

D 英語問題

注意

1. 試験開始の指示があるまでこの問題冊子を開いてはいけません。
2. 解答用紙はすべてHBの黒鉛筆またはHBの黒のシャープペンシルで記入することになっています。HBの黒鉛筆・消しゴムを忘れた人は監督に申し出てください。(万年筆・ボールペン・サインペンなどを使用してはいけません。)
3. この問題冊子は16ページまでとなっています。試験開始後、ただちにページ数を確認してください。なお、問題番号はI～Vとなっています。
4. 解答用紙にはすでに受験番号が記入されていますので、出席票の受験番号が、あなたの受験票の番号であるかどうかを確認し、出席票の氏名欄に氏名のみを記入してください。なお、出席票は切り離さないでください。
5. 解答は解答用紙の指定された解答欄に記入し、その他の部分には何も書いてはいけません。
6. 解答用紙を折り曲げたり、破ったり、傷つけたりしないように注意してください。
7. この問題冊子は持ち帰ってください。

マーク・センス法についての注意

マーク・センス法とは、鉛筆でマークした部分を機械が直接よみとって採点する方法です。

1. マークは、下記の記入例のようにHBの黒鉛筆で枠の中をぬり残さず濃くぬりつぶしてください。
2. 1つのマーク欄には1つしかマークしてはいけません。
3. 訂正する場合は消しゴムでよく消し、消しきずはきれいに取り除いてください。

マーク記入例：

A	1	2	3	4	5
	○	○	●	○	○

 (3と解答する場合)

I . 次の文を読み、下記の 1～8 それぞれに続くものとして、本文の内容ともっともよく合致するものを、各イ～ニから 1 つずつ選び、その記号を解答用紙の所定欄にマークせよ。

Is there a creative writer who hasn't at times wondered what drives thousands of people to spend thousands of hours thinking about and writing made-up stories? At best these stories will be read by thousands of people who have got nothing better to do than read made-up stories! Is there some evolutionary need that has molded our minds to seek stories? Steven Pinker, the author of *How the Mind Works*, controversially suggests that music confers no survival advantage but that fiction can "supply us with a mental catalogue of the fatal difficulties we might face someday and the outcome of strategies we could make use of in them." Perhaps for writers of fiction the truth of this is even greater. But what does this mean for the mind? Does it suggest we have special systems in our brains that have evolved for the purpose of creating stories that might some day be useful in our real lives? And why is it that some people are better at making up stories than others, and if they are, are they therefore better prepared for whatever life throws at them?

In her book, *The Mystery of the Cleaning Lady: A Writer Looks at Creativity and Neuroscience*, Australian novelist and creative writing teacher, Sue Woolfe, explores these questions in such an honest and personal way that I almost felt as if I were sitting in the room listening to her deepest thoughts. As a neuropsychologist, I often find myself annoyed when I read fiction involving, for example, a character who has suffered a stroke, where some of the neurology facts are obviously wrong. But this didn't happen with Sue's book, and I quickly became interested, finding myself reading it as a beginning fiction writer, not as a neuroscientist.

Sue began writing the book as part of her doctoral thesis in creative writing. She takes her reader through the long, often difficult process of completing her 2003 novel, *The Secret Cure*, a novel about the wonders of the creative human mind. She weaves in neuroscience findings and theories that might explain some of her creative processes and show how they can become blocked. In *The Mystery of the Cleaning Lady*, she shows us how her creative process soared and stumbled and soared again. She engaged herself in the imaginary world of her laboratory cleaning lady by spending time in a real laboratory and listening and observing and taking notes.

When she found she could not write, she asked herself “what does a fiction writer do to her mind to create fiction, and was I doing something wrong that jeopardized my own work?”

I, like most contemporary neuroscientists, tend to assume that everyone understands that the mind is a product of the brain. As Sue discovered, some neuroscientists like Antonio Damasio explain this further by pointing out that the brain, by itself, would have no mind. It requires the cooperation of the body in order to think and feel. It is this interaction between the brain and the body that causes the mind. In return, our feelings may seem to come from the body, and the body is modified by our thoughts and the brain by our actions. Sue gives many examples of writers who, like her, feel that their creative thoughts are body-centered, and come from the belly, or the fingers, rather than from the brain, which in fact has no sensations of its own. As she tells us about the everyday, often painful, journey of creating her novel, she muses, comments, and analyzes her creative process. Looking into neuroscience research on creativity, she reports and explains her discoveries in ways that made sense to me as a neuroscientist, but also made sense to me as a creative writer.

Sue begins a novel by writing numerous seemingly unrelated fragments, a process most productive when she is in an almost dreamlike state she refers to as “loose construing” where attention is defocused, logical thought is slowed, judgment and anticipation put on hold, and new elements can be allowed in without seeming incongruent. Shaping the story from these fragments comes much later, probably involving more “tight construing” where logic and structure have a place. Only at the end do themes finally emerge. Another interesting idea Sue discusses is Damasio’s hypothesis that we have body reactions or “body-centered markers” that link certain thoughts with emotional states, making them unpleasant, and focusing us on thoughts that are more acceptable. This got her thinking about the constraints that an avoidance of unacceptable thoughts can place on a writer. She decided that in order to enter the psyche of a character whose values and experiences were far removed from her own, she must allow herself through “loose construing” to think like her character, however unthinkable those thoughts might be. She learned that she must free her mind to work in its mysterious way to

create a rich story; rich with more meanings than she ever consciously thought up.

In the end, Sue came to the conclusion that neuroscience does not yet know how the mind works when it comes to creating complex and rich stories that, from the writer's point of view—at least during those precious peak times of creation—almost seem to write themselves. Rather like the process of writing a novel, the theme or deeper truth may only appear after a much longer journey as we pull together the many fragments that neuroscience research throws up. For her readers, Sue has translated her discoveries of fragments of the mystery of creating stories into a book about writing that is far different from a writing manual. Her book is a pleasure to read and provides much food for thought and new strategies to try in those times when writing a book seems the worst idea you ever had.

As a baby boomer neuropsychologist, and a writer of fiction as well as narrative non-fiction, I am convinced that creative writing is one of the best exercises we can do for the aging brain. The folklore, somewhat supported by research data, is that in most right-handed people, right brain thinking is more creative and comprehensive, and left brain thinking more logical and linear. The right brain is better at seeing the world from a broader perspective and may be better at visual imagery, and the left brain is definitely dominant for language. But to believe the rhetoric of folk psychologists who claim that they can teach you how to draw or become more creative by using your right brain is probably unwise. The brain is more like a great symphony orchestra where every part works in concert with the whole. Sure, occasionally the violins might soar above the rest, but even then they rely on the background of the orchestra as a beautifully coordinated whole to give them their full meaning. In the healthy brain, everything we do involves the right and left sides of the brain working together, and creative writing must be one of the clearest examples of this. Our language comes primarily from the left brain and perhaps our images—the visual ones at least—come more from the right brain. Very likely the “loose construing” Sue discusses is more a right brain activity and the “tight construing” later needed to put the story together is more of a left brain activity. But in both types of thinking and in all stages of writing that story, my guess is that both sides of the brain are fully on-line. Reading fiction and narrative non-fiction also indisputably engages both sides of the brain, at least if the reader is involved in the book.

1. The first paragraph asks all of the following questions EXCEPT
- ㄱ. Why do people read and write fiction?
 - ㄴ. Does the brain have a need to create stories?
 - ㄷ. What is the relation between music and fiction?
 - ㄹ. Does writing stories help us deal with real life?
2. *The Mystery of the Cleaning Lady* explores
- ㄱ. the mind of a young woman.
 - ㄴ. the creative process.
 - ㄷ. the world of a research laboratory.
 - ㄹ. the life of Sue Woolfe.
3. The underlined word “jeopardized” (paragraph 3) is closest in meaning to
- ㄱ. defended.
 - ㄴ. ignored.
 - ㄷ. improved.
 - ㄹ. threatened.
4. The underlined word “incongruent” (paragraph 5) is closest in meaning to
- ㄱ. balanced.
 - ㄴ. believable.
 - ㄷ. appropriate
 - ㄹ. inconsistent.
5. The passage suggests that *The Mystery of the Cleaning Lady* is
- ㄱ. likely to be made into a movie.
 - ㄴ. a difficult book to understand.
 - ㄷ. not reliable in its scientific claims.
 - ㄹ. unlike most manuals on writing.

6. The author of the passage is all of the following EXCEPT
- ㄱ. a writer of fiction and non-fiction.
 - ㄴ. a member of the baby boom generation.
 - ㄷ. a teacher of creative writing.
 - ㄹ. a psychologist who studies the brain.
7. The author uses the image of a “symphony orchestra” (last paragraph) to suggest that
- ㄱ. creative writing is like playing a musical instrument.
 - ㄴ. the brain has many parts that work together.
 - ㄷ. creative writing depends on a wide variety of skills.
 - ㄹ. the brain needs the body to think and feel.
8. The most appropriate title for this passage is
- ㄱ. The Mystery of Creative Writing.
 - ㄴ. Sue Woolfe: Writer of Fiction.
 - ㄷ. The Evolutionary Basis of Storytelling.
 - ㄹ. How to Write a Novel.

II . 次の文を読み、下記の設問A・Bに答えよ。解答は解答用紙の所定欄にしるせ。

In 2003, officials in Garden Grove, California, a community of 170,000 people located in the suburb of Orange County, set out to confront a problem that afflicts almost every town in America: drivers speeding through school zones.

Local authorities had tried many tactics to get people to slow down. They replaced old speed limit signs with bright new ones to remind drivers of the twenty-five-mile-an-hour limit during school hours. Police began ticketing speeding motorists during drop-off and pickup times. But these efforts had only limited success, and speeding cars continued to hit bicyclists and pedestrians in the school zones with depressing regularity.

So city engineers decided to take another approach. In five Garden Grove school zones, they put up what are known as dynamic speed displays, or driver feedback signs: a speed limit posting coupled with a radar sensor attached to a huge digital readout announcing YOUR SPEED.

The signs were curious in a few ways. For one thing, they didn't tell drivers anything they didn't already know—there is, after all, a speedometer in every car. If a motorist wanted to know her speed, a glance at the dashboard would do it. For another thing, the signs used radar, which decades earlier had appeared on American roads, reserved for police officers only. Now Garden Grove had scattered radar sensors along the side of the road like traffic cones. And the YOUR SPEED signs came without penalty—no police officer standing by ready to write a ticket. This challenged decades of law enforcement policy, which held that most people obey speed limits only if they face some clear negative consequence for exceeding them.

In other words, officials in Garden Grove were betting that giving speeders redundant information with no consequence would somehow compel them to do something few of us are inclined to do: slow down.

The results fascinated and delighted the city officials. In the neighborhood of the schools where the dynamic displays were installed, drivers slowed an average of 14 percent. Not only that, at three schools the average speed dipped below the posted speed limit. Since this experiment, Garden Grove has installed ten more driver feedback signs. “Frankly, it's hard to get people to slow down,” says Dan

Candelaria, Garden Grove's traffic engineer. "But these encourage people to do the right thing."

In the years since the Garden Grove project began, radar technology has dropped steadily in price, and YOUR SPEED signs have increased on American roadways. Yet despite their presence everywhere, the signs haven't faded into the landscape like so many other motorist warnings. Instead, they've proven to be consistently effective at getting drivers to slow down—reducing speeds, on average, by about 10 percent, an effect that lasts for several miles down the road. Indeed, traffic engineers and safety experts consider them to be more effective at changing driving habits than a cop with a radar gun. Despite their redundancy, despite their lack of consequence, the signs have accomplished what seemed impossible: they get us to let up on the gas.

The signs bring about what's called a feedback loop, a profoundly effective tool for changing behavior. The basic premise is simple. Provide people with information about their actions in real time (or something close to it), then give them an opportunity to change those actions, pushing them toward better behaviors. Action, information, reaction. It's the operating principle behind a home thermostat, which fires the furnace to maintain a specific temperature, or the consumption display in a Toyota Prius, which tends to turn drivers into so-called "hypermilers," trying to wring every last mile from the gas tank. But the simplicity of feedback loops is deceptive. They are in fact powerful tools that can help people change bad behavior patterns, even those that seem difficult. Just as important, they can be used to encourage good habits, turning progress itself into a reward. In other words, feedback loops change human behavior. And thanks to an explosion of new technology, the opportunity to put them into action in nearly every part of our lives is quickly becoming a reality.

A feedback loop involves four distinct stages. First comes the data: a behavior must be measured, captured, and stored. This is the evidence stage. Second, the information must be relayed to the individual, not in the raw-data form in which it was captured but in a context that makes it emotionally impressive. This is the relevance stage. But even compelling information is useless if we don't know what to make of it, so we need a third stage: consequence. The information

must illuminate one or more paths ahead. And finally, the fourth stage: action. There must be a clear moment when the individual can recalibrate a behavior, make a choice, and act. Then that action is measured, and the feedback loop can run once more, every action stimulating new behaviors that bring us closer to our goals. This basic framework has been shaped and refined by thinkers and researchers for ages.

A. 次の1～9それぞれに続くものとして、本文の内容ともっともよく合致するものを、各イ～ニから1つずつ選び、その記号をマークせよ。

1. The traffic problem in Garden Grove discussed in this passage is

- イ. a new kind of challenge for this city.
- ロ. fairly easy for police to control.
- ハ. unique to this city due to its location.
- ニ. limited to certain periods of the day.

2. The new speed limit displays were designed to

- イ. remind drivers of what they are doing.
- ロ. warn drivers of the dangers of their actions.
- ハ. encourage drivers to maintain their speed.
- ニ. let drivers compare themselves to other drivers.

3. The author compares radar sensors to "traffic cones" (paragraph 4) to suggest that radar sensors are

- イ. brightly colored.
- ロ. commonly seen.
- ハ. highly informative.
- ニ. easily ignored.

4. One interesting result of the new approach to traffic signs is that it
- イ. showed that traditional law enforcement principles are correct
 - ロ. received lots of positive feedback from the public.
 - ハ. got drivers to follow traffic rules without punishment.
 - ニ. encouraged schools to cooperate with speeding drivers.
5. All of the following are true of YOUR SPEED signs EXCEPT that they
- イ. have a bigger influence on speeding drivers than do policemen.
 - ロ. are based on the behavioral principle of the feedback loop.
 - ハ. cause drivers to reduce their speed by at least 10 percent.
 - ニ. are not noticed as much as they were when first introduced.
6. The underlined word “wring” (paragraph 8) is closest in meaning to
- イ. add.
 - ロ. finish.
 - ハ. obtain.
 - ニ. twist.
7. The passage states that effective feedback loops involve all the following steps EXCEPT
- イ. raw data on individual behavior is stored.
 - ロ. raw data is communicated to the individual.
 - ハ. the individual considers possible responses.
 - ニ. the individual chooses a response and acts.
8. The underlined word “recalibrate” (last paragraph) is closest in meaning to
- イ. adjust.
 - ロ. count.
 - ハ. design.
 - ニ. locate.

9. The most appropriate title for this passage is

- イ. Traffic Patterns in Garden Grove.
- ロ. Human Behavior and the Feedback Loop.
- ハ. Traffic Safety: A New Kind of Punishment.
- ニ. Speed Limit Signs Get Smarter.

B. 文中の下線部 something few of us are inclined to do (第5段落) を15字以内で和訳せよ。ただし、句読点は合計字数に含まれる。

Ⅲ. 次の1～9それぞれの空所を補うのもっとも適当なものを、各イ～ニから1つずつ選び、その記号を解答用紙の所定欄にマークせよ。

1. If she drinks any more wine, I don't think she'll be () to perform this afternoon.

- イ. capable ロ. fit ハ. possible ニ. unable

2. Her failure to show up for the morning meeting was a rather frequent ().

- イ. appointment ロ. attitude ハ. occurrence ニ. opportunity

3. They won't enter the room until it () cleaned.

- イ. has been properly ロ. has properly
ハ. is clearly ニ. will be clearly

4. A serious accident occurred here that () for years.

- イ. has remembered ロ. remembered
ハ. was to be remembered ニ. was to have been remembered

5. The woman decided to wait at the library until her husband ().

- イ. came ロ. come ハ. has come ニ. will come

6. I was almost asleep when I heard my name ().

- イ. call ロ. called ハ. calling ニ. to be called

7. Unfortunately, train services are not back to () after yesterday's strike.

- イ. common ロ. normal ハ. ordinary ニ. regular

8. () of these projects ever came anywhere near realization.

- イ. Any ロ. Anything ハ. Each ニ. None

9. () her clothes were made in France.

- イ. Almost ロ. Almost all ハ. Almost of ニ. Most

IV. 次の1～6のそれぞれにおいて、下線部イ～ニのうち、英語表現上正しくないものを1つずつ選び、その記号を解答用紙の所定欄にマークせよ。

1. The number of crimes in this city have shown_イ a steady decrease_ロ from five hundred three years ago_ハ to two hundred this year_ニ.
2. The value of the dollar declines_イ as_ロ the rate of inflation raises_ハ.
3. By the time_イ the guests arrive_ロ, the door will have been opened_ハ to let in them_ニ.
4. Students discussed_イ personal issues each other_ロ in order to solve_ハ their problems_ニ.
5. I'm afraid_イ you have the different_ロ number. What number_ハ are you calling_ニ?
6. The sale of the property were to be taken up_イ at the board meeting_ロ, but there was not enough time_ハ.

V. 次の日本文と同じ意味になるように、下記の英文の空所(1)～(6)それぞれにもっとも適当な1語を補い、英文を完成せよ。解答は解答用紙の所定欄にしるせ。

冬の木曜日の午後四時に、私はデヴィッド・ドイッチュの家を訪ねて彼に会った。ドイッチュはロンドン地区で育ち、ケンブリッジ大学で学士号を取得し、数学の修士号取得のためにそこでさらに勉強を続けた——数学は本人の主張によれば得意ではなかった——それから、物理学の博士号を目指してオックスフォード大学へ移った。ドイッチュは大学に所属してはいるが、教員ではないし科目を教えたこともない。「私は人前で話すのは好きです」と、私に言った。「人々が聞きたいとも思わないような話をするのが嫌なだけなのです。そんな風に教育の体系を作り上げることは間違っています。でも私が教えないのはそういう理由からではありません。私が教えないのは、本能的な理由からです——ただ私は教えるのが嫌いなのです。私が生物学者になるとすれば、理論的生物学者になるでしょう。なぜならカエルを切り刻むなんて考えるだけでも嫌だからです。道徳的理由からではなく嫌でたまらないからなのです。同じように、そこにいたくない人々の一団に向かって話をするのは嫌で堪りません。」そうする代わりに、ドイッチュは講演や、給付金、賞金、著作でお金を稼いだ。

I met David Deutsch at his home, at four o'clock on a wintry Thursday afternoon. Deutsch (1) up in the London area, took his undergraduate degree at Cambridge University, stayed there for a master's in math—which he claims he's no (2) at—and went on to Oxford University for a doctorate in physics. Though affiliated with the university, he is not on staff and has never (3) a course. "I love to give talks," he told me. "I just don't like giving talks that people don't want to hear. It's wrong to set up the educational system that way. But that's not (4) I don't teach. I don't teach for instinctive reasons—I just dislike it. If I were a biologist, I would be a theoretical biologist, because I don't like the (5) of cutting up frogs. Not for moral reasons but because it's disgusting. Similarly, talking to a group of people who don't want to be there is disgusting." (6), Deutsch has made money from lectures, grants, prizes, and his books.