

同志社大学(法) 2009年度 (200点満点 100分)

【1】 次の英文を読んで設問に答えなさい。[\*印のついた語は注を参照しなさい。] (71 点)

Colonel William Prescott\* is said to have prepared his troops for a charge from the British Army at the Battle of Bunker Hill by telling his men, “Don’t shoot until you see the whites of their eyes.”

If the opposing army ( A ) British men but rather a horde of charging chimpanzees, the American troops would have been immediately (a)overrun. Why? Because neither chimpanzees nor any of the other 220 species of nonhuman primates\* have whites of the eyes, ( B ) not that can be easily seen. This means that if their eyes are looking in a direction other than the one in which their heads are pointing, we can easily be (b)fooled about what they are looking at.

Why should humans be so different? Yet we are. We cannot fool anyone. The whites of our eyes are several times larger than those of other primates, which makes it much easier to see where the eyes, ( C ) the head, are pointed. Trying to explain this trait leads us into one of the deepest and most controversial topics in the modern study of human evolution: the evolution of cooperation.

The idea is simple. (x)Knowing ( あ ) ( い ) ( う ) ( え ) ( お ) valuable information about what they are thinking and feeling, and what they might do next. Even young children know that when a person is looking at one toy and not another, she or he most likely prefers that toy and may ( D ) it. Professional poker players are often so worried about others reading their minds by reading their eyes ( E ) they wear sunglasses.

In a recent experiment, a research team has shown that infants tend to follow the direction of others’ eyes, not their heads. Thus, when an adult looked to the ceiling with her eyes only, her head remaining straight ahead, infants looked to the ceiling ( F ). However, when the adult closed her eyes and pointed her head to the ceiling, infants did not very often follow.

Our nearest primate relatives, the African great apes (chimpanzees, bonobos\* and gorillas) showed precisely the opposite pattern of gaze-following. When the human pointed her eyes only to the ceiling (head remaining straight ahead), they followed only rarely. But when she pointed her head only (eyes closed) to the ceiling, they followed much more often.

It has been repeatedly demonstrated that all great apes, and also humans, follow the gaze direction of others. But in previous studies, the head and eyes were always pointed in the same direction.

(y)( か )( き ) we made the head and eyes point in different directions ( く )( け )( こ ) a species difference: humans are (c)sensitive to the direction of the eyes specifically in a way that our nearest primate relatives are not. This is the first demonstration of an actual behavioral function for (ア)humans’ uniquely visible eyes.

Why might it have been advantageous for some early humans to (d)advertise their eye direction in a way that enabled others to determine what they were looking at more easily? One possible answer, what we have called “the cooperative eye (e)hypothesis,” is (z)that especially visible eyes made it easier to coordinate close-range collaborative activities in which (f)discerning where the other was looking and perhaps what she was planning benefited both participants.

If we are gathering berries to share, with one of us pulling down a branch and the other harvesting the fruit, it would be useful—especially before language evolved—for us to coordinate our activities and communicate our plans, using our eyes and perhaps other visually based gestures.

Infant research, too, suggests that coordinating visual attention may have provided the foundation for the evolution of human language. Babies begin to acquire language through joint activities with others, in which all (g)parties are focused on the same object or task. That is the best time for an infant to learn the word for the object or activity ( G ) question.

We are still a long way from ( H ) out why humans do so many complicated things together—from building houses to creating universities to fighting wars. But as to how, the simple fact that we have evolved highly visible eyes supplies at least one small piece of the puzzle.

[注] William Prescott ウィリアム・プレスコット、米国独立戦争時の指揮官

primates 霊長類の動物

bonobos ボノボ(アフリカ中央部の密林に住むチンパンジーに近縁の類人猿)

I-A 空所(A)～(H)に入るもっとも適当なものを次の1～4の中からそれぞれ一つ選びなさい。

- |     |                 |                  |                 |              |
|-----|-----------------|------------------|-----------------|--------------|
| (A) | 1 have not been | 2 had not been   | 3 are not       | 4 was not    |
| (B) | 1 at least      | 2 at best        | 3 by chance     | 4 by far     |
| (C) | 1 in regard to  | 2 in respect for | 3 as opposed to | 4 as long as |
| (D) | 1 reach for     | 2 reach to       | 3 take in       | 4 take on    |
| (E) | 1 for           | 2 when           | 3 which         | 4 that       |
| (F) | 1 in motion     | 2 in turn        | 3 in play       | 4 in depth   |
| (G) | 1 in            | 2 to             | 3 for           | 4 upon       |
| (H) | 1 breaking      | 2 turning        | 3 figuring      | 4 striking   |

I-B 下線部(a)～(g)の意味・内容にもっとも近いものを次の1～4の中からそれぞれ一つ選びなさい。

- |                  |                             |                 |                        |               |
|------------------|-----------------------------|-----------------|------------------------|---------------|
| (a) overrun      | 1 successful                | 2 following     | 3 overwhelmed          | 4 unsatisfied |
| (b) fooled       | 1 mocked                    | 2 deceived      | 3 forgotten            | 4 ridiculed   |
| (c) sensitive to | 1 dedicated to              | 2 responsive to | 3 responsible for      | 4 obedient to |
| (d) advertise    | 1 boast of                  |                 | 2 make ads about       |               |
|                  | 3 give misinformation about |                 | 4 allow recognition of |               |
| (e) hypothesis   | 1 function                  | 2 frame         | 3 variation            | 4 theory      |
| (f) discerning   | 1 detecting                 | 2 concerning    | 3 neglecting           | 4 controlling |
| (g) parties      | 1 celebrations              | 2 games         | 3 participants         | 4 practices   |

I-C 波線部(ア)の意味・内容にもっとも近いものを次の1～4の中から一つ選び、その番号を解答欄に記入しなさい。

(ア) humans' uniquely visible eyes

- 1 human eyes, which can be set to one single direction at a time
- 2 human eyes, whose whites are larger than those of any other primate
- 3 human eyes, which endow us with a vision that no other primates are allowed
- 4 human eyes, which might look very funny to other primates

I-D 二重下線部(x)の空所(あ)～(お)に入るもっとも過当なものを下の1～5の中からそれぞれ一つ選びなさい。

Knowing(あ)(い)(う)(え)(お) valuable information about what they are thinking and feeling, and what they might do next.

- 1 looking at
- 2 others
- 3 provides
- 4 are
- 5 what

I-E 二重下線部(y)の空所(か)～(こ)に入るもっとも適当なものを下の1～5の中からそれぞれ一つ選びなさい。ただし、(か)に入る文頭の語も小文字で表している。

(か)(き) we made the head and eyes point in different directions (く)(け)(こ) a species difference

- 1 when
- 2 did
- 3 only
- 4 we
- 5 find

I-F 二重下線部(z)と同じ用法の"that"を次の1～4の中から一つ選びなさい。

- 1 My sister is a lawyer and her office is in that tall building over there.
- 2 The Japanese spoken in Kyoto is slightly different from that of Osaka.
- 3 My conclusion is that we should not purchase it right now.
- 4 This is the book that our teacher mentioned in his lecture last week.

I-G この文章の内容をもっとも的確に表すタイトルとしてふさわしいものを、次の1～4の中から一つ選びなさい。

- 1 Evolution of Verbal Communication
- 2 Cognitive Abilities of Nonhuman Primates
- 3 Human Eyes and How Language Evolved
- 4 Secret of the Whites of Human Eyes

I-H 本文の内容に合致するものを次の1～8の中から三つ選びなさい。

- 1 It is very difficult to see the whites in the eyes of chimpanzees or of any other nonhuman primates; the large whites of eyes are exclusive to humans.
- 2 Accurate measurement of the whites of human eyes is the only way to increase our understanding of how the evolution of cooperation took place.
- 3 While it is easy for an adult to guess what others might be thinking and feeling from their behavior, it is virtually impossible for young children, let alone chimpanzees and other nonhuman primates.
- 4 In one experiment carried out by a research team, infants and great apes were asked by adults to look to the ceiling with their eyes only, their heads remaining straight ahead.
- 5 The African great apes and humans have precisely opposite gaze following patterns; human babies rarely follow people who have their eyes closed when they turn their heads upwards, whereas apes are very likely to do that.
- 6 There had never been a study on communication activities of great apes until a research team pioneered the field through an elaborately designed experiment.
- 7 According to the "cooperative eye hypothesis," human eyes make it easier for people to conceal their thoughts in close-range collaborative activities with others.
- 8 Coordinating visual attention has much to do with the way human babies acquire language; babies learn names of things through participating in joint activities with others.

【2】 次の英文を読んで設問に答えなさい。[\*印のついた語は注を参照しなさい。] (79 点)

Some of the most compelling findings on diet and aging come not from a test tube but from an examination of various long-lived people around the world. The eating habits of two cultures—the European countries that (a)border the Mediterranean Sea and the Okinawans of Japan—offer lessons on how to dine well and live both longer and healthier.

(b)Typical menus in both Okinawa and the Mediterranean include generous amounts of fruits, vegetables, and legumes; limited dairy and red meat; and healthy fats. Those who follow these diets tend to live longer and have a lower risk of conditions like heart disease. Okinawans have an average life expectancy (x)of 81 (the highest on the planet), and the population is thought to have the highest number of people over 100 years old of any culture. And research shows that adhering to a Mediterranean diet—with its similar emphasis on whole foods—can add years to your life.

No single anti-aging ingredient stands (A) in either of these diets; it is the patterns of eating that (c)count, say Andrew Weil, author of *Healthy Aging*, and William Evans, researcher at University of Arkansas for Medical Sciences. And you do not need to move to Greece or Japan to benefit. Studies suggest that even people who adopt these eating habits later in life (ア)can reap the rewards. Here are five principles that should be the basis of your diet.

**Focus on plants.** Fruits and vegetables contain (B) of healthy antioxidants and anti-inflammatory compounds that increase the chances you will age healthfully. “The more plants you eat, the better,” says Weil. Studies suggest that people with diets high in fruits and vegetables enjoy a lower risk of heart disease, cancer, and diabetes, plus better memory and eyesight. Those are five great reasons to get your five to nine daily servings of (d)produce.

**Choose the right fats.** The saturated fats found in animal foods increase chances of getting heart disease and hardening of the arteries. “As soon as people increase their saturated fat (e)intake, we can see bad things start to happen,” says Evans. Also (イ)steer clear of trans-fatty acids\* (found in many margarines and processed foods), which promote inflammation.

Don’t avoid all fats, however. The omega-3 fatty acids\* found in foods like fish and walnuts protect the heart—and what is good for the heart also helps the brain. “Studies show that fats in fish can help reduce the risk of Alzheimer’s disease,” Evans says. “This benefit may (C) the anti-inflammatory effects of these fats.” Both the Okinawan and Mediterranean diets contain high levels of omega-3 fatty acids. (D) two to three servings of oily fish a week, advises Weil.

(f)**Hold the sugar.** American favorites like baked goods and white bread score high on the glycemic index (GI)\*, a rank of foods based on how they make blood sugar rise. The body quickly digests high-GI foods and converts them to sugar, which triggers insulin release—increasing your risk of diabetes and other age-related conditions. Sugars also cause chemical reactions in the body that promote inflammation, says Weil. He advises avoiding foods made from flour, like crackers and cookies, as well as all soda. Instead, choose foods like brown rice, oats, and rye which have a better GI score. Keep in mind that pasta has a better GI score than many other flour-based products, as do Japanese soba noodles.

**Eat fresh.** Highly processed foods cheat you out of protective nutrients. (E) the way from the farm to your plate, hundreds of vitamins, minerals, antioxidants, and proteins can get lost in industrialized production. Often high in trans-fatty acid, processed foods can trigger inflammation. When possible, (g)opt for locally grown and seasonal choices, which are more likely to retain their nutrients.

**Eat consciously.** (y)When (あ)(い)(う)(え) and aging, remember how to eat, (お) just what to eat. David Rakel, director of the University of Wisconsin Integrative Medicine program, says we should adopt the approach practiced by many in Mediterranean countries. That means savoring and enjoying our food and the company around the table. Rakel adds, “This probably has more of an effect on aging well than asking, ‘What’s the (h)active ingredient in this red fruit?’” Eating mindfully also helps you notice when you are full. It is important, since so many diseases of aging are caused or worsened by putting (F). Traditionally, Okinawans end their meals according to *hara hachi bu*, which means “at 80% full.” “By making wise food choices now, both (i)in terms of what you eat and how, you can increase your chances of aging gracefully,” says Weil.

[注] trans-fatty acids トランス脂肪酸  
omega-3 fatty acids オメガ3脂肪酸  
glycemic index (GI) グリセミック指数

II-A 空所(A)～(F)に入るもっとも適当なものを次の1～4の中からそれぞれ一つ選びなさい。

- (A) 1 off                      2 out                      3 by                      4 around  
 (B) 1 a wide range      2 a small range      3 a broad space      4 a large space  
 (C) 1 be associated in    2 be associated with                      3 cause problems to    4 cause problems with  
 (D) 1 Dry out                      2 Stay away from      3 Get rid of                      4 Aim for  
 (E) 1 Through                      2 In                      3 On                      4 By  
 (F) 1 food together      2 off eating                      3 up height                      4 on weight

II-B 下線部(a)～(i)の意味・内容にもっとも近いものを次の1～4の中からそれぞれ一つ選びなさい。

- (a) border      1 touch                      2 divide                      3 show                      4 pass  
 (b) Typical      1 Formal                      2 Classic                      3 Tropical                      4 Casual  
 (c) count      1 suffer                      2 matter                      3 differ                      4 calculate  
 (d) produce      1 saturated fats      2 processed foods      3 animals                      4 plants  
 (e) intake      1 popularity                      2 rejection                      3 medication                      4 consumption  
 (f) Hold      1 Keep off                      2 Keep up                      3 Keep to                      4 Keep on  
 (g) opt for      1 throw away                      2 take off                      3 select from                      4 join in  
 (h) active      1 effective                      2 useless                      3 moving                      4 extra  
 (i) in terms of    1 on the point of      2 in relation to      3 regardless of                      4 with no regard to

II-C 波線部(ア)と(イ)の意味・内容にもっとも近いものを次の1～4の中からそれぞれ一つ選びなさい。

(ア) can reap the rewards

- 1 can make much money                      2 can make a great loss  
 3 can make benefits possible                      4 can make life worthless

(イ) steer clear of trans-fatty acids

- 1 take care to avoid trans-fatty acids                      2 closely examine what trans-fatty acids are  
 3 be completely ignorant of what trans-fatty acids are    4 do your best with trans-fatty acids

II-D 本文第二段落の二重下線部(x)と同じ用法の”of”を次の1～4の中から一つ選びなさい。

- 1 I am not sure of his address.      2 They live in the city of Tokyo.  
 3 There are 30 kilos of apples.      4 February is the shortest of all the months

II-E 二重下線部(y)の空所(あ)～(お)に入るもっとも適当なものを下の1～6の中からそれぞれ一つ選びなさい。(ただし、選択肢の中には、使われないものが一つ含まれています。)

When (あ)(い)(う)(え) and aging, remember how to eat, (お) just what to eat.

- 1 not      2 to      3 he      4 food      5 it      6 comes

II-F この文章の内容をもっとも的確に表すタイトルとしてふさわしいものを、次の1～4の中から一つ選びなさい。

- 1 The Healthy Aging Diet                      2 Anti-aging Foods in Industrialized Countries  
 3 Balanced Foods and Exercise for Good Health                      4 Five Diseases from Unhealthy Foods

II-G 本文の内容に合致するものを次の1～8の中から三つ選びなさい。

- 1 Both eating more plants and adopting less saturated fat can reduce the risk of heart disease and similar conditions.  
 2 When people often eat fruits and vegetables, they have higher incidences of heart disease, cancer, diabetes and Alzheimer’s disease.  
 3 Mediterranean people regularly consume high levels of omega-3 fatty acids found in foods like fish.  
 4 The glycemic index is a figure that indicates the ability of a food to decrease blood sugar levels.  
 5 In order to trigger and promote inflammation, you should avoid not only crackers and cookies but all soda.  
 6 When you eat processed foods, you should not eat locally grown and seasonal fruits and vegetables at the same time.  
 7 In order to age gracefully and avoid many health problems, it is important for you to enjoy your meals together with others.  
 8 Both Okinawan and Mediterranean cultures usually end their meals with their stomachs 80% full.

II-H 本文中の太い下線部を日本語に訳しなさい。

Keep in mind that pasta has a better GI score than many other flour-based products, as do Japanese soba noodles.

**【3】 次の対話を読んで設問に答えなさい。(50点)**

*(Raymond and Ikuo are sitting around the dinner table discussing a recent lecture Raymond heard on the internet.)*

*Raymond:* A university professor gave his last lecture and it is a big hit on the internet.

*Ikuo:* Wow, I'd like to watch it.

*Raymond:* Well, I did and this university has a series of lectures called, "The Last Lecture." A professor is supposed to imagine that if they had just one lecture to give before she or he died, ( a )

*Ikuo:* Yeah, and ....

*Raymond:* Well, for this professor, it really was his last lecture because he is dying of cancer.

*Ikuo:* Ooo, poor guy. ( b )

*Raymond:* No, not really, in fact he said he felt great and to prove it he did some exercises on the stage!

*Ikuo:* So, what'd he talk about? Death and dying?

*Raymond:* No, he specifically said he would not talk about those things: his cancer, his wife and kids, and religion.

*Ikuo:* So the subject of his talk was ....

*Raymond:* ( c )

*Ikuo:* Hmm, different. And what kind of dreams did this professor have as a kid?

*Raymond:* Well, there were the usual ones like meeting famous TV actors or becoming a professional athlete.

*Ikuo:* I suppose so ....

*Raymond:* But the big one was being in zero gravity.

*Ikuo:* ( d )

*Raymond:* Yes, but because he wore glasses, he couldn't become an astronaut.

*Ikuo:* So how did he get zero gravity?

*Raymond:* Well, NASA has a special plane that goes up and down really quickly and when it goes down, people become weightless for a few seconds.

*Ikuo:* And he got on this plane?

*Raymond:* Yes, with a bunch of his students. ( e )

*Ikuo:* What was that?

*Raymond:* Well, his biggest dream, and it has just been attained, was to work on developing the rides at Disneyland

*Ikuo:* Really!

*Raymond:* Yes, this professor's specialty is computer graphics and virtual reality.

*Ikuo:* ( f )

*Raymond:* You bet. He got to go to Disneyland for a year and work on developing some new rides in the park.

*Ikuo:* Fantastic. What rides did he work on?

*Raymond:* Well, he didn't really say which ones, but he did work on a potential ride where Aladdin rides a magic carpet around

*Ikuo:* Like being weightless!

*Raymond:* Exactly. It hasn't been built, but it might be in the future at Disneyland.

*Ikuo:* ( g )

*Raymond:* Well, it is not there yet—just an old one for little kids—but maybe sometime in the future.

*Ikuo:* I'll bet he had some other messages for his audience.

*Raymond:* That's right. With every one of his dreams, somebody tried to block him. Or, as he said, put up a brick wall. But he added that brick walls are there for a reason: they let us prove how badly we want things.

*Ikuo:* ( h )

*Raymond:* Well, they keep out the people who don't want their dreams badly enough. [ ア ]

*Ikuo:* That is a lot to think about. I think I'll go and get that lecture.

III-A 本文の(a)～(h)に入るもっとも適当なものを次の1～4の中からそれぞれ一つ選びなさい。

- (a) 1 what would they talk about?  
 2 maybe they would just go ahead and die  
 3 what would he give it up for?  
 4 perhaps they shouldn't die anyway
- (b) 1 He must have looked really happy.  
 2 He must have been filled with joy and satisfaction.  
 3 He must have gone to great lengths to have a terrible lecture.  
 4 He must have looked, felt, and sounded terrible and depressed.
- (c) 1 Death and dying and having dreams after dying.  
 2 Cancer and the culture of death and dreams.  
 3 Realizing his childhood dreams.  
 4 Lecturing in his dreams.
- (d) 1 Just like sitting here on the ground?  
 2 Like an astronaut in space?  
 3 Like astronauts during their meetings?  
 4 Because zero is such an important number?
- (e) 1 Because only with his students could he be weightless  
 2 And the airplane is a dreamy place.  
 3 Just because of the airplane could he dream.  
 4 And that led to his biggest dream.
- (f) 1 Boy, I bet Disney could really use that  
 2 Wow, Disney is so behind.  
 3 Sure, Disney really was taken for a ride  
 4 Cool, Disney should steal his mind.
- (g) 1 I'll never consider going on the Aladdin ride!  
 2 That'll be my first stop next time I'm in Disneyland!  
 3 And the princess can take a ride anywhere!  
 4 I'll become weightless just to go to Disneyland!
- (h) 1 Why don't my dreams look like bricks?  
 2 I think I see the dream clearly.  
 3 Why do I feel a brick in my head?  
 4 I don't quite understand.

III-B 本文の空所[ ア ]に入る言葉を日本語で表現すると次のようになります。これを英語にしなさい。

- [ ア ] 言い換えれば、人は自分が本当にやりたいと思っていることを本気で考えていなければ、ただ諦めることになってしまうよ。