旭川医科大学

平成27年度一般入試前期日程

英 語 問 題 紙

注意事項

- 1. 試験開始の合図があるまで、この問題紙を開いてはいけません。
- 2. 英語の問題紙は、10ページあります。
- 3. 解答用紙は4枚あります。
- 4. 受験番号は、監督者の指示に従って、全ての解答用紙の指定された箇所に必ず記入しなさい。
- 5. 受験番号および解答以外のことを解答用紙に書いてはいけません。
- 6. 解答はすべて解答用紙の指定された欄に書くこと。裏面に書かないこと。
- 7. 解答用紙のみを提出しなさい。問題紙は持ち帰りなさい。

問題 1 以下の英文を読み、問いに日本語で答えなさい。

DO DOMESTICATED DOGS HAVE A SENSE OF SHAME?

In thinking about moral behavior, Darwin opened his mind to ask if other animals might also have a sense of right and wrong. After devoting considerable thought to (1) the matter, I've come to the personal conclusion that, although chimpanzees and for that matter domestic dogs are very good as learners of rules, humans may be the only animal species to deal moralistically in virtue and evil and to internalize rules on that basis. If any other animal had such abilities, most likely it would be a highly social animal like an African great ape or perhaps a socially sensitive carnivore like a wolf or a dolphin.

I'm quite certain that many people with beloved pets would disagree, dog owners in particular. Many sense that their animal companions are feeling *morally* chastised when told, "You should be ashamed of yourself," just as they may seem to respond proudly and virtuously to "That's a *very* good dog!" I've experienced ②such anthropomorphic reactions myself, with delight born out of a sense of kinship, but obviously that doesn't make such a reaction scientifically the case.

Darwin focused on dogs because they're unusually congenial to us psychologically and because dog owners have such a well of experience, so many tales to tell about their humanlike pets. In fact, he gathered a large corpus of stories that were suggestive of canine sympathy, loyalty, and self-sacrificial protectiveness, along with a few anecdotes that might have suggested the presence of guilt feelings or shame. But this open-minded scientist did not jump to conclusions.

It is with a wistful sense of personal regret that I must inform other loyal

dog owners that when their charges seem to be giving them guilty looks, in all probability they (the owners) are projecting their own moralistic human reactions onto an amoral canine. An empathetic dog may be feeling uncomfortable in the face of disapproval, or submissively fearful of punishment for breaking a rule, and it may be showing this eloquently by means of body language, but I'm reasonably certain that a humanlike sense of being ashamed—and I mean feeling shame because there exists a strong and moralistic emotional identification with a serious and important rule that has been broken—plays no part in this picture.

(3) Charitable interpretations with respect to doggie shame or doggie guilt are scarcely surprising, precisely because we humans have been breeding dogs to have feelings similar to our own for at least fifteen thousand years. Today this is done very methodically, but in the distant past simply favoring puppies that made the best pets, and then doing so over many generations, would have modified the "basic personality" of domesticated canines.

As a fanatical dog lover, I would be the first to say that the dogs we've domesticated truly are friendly, affectionate, loyal, empathetic, eager for approval, and, if their masters are in trouble, often protective and self-sacrificing. If properly trained, they are as good as we are at following rules, and with all of (a) these similarities it is natural to expect them to also have feelings of shame. But moral they are not, for a rule-internalizing conscience and sense of shame would appear to be missing. I realize that my skepticism is a matter of opinion and that a human can never get inside the head of a dog. However, there are at least a few facts that tend to support this hard-nosed viewpoint.

It's easy enough to think you're seeing a dog conscience in action when you come home to find not only a mess on the floor but also a cowering canine

with head bowed, ears back, and tail between its legs. It also seems logical that if you then punish this humanlike culprit in the presence of its misdeed, it will recognize the shameful error of its past ways and desist in the future, just as a human would, because shame feelings are unpleasant and are to be avoided. And it's certainly true that nasty nose rubs or training whacks with rolled-up newspapers will be remembered by your dog—as evidence of a beloved master's obvious disapproval. In that sense dogs can learn our kind of rules, for we've bred them to be sensitive this way for thousands and thousands of generations by favoring the more docile individuals.

However, the idea that after-the-fact punishment can produce a positive shift in the dog's behavior, just as it does with humans, is quite erroneous. Any professional dog trainer will tell you that you must punish your canine pet right in the commission of the deviant act—or at most within just sixtenths of a second after the dog's unappreciated deed is done. Otherwise, apparently your dog will be confused because it will see you, a person it is closely bonded to, being hostile or hurting it for no good reason. People, on the other hand, understand perfectly well when they are punished now for a previous rule infraction, so can an African great ape. But (5) in this respect dogs seem to live only in the present.

A devoted dog owner could argue that nevertheless dogs *must* be feeling shame — just look at their body language and those eyes. I can't prove that to be false. (6) What I can point out objectively, however, is that dogs neither blush with shame as we do nor seem to respond to punishment after the fact. Thus, in spite of being selected for humanlike qualities during the course of many thousands of dog generations, dogs remain on a significantly different wavelength regarding *ex post facto condemnation and punishment.

^{*}ex post facto 事後の, 遡及的な

"Might makes right" is what prevails among the ancestors of all dogs, the wolves. In every pack there are alphas who impose their rules of dominance upon subordinates, and if a subordinate successfully breaks a rule — when it gets away with something behind the alpha's back — there's absolutely no evidence of "shame" or "remorse" in the sneaky, willful subordinate's body language. A subordinate caught in such an act will certainly try to appease the superior, but this has nothing to do with feeling *morally* reprehensible. It's simply a matter of manipulative self-protection, and this, too, is found in humans. The difference is that we're also moral.

It appears that the minds of dogs continue to be genetically set up to make them respond to punishment in only a very immediate way and that for some reason, yet to be discovered, this particular piece of brain wiring has resisted the attempts of egoistic humans to modify their domestic dogs and make them into obedient companions who totally remind us of ourselves. One major hint is that in dogs the prefrontal cortex—the part of the brain that helps in making social decisions that result in self-control—is much smaller, proportionately, than it is in human brains. Perhaps (7) the potential just wasn't there, even though as dog breeders we humans have tried hard enough to make our pets as *prosocially oriented as we are.

(Adapted from Moral Origins: The Evolution of Virtue, Altruism, and Shame, by Christopher Boehm)

^{*}prosocially 向社会的に

- 間 1 下線部(1)の内容を本文に即して述べなさい。
- 問 2 下線部(2)の内容を本文中の具体例を挙げて述べなさい。
- 問3 下線部(3)の理由を本文に即して述べなさい。
- 間 4 下線部(4)の内容を本文に即して述べなさい。
- 問 5 下線部(5)の根拠を本文に即して述べなさい。
- 問 6 下線部(6)を和訳しなさい。
- 問7 下線部(7)はどのような能力か、本文に即して述べなさい。

問題 2 Read the following text and answer the questions in English.

Burke Harris's journey began with a medical-journal article that Whitney Clarke, a psychologist on the clinic's staff, dropped on her desk one day in 2008: "The Relationship of Adverse Childhood Experiences to Adult Health: Turning Gold into Lead." The author was Vincent Felitti, the head of the department of preventive medicine at Kaiser Permanente, the giant health maintenance organization based in California, and the article described the Adverse Childhood Experiences study, commonly called the ACE study, that Felitti had conducted in the 1990s with Robert Anda, an epidemiologist at the Centers for Disease Control in Atlanta. When Burke Harris read the paper, she told me, something clicked: "The clouds parted," she said with a smile. "Angels sang. It was like that scene at the end of *The Matrix* where Neo can see the whole universe bending and changing."

Beginning in 1995, patients enrolled in the Kaiser *HMO who came in for comprehensive medical exams were mailed questionnaires asking them to relate their personal histories in ten different categories of adverse childhood experiences, including physical and sexual abuse, physical and emotional neglect, and various measures of household dysfunction, such as having divorced or separated parents or family-members who were *incarcerated or mentally ill or addicted. Over the course of a few years, more than seventeen thousand patients completed and returned the questionnaires—a response rate of almost 70 percent. As a group, the respondents represented a very mainstream, middle- to upper-middle-class demographic: 75 percent were white; 75 percent had attended college; the average age was fifty-seven.

When Anda and Felitti tabulated the responses, they were surprised, first,

^{*}HMO: health maintenance organization 会員制民間健康維持組織

^{*}incarcerate 投獄する

by the sheer prevalence of childhood trauma among this generally well-off population. More than a quarter of the patients said they had grown up in a household with an alcoholic or a drug user; about the same fraction had been beaten as children. When the doctors used the data to assign each patient an ACE score, giving them one point for each category of trauma they had experienced, they found that two-thirds of the patients had experienced at least one ACE, and one in eight had an ACE score of 4 or more.

The second and more significant surprise came when Anda and Felitti compared the ACE scores with the *voluminous medical histories that Kaiser had collected on all the patients. The correlations between adverse childhood experiences and negative adult outcomes were so powerful that they "stunned us," Anda later wrote. What's more, those correlations seemed to follow a surprisingly linear dose-response model: the higher the ACE score, the worse the outcome on almost every measure from addictive behavior to chronic disease. And and Felitti produced one bar chart after another from the data, and each one traced more or less the same shape. Along the bottom of each chart, the x-axis, the doctors plotted the number of ACEs that patients had experienced. Along the y-axis, they indicated the prevalence of a specific undesirable outcome: obesity, depression, early sexual activity, history of smoking, and so on. On each chart, the bars rose steadily and consistently from left (0 ACEs) to right (more than 7 ACEs). Compared to people with no history of ACEs, people with ACE scores of 4 or higher were twice as likely to smoke, seven times more likely to be alcoholics, and seven times more likely to have had sex before age fifteen. They were twice as likely to have been diagnosed with cancer, twice as likely to have heart disease, twice as likely to have liver disease, four times as likely to suffer from *emphysema or chronic

^{*}voluminous おびただしい量の

^{*}emphysema 気腫, 肺気腫

*bronchitis. On some charts, the slopes were especially steep: adults with an ACE score above 6 were thirty times more likely to have attempted suicide than those with an ACE score of 0. And men with an ACE score above 5 were forty-six times more likely to have injected drugs than men with no history of ACEs.

The behavior outcomes, though surprising in their intensity, at least made some intuitive sense. Psychologists had long believed that traumatic events in childhood could produce feelings of low self-esteem or worthlessness, and it was reasonable to assume that those feelings could lead to addiction, depression, and even suicide. And some of the health effects that turned up in the ACE study, like liver disease and diabetes and lung cancer, were most likely the result, at least in part, of self-destructive behaviors like heavy drinking, overeating, and smoking. But Felitti and Anda found that ACEs had a profound negative effect on adult health even when those behaviors weren't present. When they looked at patients with high ACE scores (7 or more) who didn't smoke, didn't drink to excess, and weren't overweight, they found that their risk of *ischemic heart disease (the single most common cause of death in the United States) was still 360 percent higher than those with an ACE score of 0. The adversity these patients had experienced in childhood was making them sick through a pathway that had nothing to do with behavior.

(Adapted from How Children Succeed: Grit, Curiosity, and the Hidden Power of Character, by Paul Tough)

^{*}bronchitis 気管支炎

^{*}ischemic 虚血性の

- Question 1. Who conducted the ACE study?
- Question 2. What does the "linear dose-response model" mean?
- Question 3. Why were negative effects on adult health not necessarily caused by behavior outcomes such as heavy drinking or smoking?
- Question 4. Read the following statements, and mark $\underline{\mathbf{T}}$ for true or $\underline{\mathbf{F}}$ for false according to the text.
 - A. Whitney Clarke did not join the ACE study.
 - B. Kaiser HMO came in for comprehensive medical exams in 1995.
 - C. Patients who participated in the ACE study filled out the questionnaires.
 - D. Three-fourths of the patients who completed the questionnaires were white.
 - E. Around half of the patients did not experience trauma in their childhood.
 - F. ACE scores were assigned on the basis of the severity of the adverse experiences.
 - G. Patients with higher ACE scores tended to have a superior attitude to those with no history of ACE.
 - H. People with ACE scores of 4 or more tended to exhibit self-destructive behaviors.

問題 3 Today, young people tend to read fewer books than forty years ago.

Suppose this is correct. What are the causes? What are the negative aspects of this tendency? State your opinion in English with specific examples.