

英 語
( 問 題 )
2008年度

注 意 事 項

1. 問題冊子および記述解答用紙は、試験開始の指示があるまで開かないこと。
2. 問題は2-8ページに記載されている。試験中に問題冊子の印刷不鮮明ページの落丁・乱丁および解答用紙の汚れ等に気づいた場合は、手を挙げて監督員に知らせること。
3. 解答はすべて解答用紙の所定欄にHBの黒鉛筆またはHBのシャープペンシルで記入すること。
4. 解答用紙の所定欄(2か所)に受験番号および氏名を、マーク解答用紙の所定欄(1か所)には氏名のみを記入すること。  
記述解答用紙の所定欄の受験番号は正確にでないに記入すること。読みづらい数字は採点処理に支障をきたすことがあるので、注意すること。

数字見本	0	1	2	3	4	5	6	7	8	9
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5. マーク欄ははっきり記入すること。また、訂正する場合は、消しゴムででないに、消し残しがないようよく消すこと(砂消しゴムは使用しないこと)

マークする時	● 良	○ 悪	○ 悪
マークを消す時	○ 良	○ 悪	○ 悪

6. 試験終了の指示がでたら、すぐに解答を止め、筆記具を置くこと。終了の指示に従わず解答を続けた場合は、答案のすべてを無効とするので注意すること。
7. 試験終了後、問題冊子は持ち帰ること。
8. いかなる場合でも、解答用紙は必ず提出すること。

READING SECTION

All answers must be indicated on the MARK SHEET.

I Answer the questions below after reading the following passage.

Recent research may provide some clues to a long-standing paradox. Men's brains are bigger than women's—about 100 grams heavier on average—even when their larger proportional size is factored into the equation. Brain volume is correlated with intelligence, according to a 2005 study, yet both sexes score about the same on IQ tests.

Even though women's brains are smaller, they have some <sup>(1)</sup>distinct advantages that may level the playing field. Women have more gray matter—areas of nerve cell bodies. Studies consistently show that women surpass men on verbal and memory tasks, and the superior temporal cortex, one of the brain areas responsible for language, is 29 percent larger in females. Blood flow is about 15 percent higher in the female brain, which offsets the cognitive losses of aging, and women's nerve cells are also more tightly packed together, which suggests that they may function more efficiently.

An analysis of human brain tissue, for example, conducted by Sandra Witelson and her colleagues at the Michael G. DeGroot School of Medicine at McMaster University, revealed that women's nerve cells were 11 percent denser than men's in a region of the temporal cortex that is involved with language processing, comprehension, and memory. "Little girls develop language skills earlier than boys, and they're ( a ) discriminate between speech sounds," says Witelson.

This may be part of the reason why women do better in school—( b ) because they're conditioned to please people or to sit in a chair quietly. According to behavioral studies, even in kindergarten and first grade, girls are more articulate than boys, their handwriting is neater, and they're quicker at answering questions, says Louann Brizendine, a researcher at the University of California at San Francisco and author of *The Female Brain*. ( c ), this pattern appears to become more obvious: Females now outnumber males in college, and more women go on to graduate.

The male brain, by contrast, is filled with more white matter, which consists of longer nerve fibers that communicate with more distant regions of the brain. White matter also contains fibers from nerves that block the transmission of information in the cortex, which enhances local processing. The white matter may be what gives men their ability to focus intently on work and tune out distractions, ( d ) their clear-cut superiority when it comes to reasoning about physical objects and locations, says Ruben Gur, a psychologist and director of the Brain Behavior Laboratory at the University of Pennsylvania in Philadelphia. ( e ), then, that men still dominate fields like architecture, organic chemistry, physics, and brain surgery. There are only a handful of female chess grandmasters, and girls are less likely than boys to sit for hours playing video games.

Men are faster at mentally rotating an object—imagining what something looks like from a different perspective—and have an internal compass that enables them to look up at the sun to figure out directions. Women, on the other hand, rely on landmarks—turn right at the church, turn left after the fire station—to find their way around.

Because it takes hundreds of thousands of years for the genetic evolution of natural selection to occur, these sex differences in navigation strategies probably have their roots in the Stone Age. Women most likely watched the kids and worked close to home, using familiar sights to find their way back. Men, meanwhile, were hunters and ventured into unknown territory in search of food. ( f ), they figured out where they were by estimating the distance they had already traveled and their orientation in space.

Over the millennia, men and women apparently evolved different mental pathways to get around, and men mastered the use of geometric cues to navigate unfamiliar territory. In a 2000 German study, for example, men sped through a three-dimensional virtual-reality maze much faster than women,

averaging two minutes and 22 seconds compared with three minutes and 16 seconds for women.

Brain imaging techniques revealed that men found their way out of the maze using the left hippocampus, a memory storage region that also governs mapping of the physical environment. Women used their right parietal and prefrontal regions, which are linked to visual identification and reasoning. The women's use of the prefrontal region, say researchers, suggests that they relied on landmarks and pictured the objects in their minds, while the men used both landmarks and geometric cues, like shapes and angles, to escape the maze.

These skills may have enabled men to navigate distant lands across unmarked desert sands and vast unexplored oceans. In one famous 1916 incident, New Zealand native Frank Worsley, a member of the Antarctic expedition led by explorer Ernest Shackleton, relied almost solely on his internal compass to save the lives of 28 men lost on an island in the Antarctic.

Worsley set off from the remote island in a 22-foot lifeboat across the South Atlantic Ocean, eventually traveling 800 miles to one of the South Sandwich Islands near the tip of South America, where there was a whaling station where they could get help. Worsley had only been able to take sightings of the sun four times during the stormy 17-day trip, and the rest had been based on his internal compass.

The way males and females handle their anger or emotionally upsetting situations — women may feel sick to their stomach, while men tend to act out — may also stem from fundamental differences in how their brains have evolved.

A 2002 study using MRI scans showed that brain areas keeping aggressive behavior under control were relatively larger in women than in men. Female brains had a significantly greater volume than males of orbital frontal cortex, the seat of cool-headed decision making behind the forehead, in proportion to the amygdala, a more primitive, almond-shaped structure deep inside the brain that excites us by stimulating the survival instinct and getting the adrenaline flowing.

The implication here is that in an emotionally intense situation, women are more able to control their tempers. ( g ) they have a bigger braking mechanism than males, women will try to defuse a volatile situation rather than explode.

We need look ( h ) the latest in <sup>(2)</sup>celebrity bad behavior for an example. When Paris Hilton was arrested on suspicion of drunk driving in the early morning hours last September, she was "cooperative," according to police sources. But alcohol suppresses the frontal cortex, ( i ) one's ability to control anger or aggression. Like when Mel Gibson was stopped by police for the same reason, and he completely lost his temper.

When Larry Cahill and his colleagues at University of California at Irvine conducted a series of experiments to track sex differences in the brain's ability to store memories, they came to similar conclusions. Researchers found that the amygdala, which also processes emotional memories, acts differently in men and women. In one study, volunteers were shown a series of extremely violent films while their brain activity was measured using a PET scan.

To process the most disturbing material, men fired up the amygdala's right hemisphere, which is more in tune with the outside world and communicates with regions that control sight and motor coordination. Women, on the other hand, activated the left hemisphere, which concentrates more on the body's inner environment and is connected to the insular cortex, where information gained from the senses is translated into emotional experiences, and to the hypothalamus, the master regulator of certain basic functions.

"When men are presented with a strong emotional stimulus, part of the motor system is activated, ( j ) may be why men try to resolve the situation by taking action," says Witelson. "But in women, the hypothalamus is activated, which controls digestion, so it may not be surprising that when a woman

is really upset, she feels sick and can't sleep."

We also know that the brain's right hemisphere extracts the essence of a situation, the central idea, while the left side considers the finer points and tracks the details. Consequently, this right-left amygdala division may also illuminate why women remember every painful detail of an argument they had on their honeymoon—where they were, what they were wearing, the time of day—while their husbands barely recall the fight.

[Adapted from Linda Marsa, "He thinks, she thinks,"  
*Discover Magazine*, July 2007]

(1) Choose the best word or phrase to put in each space (a)~(j). No answer can be used more than once.

- |                     |                   |                  |                   |
|---------------------|-------------------|------------------|-------------------|
| A as well as        | B because         | C better able to | D even though     |
| E in all likelihood | F it's not merely | G little wonder  | H no further than |
| I over time         | J reducing        | K which          |                   |

(2) Choose the best way to complete each of these sentences, which relate to the underlined words in the passage.

- 1 The fact that women have some (1) distinct advantages that may level the playing field suggests that
- A a deeper understanding of how men's and women's brains function has led to greater equality between them.
  - B evolutionary changes in the brains of men and women have decreased over the years.
  - C inequality between men and women can be explained by differences in the way their brains function.
  - D overall, men are more intelligent than women but other advantages women have over men equalize their relations with one another.
  - E the smaller size of a woman's brain does not mean she is intellectually inferior to men.
- 2 The writer uses the example of (2) celebrity bad behavior to
- A emphasize that differences in brain function do not apply to people in all professions.
  - B explain that a bigger braking mechanism in women does not result in more rational behavior.
  - C illustrate that when drunk, differences in brain function between men and women lessen.
  - D reinforce the argument that women are better than men at handling difficult situations.
  - E suggest that women are more likely than men to get away with improper behavior.

(3) Which of the following agree with statements in the text? Mark your answers true or false.

- a. Although a woman's brain is smaller compared to a man's, in many ways her brain is more efficient than a man's.
- b. Because the results of IQ tests are similar, biological differences in their brains cannot explain behavioral differences between men and women.
- c. Differences in the way the amygdala functions in men and women help explain why men learn languages more easily than women.
- d. Increased amounts of white matter in men's brains explain their strong desire to get along with others.
- e. Sex differences in navigational ability seem to be the result of thousands of years of experiencing different sex roles in society.
- f. The fact that men can better remember the details of an argument with their wives, suggests that their right hemispheres are more developed than in women.
- g. Women are more likely to feel physical discomfort than men when presented with a disturbing situation.

**II Answer the questions below after reading the following passage.**

And so there I was, standing in the forest among the women's gardens, remembering my grandmothers. Beyond the trees their daughters were waiting for me. Four aunts. Asana, daughter of Ya Namina, my grandfather's senior wife: a magnificent pride flowed like river water from the mother's veins through the daughter's. Gentle Mary, from ( a ) foolish children ran in fright, but who did my hair, cared for me like I was her own, and talked of the sea and the stars. Hawa, whose face wore the same expression I remembered from my childhood—of disappointment already foretold. Not even a smile to greet me. Enough of her. And Serah, belly sister of my father, who spoke to me in a way no other adult ever had—as though I might one day become her equal.

They were the ones ( b ) presence filled the background to my childhood. Not my only aunts, by any means, rather my husbandless aunts. Asana, widow. Mary, who never married. Serah, divorced. The fate of Hawa's husband had never been quite clear, it remained something of a mystery. I had heard some of their stories before, though I didn't remember who had told me or when. As a child I had spent my evenings at home doing schoolwork, or trying to get a picture on the black and white TV, as a teenager I'd lain in my room fiddling with my yellow transistor radio, waiting for my favourite tunes. Without men of their own to occupy them, these four aunts had always been frequent visitors to my father's house until he left to take up a series of appointments overseas and I followed in his slipstream to university.

Coming back, I thought about my aunts and all the things that had never been spoken. And I saw them for what they were, the mirror image of the things that go unsaid: all the things that go unasked.

The stories gathered here belong to them, though now they belong to me too, given to me to do with as I wish. Just as they gave me their father's coffee plantation. Stories that started in one place and ended in another. Worn smooth and polished as pebbles from countless retellings. So that afterwards I thought maybe they had been planning it, waiting to tell me for a long time.

That day I walked away from the waiting women, into the trees and towards the water: the same river that further on curled around the houses, so the village lay within its embrace like a woman in the crook of her lover's arm. Either side of the path the shadows huddled. Sharp grasses reached out to scratch my bare ankles. A caterpillar descended on an invisible thread to twirl in front of my face, as if surveying me from every angle before hoisting itself upwards through the air. A sucker smeared my face with something sticky and unknown. I paused to wipe my cheek in front of a tall tree with waxy, elliptical leaves. Along the branches hung hundreds of sleeping bats. As I watched, a single bat shifted, opened a wing and wrapped its body ever more tightly. For a moment a single eye gleamed at me from within the darkness.

Here and there scarlet berries danced against the green. I reached out, careful of the stinging tree-ants, and plucked a pair. I pressed a fingernail into the flesh of a berry and held it to my nose. Coffee. The lost groves. All this had once been great avenues of trees.

And for a moment I found myself in a place that was neither the past nor the present, neither real nor unreal. Rothoron, my aunts called it. Probably you have been there yourself, ( c ) you are and wherever in the world you are reading this. Rothoron, the dreamlike bridge suspended between sleep and wakefulness.

In that place, for a moment, I heard them. I believe I did. A child's laugh, teasing and triumphant, crowning some moment of glory over a friend. The sound of feet, of bare soles, flat African feet pat-patting the earth. A humming—of women singing as they worked. But then again, perhaps it was just the call of a crane flying overhead, the flapping of wings and the buzz of the insects in the forest. I stood still, straining for the sound of their voices, but the layers of years in between us were too many.

I passed through the ruined groves of the coffee plantation that by then was mine. Not in law, not

by rights. Conventional law would probably deem it to belong to Alpha, Asana's son. But it was mine if I wished, simply because I was the last person ( d ) with the power to do anything with it.

Down by the water, under the gaze of a solitary bird, a group of boys were bathing. At the sight of me they stopped their play in order better to observe my progress, which they did with solemn expressions, bellies puffed out in front of them like pompous old men, sniffing airily through snot-encrusted nostrils. I smiled. And when they smiled back, ( e ) they did suddenly, they displayed rows of perfect teeth. One boy leaned with his arm across his brother's shoulder, his eyes reclining crescents above his grin, and on his ear the cartilage formed a small point in exactly the same place as it does on my son's ear. I had bent and kissed that very place as he lay sleeping next to his sister, before I left to catch my early morning flight.

And later, inside my grandfather's house, I pushed open the shutters of a window, finely latticed with woodworm. The plaster of the window sill was flaking, like dried skin. The clay beneath was reddish, tender looking. In the empty room stood the tangled metal wreck of what was once a four-poster bed. I remembered how it was when my grandfather lived and I came here as a child on visits from the city on the coast where my father worked. Then I sat confused and terrified before him, until somebody — a grandmother, an aunt — picked me up and carried me away. It was only the fact that my father was the most successful of his sons, though still only the younger son of a junior wife, ( f ) made him consent to have me in his presence at all.

In the corner a stack of chests once stood, of ascending size from top to bottom. Gone now. Fleeting I imagined the treasures I might have found inside. Pieces of faded indigo fabric. Elegant gowns crackling with ancient starch. Letters on onion-skin paper. Leather-bound journals. Memories rendered into words. But, no. For here the past survives in the scent of a coffee bean, a person's history is captured in the shape of an ear, and those most precious memories are hidden in the safest place of all. Safe from the fire or floods or war. In stories. Stories remembered, until they are ready to be told. Or perhaps simply ready to be heard.

And it is women's work, this guarding of stories, like the tending of gardens. And as I go out to them, my aunts, silhouetted where they sit in the silver light of early dusk, I remember the women returning home at nightfall from the plots among the trees.

A story comes to mind. A story I have known for years, it seems, though I have no memory now of ( g ) it was who told it to me.

Five hundred years ago, a ship flying the flag of the King of Portugal rounded the curve of the continent. She had become <sup>(1)</sup>becalmed somewhere around the Cape Verde Islands, and run low on stocks, food and water. When finally the winds took pity on her, they blew her south-east towards the coast, where the captain sighted a series of natural harbours and weighed anchor. The sailors, stooped with hunger, rowed ashore, dragged themselves through shallow water and on up the sand where they entered the shade of the trees. And there they stood and gazed about themselves in disbelief. Imagine! Dangling in front of their faces: juicy mangoes, bursts of starfruit, avocados the size of a man's head. While from the ends of their elegant stalks pineapples nodded encouragingly, sweet potatoes and yams peeped from the earth, and great hands of bananas reached down to them. The sailors thought <sup>(2)</sup>they had found no less a place than the Garden of Eden.

The sailors saw what they took to be nature's abundance and stole from the women's gardens. They thought they had found Eden, and perhaps they had. But it was an Eden created not by the hand of God, but the hands of women.

And I wonder what they would think if they came here now. Of all the glorious gifts the forest had to offer — fresh coffee.

[From Aminatta Forna's novel *Ancestor Stones*, published by Atlantic Monthly Press]

(1) Choose FOUR statements which agree with what the author says.

- A Five hundred years ago, Portuguese sailors came to an African coastal village and stole fruit from native gardens.
- B I brought my son with me when I came back to Africa.
- C In my grandfather's house, I found a stack of chests full of fabric, gowns, letters and journals.
- D In recalling my childhood memories, I have become a storyteller to pass on the memories of my aunts.
- E My four aunts frequently visited my father's house because they had no husbands.
- F My grandmother was one of the younger wives of my grandfather, and she gave birth to my father and my aunt Serah.
- G The coffee plantation was mine because I was the last person still alive in my family.

(2) Choose the best word or phrase to put in each space(a)~(g). No answer can be used more than once. Choose H if no word is needed.

- |           |        |         |             |
|-----------|--------|---------|-------------|
| A that    | B what | C which | D who       |
| E whoever | F whom | G whose | H (no word) |

(3) Answer the following questions.

- 1 A <sup>(1)</sup>becalmed ship is one that
- A has been sent on an exploration by a monarch.
  - B has come upon undiscovered territory.
  - C is low on supplies for its crew.
  - D is stranded because winds have died down.
- 2 The clause <sup>(2)</sup>they had found no less a place than the Garden of Eden means that
- A it was better than the Garden of Eden.
  - B it was not as beautiful as the Garden of Eden.
  - C it was not smaller than the Garden of Eden.
  - D it was undoubtedly the Garden of Eden.
- 3 Which one of the following best summarizes a key point of the passage?
- A An appreciation of women's role in maintaining oral history
  - B Recognition of religion's impact on us through references to Eden
  - C The author's return to Africa to claim her inheritance
  - D Understanding how we exaggerate past events when we're young

**LISTENING SECTION**

**All answers must be indicated on the MARK SHEET.**

**III Now listen to an interview, which you will hear TWICE. After hearing the interview TWICE, you will hear six questions. For each question choose the correct answer according to the interview, by indicating A, B, or C on the MARK SHEET. The questions will be read only ONCE.**

Example: The author's name is

- A Alan Weisman.
- B Harry Potter.
- C Leonardo Da Vinci.

Answer: A

**IV Now listen to a news report, which you will hear ONCE. After hearing the news report ONCE, you will hear five questions. For each question choose the correct answer according to the news report, by indicating A, B, or C on the MARK SHEET. The questions will be read only ONCE.**

**WRITING SECTION**

**V Read the following English passage and briefly summarize the main points in Japanese. Write your answer within the box provided on the ANSWER SHEET.**

A research group conducted a study in which 12- and 18-month-old children watched a man perform a three-part series of actions. The adult picked up a wooden block that had been placed in front of a teddy bear, shook it and then returned it to its original position. For one group of children, shaking the block made a buzzing sound; for another group, putting it back caused the sound. After the demonstration, children played with the bear and the block. They imitated the action that caused the sound both more often and earlier than did children in a group where no demonstration had been made.

**VI Write your answer to the following question in English within the box provided on the ANSWER SHEET.**

Nowadays almost everywhere you go there is a surveillance camera (防犯カメラ) taking pictures of you. How do you feel about this?

[以下余白]