

平成 24 年 度

試 験 問 題

英 語

【注 意】

1. 試験開始の合図があるまで、この問題冊子の中を見てはならない。
2. 監督者の指示に従って、すべての解答用紙の受験番号欄に受験番号を記入せよ。
3. 問題冊子は表紙のほか 9 ページ、解答用紙は 2 枚である。
4. 問題冊子の印刷不鮮明、ページの落丁・乱丁及び解答用紙の汚れ等に気付いた場合には、手を挙げて監督者に知らせよ。
5. 解答はすべて解答用紙の対応する場所に記入せよ。
6. 解答用紙は切り離してはならない。
7. 解答用紙は持ち帰ってはならない。問題冊子は持ち帰ってよい。

I. 次の英文を読んで、設問に答えよ。(*印の語には注がある。)

We all have emotions. And they consist of several elements. First, we usually have a conscious awareness of our emotions: when we are happy, we know it. Second, emotions typically affect our physical state: we show how we feel on our faces, in our voices, even in our posture; given the role emotions play in social networks, these physical manifestations are especially important. Third, emotions are associated with specific *neurophysiological activity; if you are shown a frightening picture, the flow of blood to structures deep in your brain instantly changes. Finally, emotions are associated with visible behaviors, like laughing, crying, or shrieking.

Experiments have demonstrated that people can “catch” emotional states they observe in others over time frames ranging from seconds to weeks. When college freshmen are randomly assigned to live with mildly depressed roommates, they become increasingly depressed over a three-month period. ⁽¹⁾Emotional contagion can even take place between strangers, after just brief contact. When waiters are trained to provide “service with a smile,” their customers report feeling more satisfied, and they leave better tips. People’s emotions and moods are affected by the emotional states of the people they interact with. Why and how does this happen?

We might consider another question first: Why aren’t emotions merely internal states? Why don’t we just have our own private feelings? ⁽²⁾Having feelings is surely evolutionarily advantageous to us. For example, the ability to feel startled is probably good for us in situations where we need to react quickly to survive. But we do not just feel startled, we show that we are startled. We jump or shriek or curse or clench, and these actions do not go unnoticed. They are copied by others.

Given the organization of early humans into social groups, the spread of emotions served an evolutionarily adaptive purpose. Early humans had to rely on one another for survival. Their interactions with the physical environment (weather, landscape, *predators) were modulated or affected by their interactions with their social environment. Humans bonded with others in order to face the world more effectively,

and mechanisms evolved to support this bonding, most obviously verbal communication and emotional interactions. The development of emotions in humans, the display of emotions, and the ability to read the emotions of others helped coordinate group activity by three means: facilitating interpersonal bonds, synchronizing behavior, and communicating information.

Emotions and emotional contagion probably first arose to facilitate mother-infant pair bonding and then evolved to extend to family members and ultimately to non-family members. ⁽³⁾Emotional contagion breeds coordinated interaction. At the level of mother-child pairs, emotional contagion may have prompted mothers to be more attentive to and protective of their babies when their babies needed attention. Indeed, we are sadder when our family members are sad than when strangers are sad. There is an advantage in coordinating our moods with those to whom we are related.

Eventually this type of coordination in mood or activity may have been beneficial for larger group activities, such as warding off enemies or hunting prey. If you are trying to coordinate a hunting party, it helps if members of the group are all positive and motivated. Conversely, if you are part of a group and someone in it appears afraid, perhaps that person has seen a predator that you have not seen. ⁽⁴⁾Quickly adopting his emotional state can enhance your prospects for survival. Indeed, it is thought that positive emotions may work especially well to increase group unity (“I’m happy; stay with me”) and that negative emotions may work well as communication devices (“I smell smoke; I’m scared”).

Emotions may be a quicker way to convey information about the environment and its relative safety or danger than other forms of communication, and it seems certain that ⁽⁵⁾emotions preceded language. ⁽⁶⁾What emotions lack in specificity compared to oral language, they may make up for in speed. You can tell whether your wife is angry with you very quickly, but ⁽⁷⁾having her explain it to you may take a good deal more time, especially if she insists that you guess why she is angry before she tells you. You can walk through the door at home at the end of the day and immediately know whether the environment is safe or dangerous, and that is quite a trick our ancestors

passed down to us.

(注)

*neurophysiological 神経生理学の

*predators 捕食動物

設問

1. 下線部(1)の具体的な内容を表す文を、この段落から英語で抜き出せ。
2. 下線部(2)はどのようなことを指すか、“evolutionarily”に注意して、日本語で述べよ。
3. 下線部(3)はこの段落では具体的にどのようなことを指すか、日本語で述べよ。
4. 下線部(4)はどのようなことを指すか、日本語でわかりやすく述べよ。
5. 下線部(5)の意味を日本語でわかりやすく述べよ。
6. 下線部(6)の意味を日本語でわかりやすく述べよ。
7. 下線部(7)を和訳せよ。

[下書き用紙]

II. 次の英文を読んで、設問に答えよ。(*印の語には注がある。)

The question of what distinguishes us from other animals has probably exercised us for as long as we have been around as a species. It is not an easy question to answer, especially given that modern molecular genetics has been narrowing the gap with scant concern for human self-esteem. ⁽¹⁾The one domain in which we still seem to stand apart, however, has been our minds. Human culture stands as one of the greatest of all evolutionary achievements. Our capacity for culture rests in part on our all but unique ability to introspect, to reflect on our own feelings and beliefs, and in particular those of others.

This ability to reflect on others' state of mind is a capacity that children develop at around the age of four or five years, when, in psychology terms, they acquire theory of mind. A child aged three to four is a skilled *ethologist: it knows how to manipulate others. ⁽²⁾Asked who has eaten the chocolate in the refrigerator, it knows that if it says in a very convincing way that it was the little green *goblin from down the lane who hopped over the window sill, there is every chance an adult will believe it. But it does not really understand why this trick works, and it certainly doesn't appreciate that ⁽³⁾the chocolate marks on its face tell all. But with theory of mind in its mental tool kit, it knows how to manipulate others' beliefs about the world. Now, it can lie effectively. Suddenly, it has become a psychologist — it can read the mind behind the behavior.

This capacity for theory of mind has been the great gap that stands between us and the rest of the animal kingdom. ⁽⁴⁾Animals are stuck in the mental world of the three-year-old. But the question of whether other species share this capacity with us has continued to intrigue those who study the behavior of animals. Do apes, genetically our nearest and dearest, share this unique trait with us? How about dolphins, or elephants? The problem that has plagued this area has always been how to design an experiment that definitively tells us whether animals share this trait with us. It is not as easy as it might seem.

However, a novel approach to this problem has been developed by two

psychologists at the University of St Andrews. Erica Cartmill and Dick Byrne decided to let apes tell it their way. Instead of asking the apes to do experiments that required unnatural behavior by the animals, such as pointing to where a reward might be hidden, they wondered whether apes could show that they understood mind states well enough to signal it in their behavior. They used frustration from ⁽⁵⁾a failed outcome to trigger a response in orangutans.

The experiment was elegantly simple. They offered oranges [orangutans] the opportunity to beg for food from an experimenter holding two dishes, one containing a desirable food such as bananas, the other an undesirable food such as *leeks. When the orang begged for food, it was given all the preferred food on one occasion, all the non-preferred food on another and half of the preferred food on a third. Then the experimenters waited to see what the oranges would do. They reasoned that if the oranges thought that the experimenter had misunderstood their request, they would try a range of new gestures in an attempt to make the experimenter understand, but ⁽⁶⁾if they got half the desirable food they would repeat the same gestures on the grounds that what had worked partially first time ought to work again to get them the rest. And this is exactly what they found.

This is about as close as we have gotten to showing that apes can understand someone else's mind. If we must draw a line, then it puts the great apes on our side of the boundary fence. They are still not in the same league as adult humans, so they won't be writing works of fiction. But nonetheless, like us, ⁽⁷⁾they could imagine that the world could be other than it is. And asking that question, after all, is the basis of science. ⁽⁸⁾Everyone else is so preoccupied with living their lives day to day that they could not even entertain the thought.

(注)

*ethologist 動物行動学者 《生物学的な見地からの人間の行動と社会組織の研究を行う人》

*goblin 小鬼

*leeks ネギ

設問

1. 下線部(1)の意味を日本語でわかりやすく述べよ。
2. 下線部(2)の事例によって筆者がいわんとすることは何か，日本語で述べよ。
3. 下線部(3)の意味を具体的に日本語で述べよ。
4. 下線部(4)の意味を日本語で述べよ。
5. 下線部(5)は具体的に何を指すのか，日本語で記せ。
6. 下線部(6)を“they”と“them”が指すものを明らかにして，和訳せよ。
7. 下線部(7)の意味を日本語でわかりやすく述べよ。
8. 下線部(8)が指すものは何か，日本語で記せ。

[下書き用紙]

III. 次の日本文の下線部(1), (2)を英訳せよ。

自動車, 電車, 飛行機の発明といった機械文明のもたらした大きなマイナス点のひとつは, 運動不足によって生じる健康への支障である。(1) 数十万年の人間の歴史の中で, 動くものとして進化してきた人間が, 急に動かないで済むようになったために, 身体のおちこちに異常が起きてきたのである。(2) しかも経済状態がよくなったので, 食べる方は不自由しなくなってきたから, 動かなくなったことと相まってカロリーが余りがちになり, その結果, 肥満が一般的な傾向となってきた。