

## 平成22年度入学試験問題

# 英 語

### 注 意

1. 問題冊子は、指示があるまで開かないこと。
2. 問題冊子は7ページ、解答紙は2枚である。  
「始め」の合図があったら、それぞれページ数および枚数を確認すること。
3. 「始め」の合図があったら、すべての解答紙それぞれ2ヶ所に受験番号を記入すること。
4. 解答は、黒色鉛筆(シャープペンシルも可)を使用し、すべて所定の欄に記入すること。欄外および裏面には記入しないこと。
5. 試験終了後、監督者の指示に従って、解答紙の順番をそろえること。
6. 下書き等は、問題冊子の余白を利用すること。
7. 解答紙は持ち帰らないこと。

[1] 次の英文を読んで、文中の(ア)～(コ)に入れるのに最も適当な英語一語をそれぞれ書きなさい。

Everyone thought he was dead. When my book about his films was published in 1988, Victor Mann had not been heard of in almost 60 years. Except for a few historians and old-time movie experts, few people knew (ア) he had ever existed. The last (イ) he ever made was released in November, 1928. Two months later, without (ウ) good-bye to any of his friends or relatives, without (エ) behind a letter or informing anyone of his plans, he walked (オ) of his house and was never seen (カ). His car was parked in the garage, and his rent was (キ) for three months in advance. There was food in the kitchen, and (ク) a single article of Hector's clothing was missing from his bedroom. (ケ) to the *Los Angeles Herald Express* of January 18, 1929, "It looked as though he had stepped out for a short walk and (コ) be returning at any moment." But he didn't return, and from that point on it was as if Hector Mann had vanished from the face of the earth.

[Adapted from "The Book of Illusions," by Paul Auster, Faber and Faber, 2003, p. 1]

[問題2]は3ページから始まります。

[ 2 ] 次の英文を読んで、設問に答えなさい。

Human beings apparently are not designed to be individualists, contrary to what is presented as the ideal in literature and the popular media. In a recent study at Colby College, <sup>(1)</sup> for example, researchers asked test subjects to sit side by side in rocking chairs. The weighting of the chairs had been changed so that they would naturally rock at different rates, but, without being conscious of it, the test subjects made the extra effort needed to rock in unison.

This tendency to synchronize movements, and even moods, is everywhere in our lives. One person at the table reaches for his drink, and a moment later everyone else also takes a sip.\*<sup>1</sup> One person in the room stands and stretches, and soon all his companions do the same. Walking together, we match strides so closely that armies traditionally learned to step out of unison when crossing a bridge to prevent it from shaking to the point of collapse.<sup>(2)</sup>

What's going on here? Why aren't we each doing our own thing in our own time? Doesn't our business culture reward the lone wolf who boldly goes where no one has gone before?

Sorry, but no. We praise individualism, but our bodies are built for synchrony, and so are most businesses. Over the past decade, researchers have discovered that our brains have neurons\*<sup>2</sup> that are dedicated to mirroring the behaviors of those around us. There are very practical reasons why this should be so.

Mirroring facial expressions can be a survival mechanism.<sup>(3)</sup> Let's imagine that you're standing with your co-workers, listening to them complain about your boss. You happen to look up and see the boss coming in your direction. It takes just 200 milliseconds, a fifth of a second, for a look of alarm to flash across your face. The identical expression leaps from your face to the faces of the people around you, causing them to feel fear, too, and the conversation fades away just in time. All this happens before anybody can say, "It's him!"

Mirroring the people around us is also a way we communicate belonging and friendliness. Two people in a friendly conversation match each other's body language, even matching the way they cross their legs or move their feet. When it happens unconsciously, it feels good for both partners, as a way of saying, "I'm with you." Studies conclude that we like a conversational partner more if the other person has subtly mimicked us. Mirroring gestures and movements also seems to help people work better together. They find a shared rhythm and gradually combine into a team, so parts of a project get passed on to each other smoothly, as if by magic. One person starts a sentence and the other finishes it. One person comes up with a new product idea and the other adds ideas for improving it.

The mirroring behavior that starts on the physical level can also affect us at the deepest

emotional level. Using the same facial expressions, voices, postures\*<sup>3</sup> and movements of the people around us causes us to actually feel what they feel. When someone smiles at us, we smile back and feel happier for it. When we see an expression of grief on someone's face, our expression changes, too, and we feel sorrow. Numerous studies have established this cycle as a biological fact: emotions produce facial expressions, and facial expressions in turn produce or strengthen the associated emotions. That is why moods have a way of flashing through a group or a workplace.

The phenomenon that psychologists call “emotional contagion” can have negative effects, especially if the consequences go unrecognized and thus uncorrected. Healthcare workers who spend their days with people who are sick or depressed may go home feeling depressed themselves. A shop clerk may catch the aggressive mood of an unhappy customer, and unconsciously pass that negative mood on to the next customer or a co-worker. The opposite is of course true, too: people who spread positive feelings naturally tend to create happier workplaces.

Most of the time, all this mirroring happens naturally and subconsciously. It isn't something that requires us to think. In fact, it becomes uncomfortable only when we become conscious of it, for example when we realize in mid-conversation that we have just folded our hands in precise imitation of the boss. Even worse, if we suspect that someone is purposely mimicking us, we can get the uncomfortable feeling that we are being made fun of or controlled. It is a common technique among salespeople that mirroring the customer's body language will make that customer an easier target.<sup>(4)</sup>

After all, we are not individualists, but social animals built to live and work in groups. The author Henry David Thoreau was right to say that a man should “step to the music which he hears,” but biology adds that we almost always find that music in the company of other people.

[Adapted from “The Copycat in All of Us,” by Richard Conniff, *The New York Times Online*, December 21, 2006]

[注] \* 1 sip : 少しずつ飲むこと \* 2 neurons : 神経単位 \* 3 postures : 姿勢

[設問]

1. 下線部(1)の研究で行われた実験とその結果を本文に沿って日本語で説明しなさい。
2. 下線部(2)を日本語に訳しなさい。
3. 下線部(3)が指すことを本文に沿って具体的に日本語で説明しなさい。
4. 下線部(4)について、なぜそのようなことが起こるのか、その理由を本文に沿って日本語で説明しなさい。

[ 3 ] 次の英文を読んで、設問に答えなさい。

It has long been understood that the left hemisphere of the human brain controls the right side of the body and the right hemisphere controls the left side. It has also been generally accepted that the left hemisphere controls routine behaviors while the right hemisphere deals with reacting to new stimuli.\*<sup>1</sup> The left hemisphere controls language, and, among other things, right-handedness, or the greater ability and preference for use of the right hand. It was also thought that hemispheric specialization of the brain was unique to humans, and that other vertebrates\*<sup>2</sup> did not have such a specialization.

Our theory is that the specialization of each hemisphere of the human brain was already present in its basic form when vertebrates first evolved 500 million years ago. The left hemisphere was originally specialized for the control of well-established patterns of behavior under ordinary and familiar circumstances. In contrast, the right hemisphere was at first specialized for detecting and responding to unexpected stimuli from the environment.

Most of the evidence that supports our hypothesis does not come from direct observation of the brain but rather from observations of behavior that favors one or the other side of the body. In the vertebrate nervous system, nerves to and from one side of the body are connected to the opposite-side hemisphere of the brain. Evidence that the left hemisphere specializes in the control of routine behavior has been building for some time. For many vertebrates, one routine behavior with a rightward bias is feeding. Fishes and reptiles,\*<sup>3</sup> for example, tend to strike at prey\*<sup>4</sup> on their right side under the guidance of their right eye and left hemisphere. In several species of birds, the right eye is the primary guide for food pecking\*<sup>5</sup> and prey capture.

As for mammals,\*<sup>6</sup> the feeding behavior of humpback whales\*<sup>7</sup> is a fine example of lateral\*<sup>8</sup> feeding preference. Scientists at the Alaska Fisheries Center discovered that 60 out of 75 whales had cuts only on the right jaw; the other 15 whales had cuts only on the left jaw. The findings were clear evidence that whales favor one side of the jaw for food gathering, and that "right-jawedness" is the standard. In short, in all vertebrate classes — fishes, reptiles, birds and mammals — animals tend to keep an ancestral preference for the use of the right side in the routine activity of feeding.

What do these findings say about the supposed uniqueness of human right-handedness? Evidence for a right-side bias in birds and whales is very interesting, but it hardly makes a convincing argument against the old belief that right-handedness in humans had no previous example in evolution. Yet more than a dozen recent studies have demonstrated a right-handed bias among other primates,\*<sup>9</sup> our closest evolutionary relatives. This clearly demonstrates



3. 下線部(3)は何を指すか、日本語で書きなさい。

4. 本文の内容に関する次の文(1)~(10)を読み、正しいものには○、間違っているものには×を、それぞれ記入しなさい。

- (1) The left hemisphere of the human brain controls feeding behaviors because there are often unexpected circumstances in obtaining food.
- (2) The right hemisphere of the human brain is specialized for unexpected stimuli from the environment.
- (3) The authors believe that the hemispheric specialization of the human brain remains the same as that of our ancestral primates.
- (4) In the vertebrate nervous system, each hemisphere of the brain controls the opposite side of the body.
- (5) In many animals, attacking to the right is one of the major consequences of a right hemispheric preference of the brain.
- (6) Hemispheric specialization of the brain is unique to mammals.
- (7) Right-handedness in human beings comes from the evolution of early primates.
- (8) When apes have to stand to grab food, they use both hands to grab it firmly.
- (9) The Yerkes findings failed to prove a hand preference in apes.
- (10) Hand preference is probably related to obtaining food.

[ 4 ] (英作文) 次の英文の指示に従って、100語程度の英語を書きなさい。

Global warming is a common topic in the media nowadays. How will global warming affect your own life?