- 141. 京都大 2004
- 142. 京都大 2004
- 143. 京都大 2013
- 144. 京都大 2011
- 145. 京都大 1979
- 146. 京都大 1997
- 147. 京都大 2005
- 148. 京都大 1987
- 149. 京都大 1996
- 150. 京都大 2024

(京都大 2004)

次の文の下線をほどこした部分(1)(2)を和訳しなさい。

With the rapid expansion of cameras and consumer photography today, it may be difficult to imagine a world without photographs. We have grown up with it, and the taking and viewing of photographs has become a part of everyday life. It is important to stress, however, that in the early days photography was something wonderful and new. Once the technology had been perfected, what was this thrilling new medium going to be used for? The technology, it seemed, preceded the purpose. For the early pioneers, it was enough to demonstrate that it worked, and that the natural world could be "frozen." (1) Their photographs didn't tell us much new about the world, other than that it could now be photographed. Once the novelty wore off, however, photography began to open up a visual world as never before.

Photography allowed people to see places they would not otherwise have been able to see. For example, few people were able to travel to Egypt themselves, but thanks to photography, they were now able to see such wonders of the world as the pyramids. In addition to places, people could now see people. (2) Nowadays, we are entirely used to seeing photographic images of the politicians and the celebrities of the day. Of course, this has been the case only recently. Until photography, most Americans had never seen a "true likeness" of their President.

*From Visual Culture by Richard Howells. Polity Press. Used by permission.

(京都大 2002)

次の文の下線をほどこした部分(1)(2)を和訳しなさい。。

In our hyper-mobile society, we will all be much more dispersed. Last year in Europe, there were 17 million new cars sold and Europe's car population increased by 3 million. That kind of growth can only be accommodated outside the old inner cities. They have been full for some time, so it can only occur in the suburbs and beyond.

Our future society will be a more polarized one. As these growth trends continue, a number of groups will get left behind. (1)<u>All of those too old or too young to drive, for instance — life for them will get harder. The more car-dependent we become, the more they will become dependent for their mobility on the withered remains of public transport and the goodwill of car owners.</u>

It will also be a less child-friendly world. If you go back 30 years, and look at how children got to school, 80% of eight-year-olds got to school on their own. In our survey in 1990, that had dropped to 9%. (2) Parents said that they denied their children the freedom that they themselves had enjoyed, because of the fear of traffic, and also of strangers. It is clear that our social relations are already changing.

(京都大 2013)

次の文章の下線をほどこした部分(1)~(4)を和訳しなさい。

Opening a door equipped with a familiar round doorknob is something that most of us learn to do as children. Even though one small hand might not fully encompass the knob, we can use two hands until we grow up and can finally grasp the knob easily with one. (1) The mechanics of the seemingly simple task of turning a doorknob involve a variety of forces that the hand exerts on the knob and through it to the door. If the shape of the knob is spherical or cylindrical, the pressure of the fingers on the edge must induce enough friction to cause it to turn. Once the bolt is released, we must change how we apply pressure. To move the door towards us our fingers must pull the back of the knob or we must press the front of the knob to push it open. We do all this naturally, of course, having learned the way to open a door.

Sometimes even the greatest pressure we can exert on a doorknob will not enable us to turn it. This will be the case, for example, if we cannot develop enough frictional force between our skin and the polished metal of the hardware due to moisture on the hand or the knob. Wearing gloves might also prevent us from grasping a doorknob firmly enough to operate it. (2) It is of such common domestic frustrations, if not absolute failures, that everyday inventions are born. Typically, first attempts to fix a problem begin with improving the existing technology with the aid of devices that serve the purpose at hand. In many cases, these fixes are devised by individuals for use in their homes. For example, one way to increase the frictional force between the hand and the doorknob is to place around the knob a tight-fitting rubber band. (3)An even less aesthetically pleasing solution might be to wrap the doorknob with some tape. But such solutions cry out for more elegant and architecturally integral means of increasing the frictional force between the knob and the hand.

The problem of not being able to develop enough grip between the hand and the doorknob can also be solved by changing the shape of the knob to oblate or prolate. (4) This modification shapes the knob more like an egg, which can be turned not so much by the friction but rather by the action of pushing opposite sides of the knob in opposing directions, effectively working it as a pair of levers. A doorknob of whatever roundish shape is in effect a continuum of levers. Given this,

it is no surprise that today spherical and cylindrical doorknobs have sometimes been replaced by door handles that do not disguise the fact that they are indeed levers. Door levers come in a wide variety of decorative shapes and finishes, but they are all basically means to solve the problem of people not having enough size or strength or grip in their hands to open a door.

(京都大 2011)

次の文章の下線をほどこした部分(1)~(3)を和訳しなさい。

The life of a physicist can be a lonely one. Imagine this: You sit down in an airplane, and the person next to you asks you what you do for a living. You reply that you're a physicist. From here, the conversation can go one of two ways. Nine times out of ten, the first thing out of his or her mouth is something along these lines: "Physics? I hated that class!"

(1)You'll then spend the rest of the trip (or party, or elevator ride, or date) apologizing for the emotional trauma that physics has apparently inflicted on your friend. These random encounters often reveal an almost joyful contempt, reserved specifically for the fields of physical science and mathematics. "Oh, I'm terrible at algebra!" for example, is said in an almost boastful tone, in a way that "I barely even know how to read!" never would. But why?

Physics has a somewhat unfair reputation for being hard, impractical, and boring. Hard? Perhaps. Impractical? Definitely not. Indeed, when people try to "sell" physics to the public, it is almost always in terms of how it can be used to build bridges or launch rockets — that is, how physics is ultimately the foundation for engineering or chemistry.

But boring? That's where we really take issue. (2) The problem, as we see it, is that the practical side of physics is almost always put forward at the expense of the interesting side. Even folks with technical focuses such as engineering and computer science typically don't get past mechanics and electromagnetism to the really *fun* stuff. And that's a shame, because quite frankly there has been very little cutting-edge research done on pulleys in the past few years.

This hostility to physics seems to be deep-rooted, and makes it difficult to have discussions without discouraging an audience. In starting a scientific conversation with a "civilian," we promoters of physics often feel like we're trying to force people to eat their vegetables, and rationalize it in the same way. We never begin physics discussions with "It's fun!" but almost always with "It's necessary," which naturally drains all of the fun out of it.

In an era when new technologies are constantly emerging, scientific literacy should be fundamental. On the other hand, it isn't necessary that you have four extra years of college sciences to understand them. You don't need to have a detailed knowledge of exactly how the physics works to appreciate the revolutions in quantum computing or cosmology. It is important, rather, to understand *why* these developments are significant, and how they will change technology and our lives.

And it's not simply that people need to understand a particular theory. Physics is the model inductive science, and by understanding how science proceeds, people are better able to make informed decisions about issues such as global warming. The hope is that we are more prepared to refute people who disagree with us by offering facts rather than simply insisting "No."

(3)The United States, in particular, has an immense problem with science and mathematics education, with high school students performing well below average compared to those in other developed countries. But we cannot limit ourselves to *only* blaming teenagers, or their teachers. The problem is far-reaching, affecting all walks of life.

^{*}From A User's Guide to the Universe by Dave Goldberg and Jeff Blomquist, Wiley

(京都大 1979)

次の文の下線をほどこした部分(1)(2)を和訳せよ。

Man is a history-making creature who can neither repeat his past nor leave it behind; at every moment he adds to and thereby modifies everything that had previously happened to him. Hence the difficulty of finding a single image which can stand as an adequate symbol for man's kind of existence. (1) If we think of his ever-open future, then the natural image is of a single pilgrim walking along an unending road into hitherto unexplored country; if we think of his never-forgettable past, then the natural image is of a great crowded city, built in every style of architecture, in which the dead are as active citizens as the living. The only feature common to both images is that both are purposive; a road goes in a certain direction, a city is built to endure and be a home. The animals, who live in the present, have neither cities nor roads and do not miss them; (2) they are at home in the wilderness and at most, if they are social, set up camps for a single generation. But man requires both; the image of a city with no roads leading away from it suggests a prison, the image of a road that starts from nowhere in particular, an animal trail.

(京都大 1997)

次の文の下線をほどこした部分(1)~(4)を和訳せよ。

We were alone in this wet, misty world, and there was no obvious way out. Real mist is like a "white out" when skiing — (1)<u>all sense of direction is lost, and one might as well be on another planet. One cannot even be certain if one is going up or downhill</u>. It may sound ridiculous when on skis, but if the slope is only a gentle one, you really cannot be sure. The world becomes a "blank," and one is just a speck on the surface, floating in nothingness — it is frightening.

However, unless we were going to die of cold and exposure, we had to decide on a direction and keep walking — quite meaningless to stand still for any longer, struggling with the useless maps in the driving wind.

Then the miracle happened. Suddenly there was a fierce blast of wind on my right cheek — and (2)we all stopped dead in our tracks. Just as well that we did! As if a giant banana skin was being peeled back, the mist rolled towards us in a dense, solid mass — leaving in its wake a totally clear patch of air. There was the valley, several thousand feet below us, and we found ourselves standing within a few yards of the edge of the cliff!

We had to move fast. The armistice was a brief one, and more solid mist followed the clear air. (3) But it just gave us time to head down to the left, away from the cliff, and towards the safety of the valley and the road which would lead us home. Tired as we were, we strode off down the track as fast as we could. The light was fading and the family at home would be anxious by now.

About an hour and a half later, four cold, wet and exhausted figures tramped up to the front door, where various members of the family were anxiously waiting. There was no mist down here, but (4)they told us that the early promise of a glorious day had changed down in the valley as well — and they had thought that we would have given up the walk and come back much earlier.

We assembled in the drawing room to tell of our adventure. But even in that warm and cozy room, my whole body refused to stop shaking. Only a hot bath, a good meal, and a long night's rest could restore me nearly to normality. I think we all made silent resolutions never again to venture onto any mountain without a compass. We were really very lucky to be alive.

(京都大 2005)

次の文章を読んで、下の問いに答えなさい。

For 300 years, Western travelers to Southeast Asia had been returning with tales of enormous groups of fireflies blinking on and off in harmony, in displays that supposedly stretched for miles along the riverbanks. These reports, often written in the romantic style favored by authors of travel books, gave rise to (1)widespread disbelief. How could thousands of fireflies orchestrate their flashings so precisely and on such a vast scale?

In the years between 1915 and 1935, Science published 21 articles on this mysterious form of light show. Some dismissed the phenomenon as a fleeting coincidence. Others ascribed it to peculiar atmospheric conditions of exceptional humidity, calm, or darkness. A few believed there must be a conductor, a firefly that leads all the rest. The naturalist Hugh Smith wrote in exasperation that "some of the published explanations are more remarkable than the phenomenon itself." But he confessed that he too was unable to offer any explanation.

(2) For decades, no one could come up with a good theory. By the late 1960s, however, the pieces of the puzzle began to fall into place. One clue was so obvious that nearly everyone missed it. Fireflies not only flash in harmony — they flash in rhythm, at a constant tempo. Even when isolated from one another, they still keep to a steady beat. That implies that each insect must have its own means of keeping time, some sort of internal clock. This hypothetical clock is still unknown but is presumed to be a group of neurons somewhere in the firefly's tiny brain.

The second clue came from the work of the biologist John Buck, who did more than anyone else to make the study of fireflies scientifically respectable. He suggested that the fireflies must somehow be adjusting their rhythms in response to the flashes of others. To test that hypothesis directly, Buck and his co-workers conducted laboratory studies where they flashed an artificial light at a firefly (to imitate the flash of another) and measured its response. They found that an individual firefly will shift the timing of its flashes in a consistent, predictable manner, and that the size and direction of the shift depend on when in the cycle the stimulus was received. (3) For some species, the stimulus always advanced the firefly's rhythm, as if setting its clock ahead; for other species, the clock could be either delayed or advanced,

depending on whether the firefly was just about to flash, whether it was halfway between flashes, and so on.

Taken together, the two clues suggested that the flash rhythm was regulated by an internal, resettable clock. And that immediately suggested (4)a possible synchronization mechanism: In a mass of flashing fireflies, every one is continually sending and receiving signals, shifting the rhythms of others and being shifted by them in turn. Out of the mass of flashing lights, synchronization somehow emerges naturally.

Thus we are led to entertain an explanation that seemed unthinkable just a few decades ago — the fireflies organize themselves. No conductor is required, and it doesn't matter what the weather is like. Synchronization occurs through mutual cuing, in the same way that an orchestra can keep perfect time without a conductor. What's odd here is that the insects don't need to be intelligent. They have all the ingredients they need: Each firefly contains something like a little metronome whose timing adjusts automatically in response to the flashes of others. That's it.

- (1) 下線部(1)widespread disbelief の内容を具体的に表すセンテンスが1つある。それを和訳しなさい。
- (2) 下線部(2)を和訳しなさい。
- (3) 下線部(3)を和訳しなさい。
- (4) 下線部(4)a possible synchronization mechanism の内容を音楽器 具に言及して説明しているセンテンスが1つある。それを和訳しなさい。

(京都大 1987)

次の文の下線をほどこした部分(1),(2)を和訳せよ。

The objections to white, as a colour, in large spots or masses in landscape, especially in a mountainous country, are insurmountable. In nature, pure white is scarcely ever found but in small objects, such as flowers: or in those which are transitory, as the clouds, foam of rivers, and snow. Therefore, an object of pure white can scarcely ever be managed with good effect in landscape-painting. Five or six white houses, scattered over a valley, by their obtrusiveness, dot the surface, and divide it into triangles, or other mathematical figures, haunting the eye, and disturbing that repose which might otherwise be perfect. I have seen a single white house seriously damage the majesty of a mountain; cutting away, by a harsh separation, the whole of its base, below the point on which the house stood. (1) Thus was the apparent size of the mountain reduced, not by the interposition of another object in a manner to call forth the imagination, which will give more than the eye loses; but what had been cut away in this case was left visible; and the mountain appeared to take its beginning, or to rise, from the line of the house, instead of its own natural base. But, if I may express my own individual feeling, it is after sunset, at the coming on of twilight, that white objects are most to be complained of. The solemnity and quietness of nature at that time are always marred, and often destroyed by them. (2) When the ground is covered with snow, they are of course inoffensive; and in moonshine they are always pleasing — it is a tone of light with which they accord: and the dimness of the scene is enlivened by an object at once conspicuous and cheerful. I will conclude this subject by saying that the cold, bluish colour, which many persons, who have heard the white condemned, have adopted in its stead, must be disapproved of for the reason already given. The bright yellow runs into the opposite extreme, and is still more censurable. On the whole, the safest colour, for general use, is something between a cream and a dust-colour, commonly called stone colour; — there are examples of this that need not be pointed out.

(京都大 1996)

次の文の下線をほどこした部分(1),(2),(3)を和訳せよ。

The domestic cat, that sits purring so tamely in front of the fire, has a secret wild life outside. It will walk out into the garden to stalk its prey, seizing it with sharp claws before giving a death bite with its dagger-like front teeth. The instinct of the cat is to hunt — whether its prey is an expensive cat toy in the house or a defenceless little shrew in the garden. This ability was highly valued in the past. Cats were natural pesticides, keeping down the numbers of mice and rats in farmyards, barns and mills. But, alas, it is not only mice that are caught. A study of what the cat brought home in an English village showed that they also caught sparrows, song thrushes, robins and blackbirds.

(1) There is something devilish in the way a well-fed cat will play with a terrified mouse, batting it up in the air, pouncing again on it, then setting it free again so that the chase can go on. Like man, they will kill for sheer pleasure, not for hunger. Above all, the cat can survive without man's help. It is truly independent. The cat as the ethologist Konrad Lorenz puts it, 'remains an independent, wild, little panther'. It is a paradoxical pet — a tame animal with all the skills of a wild being.

In both town and country there are two cat populations — the plump pet moggies, fed to the brim with expensive cat food, and the wild or half-wild strays which live off the mice in the fields and barns or plunder the town's dustbins at night. Some cats move between these two worlds with ease and the angel in the home becomes the devil outside on the streets. (2) This way cats have the best of both worlds — regular meals and warm naps under the radiator inside, and the excitement of exploring the rooftops, hunting, and perhaps fighting outside. We often do not know much about the private lives of our own cats. From inside the house we hear the unearthly caterwauls of a mating ritual or mysterious spitting stand-offs for territory.

This wildness at the heart of a cat is a great attraction to the true cat lover. (3) Animal lovers though we are, we may feel a pang of pride, when we see our cat proudly bringing home a large mouse or even, maybe, a rabbit. Perhaps the cat's hunter heart speaks to the savage instinct, that is still alive in women and men despite thousands of years of suppression.

Three or four generations ago, the cat's hunting instinct was taken for granted. Poets and writers saw it merely as part of its usefulness to man. But as civilization imposes its petty rules and regulations on us all, it becomes a thing to marvel at.

(京都大 2024)

次の文章を読み、設問(1)~(3)に答えなさい。

The creativity literature tells us that, even though we're just now beginning to appreciate the importance of creativity in everyday life, it is a topic pondered by poets and philosophers since time immemorial. In fact, "creativity" has only been a regular part of our vocabulary since the middle of the twentieth century. (a) Its first known written occurrence was in 1875, making it an infant as far as words go. "Creativeness" goes back a bit further, and was more common than creativity until about 1940, but both were used rarely and in an inconsistent kind of way. Strikingly, before about 1950 there were approximately zero articles, books, essays, classes, encyclopedia entries, or anything of the sort dealing explicitly with the subject of "creativity." (The earliest dictionary entry I found was from 1966.) It is not, it turns out, in Plato or Aristotle (even in translation). It's not in Kant (ditto). It's not in Wordsworth or Shelley, or in the Americans Emerson, William James, or John Dewey. As the intellectual historian Paul Oskar Kristeller finds, creativity, though we tend to assume it is a timeless concept, is a term with "poor philosophical and historical credentials." Yet, just around the end of World War II, the use of creativity shot upward the Big Bang of creativity.

When I tell people the term "creativity" is new, I invariably get the question, "what did we call it before?" And my response, annoying but sincere, is always "what do you mean by 'it'?" There are two assumptions behind the first question, both correct. The first is that words and concepts are not the same thing; the arrival or popularization of a new word does not necessarily mean the arrival of a totally new concept. The senior citizen and the old person, for example, are two different eras' ways for describing the same person — one who is advanced in age. The second assumption is that people have always been talking about the kind of stuff we talk about when we talk about creativity — in the way that people have always talked about old age. It's not totally wrong to say that creativity is, or at least can be in certain instances, a new term for old concepts, such as imagination, inspiration, fantasy, genius, originality, and even phrases like creative imagination and creative power, which long predated creativity itself.

Yet the modern concept of creativity does not perfectly trace back to any one of these older words. Ingenuity or (\mathcal{T}) is too utilitarian; it lacks the artsy vibe. Creativity may invoke monumental achievements) somehow feels in art and science, but as a synonym the term (1 too exclusive and grandiose, while (ゥ) is a little too pedestrian, something you might attribute to a pig that finds its way out of its pen. Originality hits closer to the mark, but it's somehow not as soulful nobody ever says originality is the key to a fulfilling life. (perhaps the term most often used interchangeably with creativity, lacks a sense of productivity. Like fantasy, it doesn't have to leave your head, and it can be utterly preposterous. The prevailing idea among creativity experts is that creativity is the "ability to produce something new and useful." (That phrasing is taken — not coincidentally — from US patent law.) The term "creativity," in other words, allows us to think and say things previous terms don't. It is not a new word for old ideas but a way of expressing thoughts that were previously inexpressible. When people in the postwar era increasingly chose the word "creativity," then, they were subtly distinguishing their meaning from those other, almost universally older concepts. The term may not be precise, but it is vague in precise and meaningful ways. (b) Just as light can be both particle and wave, creativity somehow manages to exist as simultaneously mental and material, playful and practical, artsy and technological, exceptional and pedestrian. This contradictory constellation of meanings and connotations, more than any one definition or theory, is what explains its appeal in postwar America, in which the balance between those very things seemed gravely at stake. The slipperiness was a feature, not a bug.

- (1) 下線部(a)を和訳しなさい。ただし、creativeness と creativity は訳さずに英語のまま表記すること。
- (2) 空欄(ア)~(工)に入る最も適切な名詞を以下の中から選び、解答欄に番号を記入しなさい。同じ語は一度しか使用してはならない。 なお、本文中では大文字で始まる語も、選択肢では全て小文字になっている。
- (1) cleverness
- ② fantasy
- ③ genius

- 4 imagination
- (5) inventiveness

(3) 下線部(b)を和訳しなさい。ただし、creativity は訳さずに英語のまま表記すること。