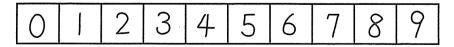
英語

90 分

## 注 意 事 項

- 1. 試験開始の合図までこの冊子を開かないこと。
- 2. 本問題冊子は15ページ、答案用紙は2ページである。
- 3. 各答案用紙の上の枠内には、受験番号を記入し、その右側の枠内には、受験番号の下2桁の数字を忘れずに記入すること。
- 4. 解答はすべて各答案用紙の所定の欄に記入すること。
- 5. 問題冊子および答案用紙は切りはなさないこと。
- 6. 答案用紙に記入する受験番号の数字の字体は、下記の例にならい、明瞭に記入すること。



## 試験問題は、つぎのページより始まります。

 $\triangle$ M4(067—70)

## Ⅰ 次の英文を読んで、以下の設問に答えよ。(80点)

The idea that cooking is a defining human activity is not a new one. In 1773, the Scottish writer James Boswell, noting that "no beast is a cook," called *Homo sapiens* "the cooking animal." (Though he might have reconsidered that definition had he been able to gaze upon the frozen-food cases at Walmart.) Fifty years later, in *The Physiology of Taste*, the French gastronome Jean Anthelme Brillat-Savarin claimed that cooking made us who we are; by teaching men to use fire, it had "done the most to advance the cause of civilization." More recently, Lévi-Strauss, writing in *The Raw and the Cooked* in 1964, reported that many of the world's cultures entertained a similar view, regarding cooking as the symbolic activity that "establishes the difference between animals and people."

For Lévi-Strauss, cooking was a metaphor for the human transformation of raw nature into cooked culture. But in the years since the publication of *The Raw and the Cooked*, other anthropologists have begun to take quite literally the idea that the invention of cooking might hold the evolutionary key to our humanness. A few years ago, a Harvard anthropologist and primatologist named Richard Wrangham published a fascinating book called *Catching Fire*, in which he argued that it was the discovery of cooking by our early ancestors—and not tool making or meat eating or language—that set us apart from the apes and made us human. According to the "cooking hypothesis," the advent of cooked food altered the course of human evolution. By providing our forebears with a more energy-dense and easy-to-digest diet, it allowed our brains to grow bigger (brains being notorious energy guzzlers) and our guts to shrink. It seems that raw food takes much more time and energy to chew and digest, which is why other primates our size carry around substantially larger digestive tracts and spend many more of their waking hours chewing—as much as six hours a day.

調理は、事実上、噛んで消化するという作業の一部を引き受け、外部のエネル(1) ギー源を用いて、われわれの身体の外部で、それを遂行してくれたのである。 Also, since cooking detoxifies many potential sources of food, the new technology cracked open a treasure trove of calories unavailable to other animals. Freed from the necessity of spending our days gathering large quantities of raw food and then chewing (and chewing) it, humans could now devote their time, and their metabolic resources, to other purposes, like creating a culture.

Cooking gave us not just the meal but also the occasion: the practice of eating together at an appointed time and place. This was something new under the sun, for the forager of raw food would have likely fed himself on the go and alone, like all the other animals. (Or, come to think of it, like the industrial eaters we've more recently become, grazing at gas stations and eating by ourselves whenever and wherever.) But sitting down to common meals, making eye contact, sharing food, and exercising self-restraint all served to civilize us. "Around that fire," Wrangham writes, "we became tamer."

Cooking thus transformed us, and not only by making us more sociable and civil. Once cooking allowed us to expand our cognitive capacity at the expense of our digestive capacity, there was no going back: Our big brains and tiny guts now depended on a diet of cooked food. (Raw-foodists take note.) What this means is that cooking is now obligatory—it is, as it were, baked into our biology. What Winston Churchill once said of architecture—"First we shape our buildings, and then they shape us"—might also be said of cooking. First we cooked our food, and then our food cooked us.

If cooking is as central to human identity, biology, and culture as Wrangham suggests, it stands to reason that the decline of cooking in our time would have serious consequences for modern life, and so it has. Are they all bad? Not at all. The outsourcing of much of the work of cooking to corporations has relieved women of what has traditionally been their exclusive responsibility for feeding the family, making it easier for them to work outside the home and have careers. It has headed off many of the conflicts and domestic arguments that such a large shift in gender roles and family dynamics was bound to spark. It has

relieved all sorts of other pressures in the household, including longer workdays and overscheduled children, and saved us time that we can now invest in other pursuits. It has also allowed us to diversify our diets substantially, making it possible even for people with no cooking skills and little money to enjoy a whole different cuisine every night of the week. All that's required is a microwave.

These are no small benefits. Yet they have come at a cost that we are just now beginning to reckon. Industrial cooking has taken a substantial toll on our health and well-being. Corporations cook very differently from how people do (which is why we usually call what they do "food processing" instead of cooking). They tend to use much more sugar, fat, and salt than people cooking for people do; they also deploy novel chemical ingredients seldom found in pantries in order to make their food last longer and look fresher than it really is. So it will come as no surprise that the decline in home cooking closely tracks the (3)

The rise of fast food and the decline in home cooking have also undermined the institution of the shared meal, by encouraging us to eat different things and to eat them on the run and often alone. Survey researchers tell us we're spending more time engaged in "secondary eating," as this more or less constant grazing on packaged foods is now called, and less time engaged in "primary eating"—a rather depressing term for the once-venerable institution known as the meal.

The shared meal is no small thing. It is a foundation of family life, the place where our children learn the art of conversation and acquire the habits of civilization: sharing, listening, taking turns, navigating differences, arguing without offending. What have been called the "cultural contradictions of capitalism"—its tendency to undermine the stabilizing social forms it depends on—are on vivid display today at the modern American dinner table, along with all the brightly colored packages that the food industry has managed to plant there.

These are, I know, large claims to make for the centrality of cooking (and not cooking) in our lives, and a caveat or two are in order. For most of us today, the choice is not nearly as blunt as I've framed it: that is, home cooking from scratch versus fast food prepared by corporations. Most of us occupy a place somewhere between those bright poles, a spot that is constantly shifting with the day of the week, the occasion, and our mood. Depending on the night, we might cook a meal from scratch, or we might go out or order in, or we might "sort of" cook. This last option involves availing ourselves of the various and very useful shortcuts that an industrial food economy offers: the package of spinach in the freezer, the can of wild salmon in the pantry, the box of store-bought ravioli from down the street or halfway around the world. What constitutes "cooking" takes place along a spectrum, as indeed it has for at least a century, when packaged foods first entered the kitchen and the definition of "scratch cooking" began to drift. (Thereby allowing me to regard my packaged ravioli with sage-butter sauce as a culinary achievement.) Most of us over the course of a week find ourselves all over that spectrum. What is new, however, is the great number of people now spending most nights at the far end of it, relying for the preponderance of their meals on an industry willing to do everything for them save the heating and the eating. "We've had a hundred years of packaged foods," a food-marketing consultant told me, "and now we're going to have a hundred years of packaged meals."

This is a problem—for the health of our bodies, our families, our communities, and our land, but also for our sense of how our eating connects us to the world. Our growing distance from any direct, physical engagement with the processes by which the raw stuff of nature gets transformed into a cooked meal is changing our understanding of what food is. Indeed, the idea that food has *any* connection to nature or human work or imagination is hard to credit when it arrives in a neat package, fully formed. Food becomes just another commodity, an abstraction. And as soon as that happens we become easy prey

for corporations selling synthetic versions of the real thing—what I call edible foodlike substances. We end up trying to nourish ourselves on images.

Now, for a man to criticize these developments will perhaps rankle some readers. 一部の人の耳には、男性が料理の重要性について語るたびに、その人が時計を逆戻しにして、女性を台所へ戻したがっているように聞こえる。But that's not at all what I have in mind. I've come to think cooking is too important to be left to any one gender or member of the family; men and children both need to be in the kitchen, too, and not just for reasons of fairness or equity but because they have so much to gain by being there. In fact, one of the biggest reasons corporations were able to insinuate themselves into this part of our lives is because home cooking had for so long been denigrated as "women's work" and therefore not important enough for men and boys to learn to do.

Though it's hard to say which came first: Was home cooking denigrated because the work was mostly done by women, or did women get stuck doing most of the cooking because our culture denigrated the work? politics of cooking are nothing if not complicated, and probably always have been. Since ancient times, a few special types of cooking have enjoyed considerable prestige: Homer's warriors barbecued their own joints of meat at no cost to their heroic status or masculinity. And ever since, it has been socially acceptable for men to cook in public and professionally - for money. (Though it is only recently that professional chefs have enjoyed the status of artists.) But for most of history most of humanity's food has been cooked by women working out of public view and without public recognition. Except for the rare ceremonial occasions over which men presided — the religious sacrifice, the July 4 barbecue, the four-star restaurant - cooking has traditionally been women's work, part and parcel of homemaking and child care, and therefore undeserving of serious — i.e., male — attention.

But there may be another reason cooking has not received its proper due. In a recent book called *The Taste for Civilization*, Janet A. Flammang, a feminist

scholar and political scientist who has argued eloquently for the social and political importance of "food work," suggests the problem may have something to do with food itself, which by its very nature falls on the wrong side—the feminine side—of the mind-body dualism in Western culture.

"Food is apprehended through the senses of touch, smell, and taste," she points out, "which rank lower on the hierarchy of senses than sight and hearing, which are typically thought to give rise to knowledge. In most of philosophy, religion, and literature, food is associated with body, animal, female, and appetite—things civilized men have sought to overcome with knowledge and reason."

Very much to their loss.

\*obesity 肥満

[Adapted from Michael Pollan, Cooked: A Natural History of Transformation. New York: Penguin Books, 2014: 5–11.]

- Ⅰ-1. 下線部(1)を英語に訳せ。
- Ⅰ-2. 下線部(2)を日本語に訳せ。
- Ⅰ-3. 下線部(3)を日本語に訳せ。
- Ⅰ-4. 下線部(4)を英語に訳せ。
- I-5. 下線部(5)について、それは誰にとっての、どういった損失と考えられるか。 50 字以内の日本語で説明せよ。(句読点も文字数に含める。)

- I-6. 以下の(1)から(4)の答としてもっとも適切なものをAからEの中から選び、記号で答えよ。
  - (1) Look at the phrase, "cultural contradictions of capitalism," marked with double underlining on page 3. Which of the following statements does it refer to?
    - A. Capitalist societies that employ millions of workers in the food industry are, on the whole, better off than societies that rely on unpaid domestic labor to produce meals.
    - B. Capitalist societies would not exist without people acquiring communication skills at domestic meals, yet capitalism works against such gatherings continuing to occur.
    - C. Paradoxically, cooking and eating together less often can have long-term positive effects on maintaining a capitalist society.
    - D. People who have ceased to cook and eat together at home on a regular basis are likely to reject capitalism as the basis for their social order.
    - E. The shortcomings of capitalism are obvious to people who rely on corporations to provide mass-produced packaged meals.
  - (2) Select a statement mentioned in the text that offers an explanation for cooking having been thought of as "female" in the West.
    - A. Depictions of ancient gods of the household and the kitchen tend to have exhibited distinctly female features.
    - B. In Western history, the readership for the majority of cookbooks and kitchen advice has been women.
    - C. Men have cooked less frequently since the Industrial Revolution, which forced them to work away from home.
    - D. Philosophers have failed to appreciate diverse understanding and expertise obtained from each of the five senses.
    - E. Women and children have been excluded from rituals that involve food in Western religions led by men.

- (3) Select a statement that reflects one of the author's opinions on eating patterns.
  - A. In the future, edible foodlike substances that do not resemble familiar meals will free humans at last from the nuisance of cooking.
  - B. People who reheat industrially prepared food at home are likely to contribute more to society than those who take time to cook from scratch.
  - C. The benefits outweigh the disadvantages for people who share cooking responsibilities and eat a variety of foods at home with others.
  - D. The most reliable way to ensure longevity would be to consume primarily foods that have not been heated.
  - E. We are most in tune with the needs of our body when we feed ourselves regardless of location, time, and the presence of other people.
- (4) Which factor does the author NOT mention regarding modern eating patterns?
  - A. disconnection from the origins of our food
  - B. individual consumers' physical well-being
  - C. personal financial burden associated with food purchase and preparation
  - D. social transmission of culture and manners at meals
  - E. time spent on cooking that could be devoted to other activities

## I-7. 次の1から10の文から、本文の内容に一致するものを3つ選び、番号で答えよ。

- 1. According to Western writers from the 18th century onwards, humans would have evolved more rapidly if they had not been slowed down by the biological need to cook much of their food.
- 2. The discovery of fire enabled humans to drive away predators while they ate, allowing them to take in more calories, and to kill harmful bacteria and other microorganisms on the food.
- Winston Churchill advocated for designing the architecture of homes and workplaces such that pleasant spaces for communal meals would be given highest priority.
- 4. Potential friction among family members in dual-income households could be minimized thanks to processed foods that help reduce meal preparation time.
- 5. "Primary eating" refers to grabbing a quick breakfast alone, while "secondary eating" entails partaking of lunch or dinner at a more leisurely pace with colleagues, friends, and/or family.
- 6. Whereas children may be deceived into thinking that brightly colored packaging contains food that is good for their body, adults in contemporary society are not so easily misled.
- 7. What is regarded as cooking has depended on how close ingredients are to their natural form and on the degree to which the cook has altered their appearance.
- 8. If women were skilled at cooking cuisines from around the world, men would consider cooking to have greater social and cultural importance than they generally do at present.
- 9. People who rarely share meals with others are likely to eat a smaller variety and quantity of food, spend more time communicating with acquaintances online, and not know how to cook.
- 10. Some technologies that have made the industrialization of cooking possible include the freezer, the microwave, chemical preservatives, convenient packaging, and canning.

During life-threatening situations our subjective sense of time can be radically altered, as if shifted into a slow-motion mode. One of the first scholarly reports of this *slow-motion effect* was published by a Swiss geologist, Albert Heim, in 1892. He gathered accounts from members of the Swiss Alpine Club who had experienced serious falls or other near-death events. Ninety-five percent of the group reported what Heim summarized as "a dominant mental quickness and sense of surety. Mental activity became enormous, rising to a hundred-fold velocity or intensity.... Time became greatly expanded. The individual acted with lightning-quickness in accord with accurate judgment of his situation. In many cases there followed a sudden review of the individual's entire past."

Review boards for human-subject experiments tend to frown upon putting people in life-threatening situations, so it is difficult to carefully corroborate and study the slow-motion effect. But some studies have asked people to estimate the duration of highly emotional or frightening events, including experiencing an earthquake, watching a scary video, jumping from a height into a net, and skydiving. For the most part these studies confirm that people generally overestimate the duration of the event, which is consistent with reports that external events are unfolding slowly (watching a movie in slow motion takes longer than watching it at normal speed).

In and of itself, however, the overestimation of the duration of emotional events is not particularly surprising because it turns out that there are innumerable perfectly harmless situations in which people also overestimate the passage of time. Indeed, our subjective sense of time is actually quite inaccurate. A watched pot never boils and time flies when you're having fun, precisely because there are countless circumstances that warp our subjective sense of time. Enduring a very boring lecture or awaiting plane repairs while on the tarmac, for example, can create the feeling of chronostasis—the sensation

that time is standing still. In contrast, when you are engrossed in a book, immersed in your favorite hobby, or fully engaged in a complex task such as writing computer code, time can seem to vaporize, magically jumping from one moment to another with nothing in between.

What is the relationship between objective clock time and our subjective sense of time? Why does time appear to slow down during life-threatening situations? What is happening in the brain when we say time is flying by, or dragging along? Before we address these questions, we must first distinguish between two distinct types of timing.

Telling time is a bidirectional problem. A stopwatch triggered at the start of a marathon provides a continuous measure of how long the marathoners have been running, but it tells us nothing about how much time they spent at the starting lineup waiting for the race to begin, much less about when they got up in the morning. Starting a stopwatch is an example of prospective timing: determining the passage of time starting from the present into the future. In contrast, if you walk into a room just in time to see the last grains of sand trickle through the neck of an hourglass, you can deduce something about how much time has elapsed since a past event: an hour ago someone flipped the hourglass over. But unless you flip it over again, the hourglass provides no information about how much time has elapsed since you entered the room. This is an example of retrospective timing: estimating the passage of time from some moment in the past up until the present.

Throughout the day humans are continuously engaging in prospective and retrospective timing. [ ① ]. First, at a party you are talking to your friends Amy and Bert; Amy asks you to remind her to leave in five minutes because she has somewhere to go. In the second scenario, Amy excuses herself and leaves, and five minutes later Bert asks you, "How long ago did Amy leave?" [ ② ], but does your brain use the same mechanism to tell time in both cases? No. [ ③ ]. In the first case you know in advance that you will be performing a

timing task; [ ④ ]. But in the second case — where Bert asked how long ago Amy left — [ ⑤ ]. Prospective timing is a true temporal task in that it relies on the brain's timing circuits. In contrast, retrospective timing is in a sense not a timing task at all; it is rather an attempt to infer the passage of time by reconstructing events stored in memory.

The distinction between prospective and retrospective timing explains a few of the mysteries about our subjective sense of time, including what some have called the holiday paradox. A five-hour wait for a delayed plane on your vacation (2) trip to Greece can seem endless as it is unfolding, while an exciting day touring Athens flies by. A week later, however, the airport delay is a mere blip in time, while the busy, fun-filled day in Athens seems quite extended.

This holiday paradox is not an artifact of our modern, fast-paced, high-speed-travel lifestyle. William James wrote in 1890: "In general, a time filled with varied and interesting experiences seems short in passing, but long as we look back. On the other hand, a tract of time empty of experiences seems long in passing, but in retrospect short. A week of travel and sight-seeing may subtend an angle more like three weeks in the memory; and a month of sickness hardly yields more memories than a day."

As they unfold, interesting and engaging activities seem to fly by, in part because we are not thinking about time. So your first tour of the 2,500-year-old Parthenon may fly by, but that five-hour wait in the Atlanta airport will drag along as you continuously check your watch and wonder to yourself how much longer is this going to take? Retrospectively, the duration of those activities is estimated in part based on the number of events stored in memory. And since we are much more likely to remember novel and personally meaningful events, the Parthenon is more likely to earn a slot in your memory bank than your first visit to the Atlanta airport bathroom.

The intimate relationship between memory and retrospective timing is strikingly illustrated by the case of the British musicologist Clive Wearing, who developed a severe inability to create new long-term memories after a serious brain infection. While many of his faculties remained intact (including his ability to play music and conduct), he initially spent much of his day writing in his diary "Now I am really completely awake," and later crossing it out, only to write, "Now I am perfectly awake — first time." In the absence of the ability to form new memories, he seemed to be trapped in an infinite loop of an unchanging present. 彼は自分がどこにいるのか、あるいはどのようにしてそこにたどり着いたのかを理解できないため、彼に可能な唯一の解釈は、たえず眠りから覚めたばかりであるということだ。 He has no retrospective sense of when he woke up, because he has little or no memory of what happened in the previous minutes and hours.

[Adapted from Dean Buonomano, Your Brain Is a Time Machine: The Neuroscience and Physics of Time. New York: W.W. Norton & Company, 2017: 57-61.]

- Ⅱ-1. 下線部(1)を日本語に訳せ。
- Ⅱ-2. 下線部(2) "the holiday paradox" とは何か, 60 字以内の日本語で説明せよ。 具体例を挙げる必要はない。(句読点も文字数に含める。)
- Ⅱ-3. 下線部(3)を日本語に訳せ。
- Ⅱ-4. 下線部(4)を英語に訳せ。

Ⅱ-5. 次の問いへの答としてもっとも適切なものをAからEの中から選び、記号で答えよ。

Which of the following best explains the "slow-motion effect" described in the first and the second paragraphs?

- A. When human brains are operating at full capacity, they can overheat and stop functioning in a short period of time.
- B. When our senses begin to work quickly, the objects around us seem to move correspondingly slowly so that we can only retain their blurred images in our brain.
- C. When we are extremely fatigued and respond slowly to stimuli, we are much more likely to become a victim of a fatal accident.
- D. When we are faced with great danger and fear, our sensory systems become paralyzed and almost numb.
- E. When we encounter a life-threatening situation, our mental activity may accelerate to such a degree that things around us seem to move quite slowly.
- II-6. 文中の空欄[①]から[⑤]には下のAからEのいずれかが入る。論旨がもっとも適切になるよう空欄[①]から[⑤]を埋め、記号で答えよ。 AからEは先頭が大文字になるべきものも小文字で書き始めてある。
  - A. in both cases you are asked to estimate the amount of elapsed time
  - B. your stopwatch is useless because you were never told when to start it
  - C. consider two scenarios in which you might rely on your ability to estimate temporal durations
  - D. as far as the brain is concerned, these two timing tasks are fundamentally different from each other
  - E. you can start a hypothetical stopwatch at t=0, and track the passage of time until approximately five minutes have elapsed

- Ⅱ-7. 次の1から8の文から、本文の内容に一致するものを2つ選び、番号で答え よ。
  - 1. Research committees today are generally unwilling to permit experiments where human subjects experience stress and embarrassment.
  - 2. Our subjective sense of time does not extend beyond highly emotional or frightening situations such as experiencing an earthquake.
  - 3. The author of the text refers to "A watched pot never boils" as an accurate illustration of retrospective timing.
  - 4. While an hourglass is an effective device to measure retrospective timing, it cannot be used to estimate the passage of time starting from the present.
  - 5. Unlike prospective timing, retrospective timing is not exactly a timing task but involves guessing how much time has passed based on memory.
  - 6. William James gave the example of time spent in sickness to highlight the relationship between health and subjective sense of time.
  - 7. The reason why the Parthenon is mentioned is to contrast its 2, 500-year history with fast-paced modern life.
  - 8. Although Clive Wearing cannot form new long-term memories, his musical performance abilities have not been affected.

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