

英 語

医学部医学科

問 題 冊 子

注意事項

- (1) 試験開始の合図があるまで、問題冊子を開かないこと。
- (2) 問題冊子は 10 ページで、解答用紙は 5 枚である。問題冊子や解答用紙に、落丁、乱丁、印刷不鮮明のものがあつた場合は、ただちに試験官に申し出ること。
- (3) 受験番号は、5 枚の解答用紙のそれぞれの指定箇所に記入すること。
- (4) 問題は **1** から **3** の 3 つの大問よりなる。
- (5) 解答は解答用紙の指定箇所に記入すること。
- (6) 解答用紙は持ち帰らないこと。
- (7) 問題冊子は持ち帰ること。
- (8) 各大問には、満点に対する配点の比率(%)を表示してある。

1 次の文章は 2011 年 5 月 30 日付けの電子版 *New York Times* の記事で、バイリンガリズム(二言語駆使能力)と脳の活性化との関係について長年研究を続けているトロントのヨーク大学の心理学教授 Bialystock 博士とのインタビューである。次の英文を読んで、後の設問に答えなさい。(配点比率 30%)

Interviewer: How did you begin studying bilingualism?

Dr. Bialystock: You know, I didn't start trying to find out whether bilingualism was bad or good. I did my doctorate in psychology: on how children acquire language. When I finished graduate school, in 1976, there was a job shortage in Canada for Ph.D.'s. The only position I found was with a research project studying second language acquisition in school children. (1) It wasn't my area. But it was close enough.

As a psychologist, I brought neuroscience questions to the study, like "How does the acquisition of a second language change thought?" It was these types of questions that naturally (ア) to the bilingualism research. The way research works is, it takes you down a road. You then follow that road.

Interviewer: (あ)

Dr. Bialystock: As we did our research, you could see there was a big difference in the way monolingual and bilingual children processed language. (A) We found that if you gave 5- and 6-year-olds language problems to solve, monolingual and bilingual children knew, pretty much, the same amount of language. (2)

But on one question, there was a difference. We asked all the children if a certain illogical sentence was grammatically correct: "Apples grow on noses." The monolingual children couldn't answer. They'd say, "That's silly" and they'd stall. But the bilingual children would say, in their own words, "It's silly, but it's grammatically correct." The bilinguals, we found, manifested a cognitive system with the ability to attend to important information and ignore the less important.

Interviewer: (い)

Dr. Bialystock: Yes. There's a system in your brain, the executive control system. It's a general manager. Its job is to keep you (イ) on what is relevant, while ignoring distractions. It's what makes it possible for you to hold two different things in your mind at one time and switch between them.

If you have two languages and you use them regularly, the way the brain's networks work is that every time you speak, both languages pop up and the executive control system has to sort through everything and attend to what's relevant in the moment. Therefore the bilinguals use that system more, and it's that regular use that makes that system more efficient.

Interviewer: One of your most startling recent findings is that bilingualism helps forestall the symptoms of Alzheimer's disease. How did you come to learn this?

Dr. Bialystock: We did two kinds of studies. In the first, published in 2004, we found that normally aging bilinguals had better cognitive functioning than normally aging monolinguals. Bilingual older adults performed better than monolingual older adults on executive control tasks. That was very impressive because it didn't have to be that way. It could have turned out that everybody just lost function equally as they got older.

That evidence made us look at people who didn't have normal cognitive function. In our next studies, we looked at the medical records of 400 Alzheimer's patients. On average, the bilinguals showed Alzheimer's symptoms five or six years later than those who spoke only one language. This didn't mean that the bilinguals didn't have Alzheimer's. It meant that as the disease took root in their brains, they were able to continue functioning at a higher level. They could cope with the disease for longer.

Interviewer: (う)

Dr. Bialystock: Sorry, no. You have to use both languages all the time. You won't get the bilingual benefit from occasional use.

Interviewer: One would think bilingualism might help with multitasking — does it?

Dr. Bialystock: Yes, multitasking is one of the things the executive control system handles. We wondered, "Are bilinguals better at multitasking?" So we (う) monolinguals and bilinguals into a driving simulator. Through headphones, we gave them extra tasks to do — as if they were driving and talking on cellphones. We then measured how much worse their driving got. Now, everybody's driving got worse. But the bilinguals, their driving didn't drop as much. Because adding on another task while trying to concentrate on a driving problem, that's what bilingualism gives you — though I wouldn't advise doing this.

Interviewer: Has the development of new neuroimaging technologies changed your work?

Dr. Bialystock: Tremendously. It used to be that we could only see what parts of the brain (エ) up when our subjects performed different tasks. Now, with the new technologies, we can see how all the brain structures work in accord with each other.

In terms of monolinguals and bilinguals, the big thing that we have found is that the connections are different. So we have monolinguals solving a problem, and they use X systems, but when bilinguals solve the same problem, they use others. One of the things we've seen is that on certain kinds of even nonverbal tests, bilingual people are faster. Why? Well, when we look in their brains through neuroimaging, it appears like they're ⁽³⁾ using a different kind of a network that might include language centers to solve a completely nonverbal problem. Their whole brain appears to rewire because of bilingualism.

Interviewer: (え)

Dr. Bialystock: Until about the 1960s, the conventional wisdom was that bilingualism was a disadvantage. Some of this was xenophobia. Thanks to science, we now know that the opposite is true.

Interviewer: (お)

Dr. Bialystock: I'm asked about this all the time. People e-mail me and say, "I'm getting married to someone from another culture, what should we do with the children?" I always say, "You're sitting on a potential gift."

There are two major reasons people should pass their heritage language onto children. First, it connects children to their ancestors. The second is my research: Bilingualism is good for you. It (オ) brains stronger. It is brain exercise.

Interviewer: Are you bilingual?

A. Well, I have fully bilingual grandchildren because my daughter married a Frenchman. When my daughter announced her engagement to her French boyfriend, we were a little surprised. It's always astonishing when your child announces she's getting married. She said, "But Mom, it'll be fine, our children will be bilingual!"

(Adapted from "The Bilingual Advantage" by Claudia Dreyfus, *New York Times*, May 30, 2011, http://www.nytimes.com/2011/05/31/science/31conversation.html?_r=1&ref=science)

設問 1 下線部(1)~(3)を日本語に訳しなさい。

設問 2 下線部(A)の“a big difference”の示す内容を日本語で説明しなさい。

設問 3 下線部(B)の“In our next studies”で明らかになったことを日本語で答えなさい。

設問 4 本文中の空所(ア)~(オ)に入れるのもっとも適した語を次の中から選び、必要があれば、適切な形に直しなさい。ただし同じ語をくり返し用いてはなりません。

focus lead light make put

設問 5 本文中の空所(あ)~(お)に入れるのもっとも適した質問をそれぞれ下の選択肢より選び、その記号を解答欄に記入しなさい。

- (A) Bilingualism used to be considered a negative thing — at least in the United States. Is it still?
- (B) How does this work — do you understand it?
- (C) Many immigrants choose not to teach their children their native language. Is this a good thing?
- (D) So high school French is useful for something other than ordering a special meal in a restaurant?
- (E) So what exactly did you find on this unexpected road?

2 以下の英文を読んで、後の設問に答えなさい。(配点比率 40%)

No one likes journalists, and I can't say I blame them. The Taliban, who controlled most of Afghanistan, liked us (a) of all, especially television journalists. They used to hang television sets from lamp-posts, using videotape as rope, and whenever I went there they ordered me not to film any living creature. They said it was against the Holy Koran. When I asked them why they hadn't allowed us to bring a television camera if there wasn't anything we could film except buildings, they just used to ignore the question.

But in 2001, after the attacks of 11 September and the advance on the Afghan capital, Kabul, of the Northern Alliance, who were fighting (b) the Taliban, they wouldn't give me a visa to enter Afghanistan at all.

There was only one thing to do — enter the country secretly. My hope was that I might be able to smuggle myself all the way from the Pakistan border to Kabul, where I could perhaps be hidden by some resistance group. I had done this in 1989, when the Communists still controlled Kabul, and it had worked very well. ⁽¹⁾ Of course, I would have had to (c) out for informers, and the penalties if I were caught could be pretty bad. But it would be an extraordinary scoop, to do a live broadcast by satellite right under the Taliban's noses.

So I wanted to (d) how far we could get inside the country. We used our contacts, and a few hours later the cameraman, Peter, found a way. A group of smugglers agreed to take us across the border and as far as we wanted to go. Their only demand was that we had to go in disguise, as women. In other words, we would have to wear burkas, the head-to-toe cloak worn by most Afghan women.

I thought it was funny. It would make a good story, and I have never been able to say no to a good story. I could see the sense in it too. No one would be able to see who we were if we wore burkas. ⁽²⁾

We went to a market in a border town in Pakistan to buy burkas. I explained to the shopkeeper that we wanted to take them home to our wives as presents. He was too polite to show he didn't (e) us. And, when we told him we wanted to try them on ourselves, he didn't ask us why. We asked for the largest he had in stock. He hooked one down from a display near the ceiling of the shop. I put it over my head: much too small. Also my big boots stuck out. The shopkeeper found one which looked bigger. The lace fitted directly in front of my face, as it should. I thought I looked pretty good. Directly I put it on, I seemed to vanish completely. No one even looked at me.

Outside, a small group of people had gathered. When we came out, they hooted and applauded. I bowed to them, and they loved that.

Our disguises might be silly and the whole enterprise might be dangerous, but we decided to go ahead with it. We were very careful not to talk to anyone in the hotel about our plan. We didn't even tell the BBC in London, in case they tried to stop us. The BBC isn't called ⁽³⁾ '*Auntie' for nothing. It can be very protective, and it worries about you endlessly.

Peter and I set off for the Khyber Pass, the main route between Pakistan and Afghanistan, sitting side by side in the back of our vehicle. He was wearing a yellow burka, I was wearing a blue one. When we passed the army roadblocks, the soldiers peered into the car and barely gave us a glance. Our disguise was working.

We arrived that evening at a small mud-brick fortress at the start of the Khyber Pass. Our driver got out to beat on the high wooden gates. At last a very old man with only one eye pulled them open to let our vehicle in. Then he slammed them shut and chained them.

We were awake at 5:30, with the cocks crowing. We had just got our kit together, and we were drinking a welcome cup of tea, when there was hooting at the gate. Someone was beating on it, just like our driver had the night before. A black Toyota truck drove in, carrying four men with AK-47 rifles. They were our escort.

The smugglers didn't laugh as we put our burkas on. It had been their idea, anyway. The part which went round my head was far too tight, and I soon started getting a headache (f) it. The rest of the burka was excellent. It was so big and roomy that I could carry everything I wanted underneath its folds. Peter was even able to hide his camera and a bag of batteries and tapes under his burka.

We shook hands with our host and his servants and climbed into the truck. We asked to sit in the truck's cab, with the driver. That meant that our four armed guards had to sit at the back. We had only been going for an hour through the dust and heat when the driver ⁽⁴⁾ stopped. He spoke to the four gunmen and then to our translator.

'He says they want you to sit in the back, out in the open,' the translator said. 'Women do not go in the front of cars here.'

We agreed, because we didn't want the gunmen to pull (g) of the deal.

It was a long day's drive, sitting out in the dust and the hot sun, and we got very tired. Sometimes we drove along the bed of the river, with water coming up to the tops of the wheels. Then we went through sand dunes. The sand forced its way through the lace in our burkas and (h) our teeth. It was very uncomfortable, sitting out there over the rear axles. I began to realize what life was like for an Afghan woman.

Once we were in open country, Peter got out his camera and (i) some shaky pictures of our journey. The smugglers knew who we were and what we were there to do, but they would stay loyal because we had paid them. That's the law of the Khyber Pass. But it ⁽⁵⁾

was important not to let the local people know we were there. Somebody would tell the Taliban.

Although I was supposed to be in charge, I couldn't see where we were driving. The burka made it hard for me to look around, and I couldn't even work out where the sun was. We asked the smugglers if we had crossed into Afghanistan yet. They didn't understand the question, because they had no interest in borders. We were in their area, that was all.

At last, the vehicle stopped at a farm. This was clearly a place used a lot by the smugglers. We had (j) it over the border. With a huge sense of pleasure and relief, we were able to take off our disguises. A crowd gathered around us, but no one laughed at the sight of two large Western men appearing from under our burkas. For a short while, I was the biggest woman in Afghanistan, with the biggest feet. And yet our disguise was so good, we weren't caught. Women count for so little in that area that none of the guards at the checkpoints even looked at us. Our burkas were like a magic cloak of invisibility.

(Adapted from John Simpson, 2007, *Twenty Tales from the War Zone: The Best of John Simpson*, Pan Books, pp. 95-101)

*Auntie : aunt の愛称

設問 1 下線部(1)の "this" はどのようなことを指すか, 日本語で説明しなさい。

設問 2 下線部(2) "It would make a good story" とはどのようなことか, 文脈に即して日本語で説明しなさい。

設問 3 "Burka" とは何か, 日本語で説明しなさい。

設問 4 下線部(3) "The BBC isn't called '*Auntie' for nothing" と言っている理由は何か, 日本語で答えなさい。

設問 5 下線部(4)を日本語に訳しなさい。

設問 6 下線部(5)を日本語で説明しなさい。

設問 7 下線部(6)の“count for so little” とほぼ同じ意味を表す表現を下の選択肢より選び、その記号を解答欄に記入しなさい。

- (A) not valued much (B) not represented
(C) small in number (D) miscalculated

設問 8 下線部(7) “Our burkas were like a magic cloak of invisibility.” の理由としてはどのようなことが考えられると言っているか、日本語で答えなさい。

設問 9 本文中の空所(a)~(j)に入れるべき語を次の中から選び、その記号を解答欄に記入しなさい。

【語 群】

- | | | |
|-----------|-----------|-----------|
| イ above | ロ against | ハ believe |
| ニ between | ホ enter | ヘ for |
| ト from | チ know | リ hidden |
| ヌ least | ル out | ヲ made |
| ワ most | カ teach | ヨ took |
| タ watch | | |

3

文中の下線部①～④を英語に訳しなさい。(配点比率 30%)

Helping others helping me

Four years ago I was diagnosed with depression. Attempting to deal with the anxiety I put even more pressure on myself. And I knew if I was going to turn my life around I had to get away.

In March 2006, with a group of students from my university, I volunteered to help with the relief effort after Hurricane Katrina in Louisiana. それによってもたらされた損害を見て、
ぞっとしました。 ① Our job was to gut houses and rip out everything, leaving a bare shell, so when families came back they could start rebuilding their homes.

Worthwhile work

Each day was physically demanding but the National Relief Network said our efforts would save families tens of thousands of dollars, which made the hard work really worth it. While I was there I met a man who had spent a week stranded on the roof of his house watching the devastation and waiting to be rescued.

彼はすべての財産を失ったにもかかわらず、生きていだけで幸せでした。 I was amazed
② and inspired by his ability to deal with the situation so well. He made me realise how lucky I am and that there are bigger and more important problems in the world than mine.

I found helping others was extremely rewarding and, as it had always been my dream to go to Africa, that summer I flew to Ghana to teach English and drama to children. Despite the considerable hardships the village where I worked endured there was a real sense of community. It was a humbling experience and again it made me truly grateful for all the opportunities I've been given.

The family I stayed with were amazing. As well as their own children they were also taking care of Cobbi, their nine-year-old nephew, whose parents were unable to look after him themselves. しかし、彼らは彼を学校へ行かせてあげるだけの経済的な余裕がなかったので、と
ても後ろめたい気持ちがありました。 ③

Staying in touch

It broke my heart to see such an intelligent little boy not able to fulfil his potential. So I decided to put him through school myself. I was a student at the time but with my savings I

could put aside the £600 per year needed for his education. Cobbi was thrilled.

Leaving Ghana was difficult but I still speak to Cobbi on the phone every week. I'm hoping to go back to and see him soon. He's grown up and confident and I feel privileged to have helped him. Cobbi's family are always thanking me but 私の方こそ彼らに感謝すべきなの④です。なぜなら、ガーナに来たことで、何事も当たり前だと思わなくなったからです。And I try not to be so hard on myself.

My time in Ghana was life changing in another way — I met my husband, Tom, who was also working as a teacher. I moved to Cirencester and we got married in May this year. I hope my story inspires others to volunteer and maybe change someone else's life — or even their own.

(Adapted from "Helping Others Helped Me," *TESCO MAGAZINE*, September/October 2009, p. 13)