so deeply entrenched that it does not even have a name of its own. It is a pedestrian view that, I think, any scientific realist will hold. This view supposes that laws of nature describe facts about reality, namely, they tell how objects of various kinds behave: how they behave some of the time, or all of the time, or even how they must behave. What is critical is that they talk about objects — real concrete things that exist here in our material world, things like quarks, or mice, or genes; and they tell us what these objects do. If we think that the facts described by a law stand, or at least that the facts that stand are sufficiently like those described in the law, we count the law true, or true for the time being, until further facts are discovered. I propose to call this doctrine ‘the facticity view of laws’.

It is customary to take the fundamental explanatory laws of physics as the ideal. They are paradigms upon which all other laws — laws of chemistry, biology, thermodynamics, or particle physics — are to be modelled. But this assumption disproves the facticity view of laws, for the fundamental laws of physics do not describe true facts about reality. Rendered as descriptions of facts, they are false; amended to be true, they lose their fundamental, explanatory force.

You all know certainly the law of universal gravitation: $F = G \frac{m_1 m_2}{r^2}$. This is the law that Richard Feynman*, in his work *The Character of Physical Law*, uses for illustration. In words, Feynman tells us:

The law of gravitation is that two bodies exert a force between each other which varies inversely as the square of the distance between them, and varies directly as the product of their masses.

Does this law truly describe how bodies behave?

Assuredly not. Feynman himself gives one reason why. ‘Electricity also exerts forces inversely as the square of the distance, this time between electric charges . . .’ It is not true that for any two bodies the force between them is given by the law of gravitation. Some bodies are charged bodies, and the force between them is not $G \frac{m_1 m_2}{r^2}$. Rather it is some resultant of this force with the electric force to which Feynman refers.

For bodies which are both massive and charged, the law of universal gravitation and Coulomb’s* law (the law that gives the force between two charges) interact to determine the final force. But neither law by itself truly describes how the bodies behave. No charged objects will behave just as the former says; and any massive objects will constitute a counterexample to

the latter. These two laws are not true; worse, they are not even approximately true.

I have not given a complete statement of these two laws, only a shorthand version. The Feynman version has an implicit *ceteris paribus** modifier in front, which I have suppressed. Speaking more carefully, the law of universal gravitation is something like this:

If there are no forces other than gravitational forces at work, then two bodies exert a force between each other which varies inversely as the square of the distance between them, and varies directly as the product of their masses.

I will allow that this law is a true law, or at least one that is held true within a given theory. But it is not a very useful law. One of the chief jobs of the law of gravity is to help explain the forces that objects experience in various complex circumstances. It can account for why the force is as it is when just gravity is at work; but it is of no help for cases in which both gravity and electricity matter. It is able to explain in only very simple, or ideal, circumstances. Once the *ceteris paribus* modifier has been attached, the law of gravity is irrelevant to the more complex and interesting situations.

If physics' basic, explanatory laws do not describe how things behave, what do they do? Once we have given up facticity, I do not know what to say. Feynman offers an idea, a metaphor. He tells us 'There is . . . a rhythm and a pattern between the phenomena of nature which is not apparent to the eye, but only to the eye of analysis; and it is these rhythms and patterns which we call Physical Laws . . .' Most philosophers or perhaps most people will want to know a lot more about how these rhythms and patterns function. But at least Feynman does not claim that the laws he studies describe the facts.

The generalizations of biology, or engineering's methods based on practical experiences, are not true laws because they are not exceptionless. Many take this to mean that biology is a second-rate science. If this is good reasoning, it must be physics that is the second-rate science. Not only do the laws of physics have exceptions; unlike biological laws, they are not even true for the most part, or approximately true.

(Nancy Cartwright, *How the Laws of Physics Lie* 適宜改变)

[注]

Feynman：ファインマン(Richard Feynman 1918～1988)。アメリカ合衆国の物理学者。量子力学分野に貢献した。

Coulomb：クーロン(Charles-Augustin de Coulomb 1736～1806)。フランスの物理学者、技術者。

ceteris paribus：ラテン語成句。伝統的な学術用語で、with other conditions remaining the same という意味。

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)を和訳しなさい。

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)の具体例を本文中からそのまま抜き出して、解答欄に記しなさい。

問 5 下線をほどこした部分(5)を和訳しなさい。

II 次の文章を読んで、問1～問5に答えなさい。*の付された語については下に注がある。

In the second half of the twentieth century it is difficult to read Plato* without some awareness of Freud*. From the other side, Plato would undoubtedly have been very much interested in modern depth psychology, the psychology of inner conflict. The Platonic model of mind and mental disturbance holds an important place in Freud's thought. Outlining this one component of Freud's thought can allow us to see more clearly its other components.⁽¹⁾ Even more important, this type of examination highlights certain problems entailed in the notion that the mind is divided. These problems were not satisfactorily solved in Plato's thinking, and similarly, an examination of Freud's changing thought over the years suggests that he too struggled with a variety of possible solutions.

Consider Freud's point of departure in his discussion of the ego and the id, the so-called structural model of the mind: "The ego represents what may be called reason and common sense, in contrast to the id, which contains the passions. All this falls into line with popular distinctions which we are all familiar with." The "popular distinctions" to which Freud refers are those that first entered and became articulated in Western thought with Plato's philosophy. This fundamental distinction in Plato's thought is a most important one in Freud's.

Freud himself compared his thought to Plato's in a few scattered remarks in his early writings, particularly in *The Interpretation of Dreams*. The history of studies comparing Freud and Plato has been reviewed elsewhere. Suffice it to say that all of those studies suffer from some degree of failure to ascertain whether the overall configurations of the theories of these two men are sufficiently congruent to warrant a "compare and contrast" approach. If we consider that the two thinkers share a central underlying notion or structure,⁽²⁾ then the comparison is justified. That underlying notion is that man is a creature of inner conflict, split into a higher, rational part and a lower, desiring part.

How much of Plato Freud knew and the way he used that knowledge in his own thinking are of no great importance to this argument.⁽³⁾ In fact, Freud was not particularly steeped in Plato. Our task is to outline certain similar structures or forms in the theories of the two men, bracketing the historical issues. It must be kept in mind that Freud did not begin by studying man in conflict or the motives of behavior. He started by treating people with "sicknesses," hysteria, neurasthenia, and the like, and came to believe that these sicknesses were to be understood as expressions of inner conflict. Dreams and other products of mental life similarly could be understood as products of an inner battle between wishes and prohibitions. Freud, then, placed at the center of his theories of psychiatric illness the "popular distinctions" referred to above, the split between reason and impulse, though he believed that impulse often acted⁽⁴⁾

outside conscious awareness. In brief, both Plato and Freud, by different routes, eventually became concerned with the issues entailed in the assumption that man could act against himself and against his own best interests.

The problem of the nature of treatment is inextricably involved with the issue of control of the lower parts by the higher. How is this control to be achieved and maintained? ⁽⁵⁾ Plato entertained several solutions, certainly not original in either his day or ours, entailing society's control over the individual, or that part of the individual which is wild and irrational, "sick." In the *Republic* and the *Laws** he proposed oppression, tender fictions, and hints of rewards in the next world. Freud too recognized a series of means of control, and saw the history of civilization as a succession of experiments in methods of controlling instinctual forces. From the perspective of the physician treating the patient, he recognized an array of "cures" or ways to make the patient act more rationally. Suggestion, reassurance, and prohibition clearly have their curative effects.

(Bennett Simon, *Mind and Madness in Ancient Greece* 適宜改変)

[注]

Plato : プラトン(前 427～347)。古代ギリシアの哲学者。

Freud : ジークムント・フロイト(Sigmund Freud 1856～1939)。オーストリアの精神科医。

the *Republic* and the *Laws* : 『国家』と『法律』。プラトンによる二つの著作。

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)を和訳しなさい。

問 5 下線をほどこした部分(5)の問いかけにたいして、本文中でどのような答えが提示されているか。(A)プラトンの場合と(B)フロイトの場合に分けて、それぞれ日本語で具体的に記しなさい。

III 次の文章を読んで、問1～問7に答えなさい。

From downstairs, David could hear the sound of a wireless program, and the faint murmur of his parents' voices: it was lulling to listen to. He stuck his bare feet out of the bed, until they felt quite chilled and he felt wakeful again.

Once there was a moment of acute danger. There was the sound of a door opening and then Mr. Moss's footstep on the stair, with his wife's voice behind him, asking him to fetch David's trousers, so that she could mend a tear she had noticed in the seat. Mr. Moss did not put on the bedroom light, for fear of waking David; he spent a long time fumbling at the foot of the bed for the trousers, and David was longing for him to find them and go, when he remembered with a shock that he was wearing them. Luckily, however, Mr. Moss was not as persistent as his wife would have been; after a while, he gave up the search and went downstairs. David could not hear what was said, but, from his mother's tone in reply, he judged that she was taking the incident as another interesting example of a man's inability to find what was under his nose. Mr. Moss did not return, nor did Mrs. Moss come; she had evidently decided to leave the trousers until the morning.

The wireless program went on for a while; then it stopped. There was a too-restful silence, during which David thought it wiser to do some sharp exercises with his legs and arms. At last, from downstairs, he heard the sound of a door opening again, and both his parents were on the move. They seemed to spend a long time fidgeting with chairs, aimlessly opening and shutting doors, talking. Then David heard the sound of front and back doors being bolted — that would be his father. Then there were footsteps coming upstairs.

Mrs. Moss stole into her son's room, again without putting on the light. She felt over the bedclothes, to make sure that he was properly covered. Then she tiptoed out again. Then there were noises of bathroom and lavatory, and the click of the landing-light going off, and the stronger click of his parents' bedroom door shutting.

David counted a thousand, and then got out of bed, took off his pyjamas, and, shoes in hand, crept out onto the little landing. There was no line of light from the bottom of the bedroom door that had recently shut, and no sound from behind it: the house slept.

He tiptoed downstairs. There was a clock in the hall, and, by the moonbeams through the fanlight, he could read the time: half-past ten — only half-past ten! He put his ear up to the clock and listened, but it was still ticking, and, as long as it went, it always kept perfect time. By now, however, David could not wait for time.

He unbolted the garden-door very quietly, and let himself out. The moon was almost at the full, and silvered the little garden so that it had a strange new beauty. David stepped almost

reverently down the gravel path to the landing-stage. There, for the first time, he dared to put on his shoes again.

Besides David, the River Say seemed to be the only thing alive and awake, this night. David stooped and dabbled his fingers in the water, and found that it still had the warmth of summer sunlight in it. He could, he reflected, pass the time by taking a moonlit bathe; yet, somehow, the stillness everywhere and the unfamiliar blackness of the water made him decide against it.

Then he was aware of a regular, watery sound coming from upstream — and coming closer. Before he had time to know that he was feeling afraid, he saw the canoe — a new canoe, all in black and silver. It glided up to the landing-stage.

(Philippa Pearce, *Minnow on the Say* 適宜改変)

- 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)について、なにが 'shock' だったのか、文脈に即して日本語で説明しなさい。
- 問 3 下線をほどこした部分(3)について、なにが 'Luckily' といえることだったのか、文脈に即して日本語で説明しなさい。
- 問 4 下線をほどこした部分(4)について、(A)なにが(B)なにの 'another interesting example' なのか、日本語で説明しなさい。
- 問 5 下線をほどこした部分(5)のように David が考えた理由を日本語で説明しなさい。
- 問 6 下線をほどこした部分(6)と同じものを、二重下線をほどこした部分(a)~(d)から選び、その記号を記しなさい。
- 問 7 下線をほどこした部分(7)を、'it' の内容を明らかにしながら和訳しなさい。

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。

今の子供には、テレビにしろ野球にしろ、ほかの楽しみがいろいろとあるから、私どもが子供の
⁽¹⁾日に夢中になったように、本を読むことをしなくなっている。子供たちに本を読む習慣がすくなく
なっているのが、人間にうまれてただ生活するだけで夢も発展もない狭い人間ばかりできそうで不
安に思う。

成人してからの読書は、どうしても必要に応じる「勉強」だけのものになり、人間の心に根をおろ
⁽²⁾したものにならない。子供の時分に楽しんで読んだものは、忘れてしまっても、どこか身につ
いて残っているもので、ずっと後、中年以後になってからも、ふと記憶に浮かび出てくることがあ
る。生地のままに白い子供の心に、素直に吸い取られた印象だからであろう。成人になってからは
考えられないような、別の広い世界へ、空想が羽ばたきして出てゆくを知る。

(大佛次郎『今日の雪』 適宜改変)

問題は、このページで終わりである。

