01 【医学科】

英語問題

2025(令和7)年度

【注意事項】

- 1. この問題冊子は「英語」である。
- 2. 試験時間は90分である。
- 3. <u>試験開始の合図まで、この問題冊子を開いてはいけない</u>。ただし、表紙はあらかじめよく読んでおくこと。
- 4. 試験開始後すぐに、以下の5および6に記載されていることを確認すること。
- 5. この問題冊子の印刷は1ページから10ページまである。
- 6. 解答用紙は問題冊子中央に3枚はさみこんである。
- 7. 問題冊子に落丁, 乱丁, 印刷不鮮明な箇所等があった場合および解答用紙が不足している場合は, 手をあげて監督者に申し出ること。
- 8. 試験開始後, 3 枚ある解答用紙の所定の欄に, 受験番号と氏名を記入すること (1 枚につき受験番号は2箇所, 氏名は1箇所)。
- 9. 解答は必ず解答用紙の指定された箇所に記入すること。解答用紙の裏面に記入してはいけない。
- 10. 問題番号に対応した解答用紙に解答していない場合は、採点されない場合もあるので注意すること。
- 11. 問題冊子の中の白紙部分は下書き等に使用してよい。
- 12. 解答用紙を切り離したり、持ち帰ってはいけない。
- 13. 試験終了時刻まで退室を認めない。試験中の気分不快やトイレ等, やむを得ない場合には, 手をあげて監督者を呼び, 指示に従うこと。
- 14. 試験終了後は問題冊子を持ち帰ること。





【 】 次の文章を読んで、下の問いに解答欄の範囲内で答えなさい。 *が付いている語句には本文の後ろに注があります。

Randall Haas, an archaeologist at University of California, Davis, recalls the moment in 2018 when his team of researchers gathered around the *excavated burial of an individual lain to rest in the Andes Mountains of Peru some 9,000 years ago. Along with the bones of what appeared to be a human adult was an impressive—and extensive—kit of stone tools an ancient hunter would need to take down big game, from engaging the hunt to preparing the *hide.

"He must have been a really great hunter, a really important person in society"—Haas says that's what he and his team were thinking at the time.

But further analysis revealed a surprise: the remains found alongside the toolkit were from a biological female. What's more, this ancient female hunter was likely not an *anomaly, according to a study published today in *Science Advances*. The Haas team's find was followed by a review of previously studied burials of similar age throughout the Americas—and it revealed that between 30 and 50 percent of big game hunters could have been biologically female.

This new study is the latest twist in a decades-long debate about gender roles among early hunter-gather societies. The common assumption was that prehistoric men hunted while women gathered and reared their young. But for decades, some scholars have argued that these "traditional" roles—documented by anthropologists studying hunter-gatherer groups across the globe since the 19th century—don't necessarily stretch into our deep past.

While the new study provides a strong argument that the individual in Peru was a female who hunted, plenty of other evidence has long been lying in plain sight, says Pamela Geller, an archaeologist at the University of Miami who is not part of the study team.

"The data is there," Geller says. "単に研究者たちがそれをどのように解釈するかが問題である。"

Whose tools?

When archaeologists excavated the burial, they found a colorful array of 24 stone tools. Among them: *projectile points for taking down a large mammal; *hefty rocks likely for cracking bones or stripping hides; small, rounded stony bits for scraping fat from pelts; tiny flakes with extra sharp edges that could have chopped the meat; and *nodules of red ocher that could help

preserve the hides. Scattered around the site were fragments of the bones of animals including ancient llama relatives and deer.

In initial discussions about the toolkit, the researchers presumed the owner was male, perhaps a prominent figure of society, or even a chief of the group. "I'm as guilty as anyone," says Haas, who has been working in the region since 2008. "I thought yeah, that makes sense with my understanding of the world." Back in the lab, however, close inspection of the bones suggested the physiology of a biological woman. To confirm, they analyzed a protein that forms tooth enamel and is linked to sex.

Importantly, the team cannot know the individual's gender identity, but rather only biological sex (which like gender doesn't always exist on a binary). In other words, they can't say whether the individual lived their life 9,000 years ago in a way that would identify them within their society as a woman.

Challenging assumptions

The 2018 discovery does pose a challenge to gender binaries commonly assumed for our early ancestors: Men acted as hunters, women acted as gatherers. This assumption comes from studies of modern hunter-gatherers, where men more frequently are responsible for the hunt while women bear the most responsibility for caring for children, says Arizona State University's Kim Hill, who specializes in human evolutionary anthropology and was not part of the study team. "You can't just stop in the middle of stalking a deer in order to nurse a crying baby," Hill says via email.

Yet inferences from present-day hunter-gatherers have limits. For decades, Geller says, some archaeologists have argued that the simple view of male hunters and female gatherers is in fact an oversimplification. "With few exceptions, the researchers who study hunting and gathering groups—regardless of which continent they work on—presume that a sexual division of labor was universal and rigid," she says. "And because it is commonsensical, they then have a hard time explaining why female-bodied individuals also bear the skeletal markers of hunting or have hunting tool kits as grave goods."

When researchers have found signs of this *discrepancy in the past, Geller says, "usually they don't say anything, as if ignoring the evidence will make it go away."

Hunting would likely require as many able-bodied adults as possible to increase safety and efficiency—regardless of their biological sex. After a child *weans, the mother could be available to assist in big hunts, says Kathleen Sterling, an archaeologist at Binghamton University, who was not part of the study team. But even with babies, hunting could still be possible with community nursing assistance.

(出典 Maya Wei-Haas, "Prehistoric female hunter discovery upends gender role assumptions." *National Geographic*, Nov. 5, 2020, 一部改変)

Notes

excavate: to remove earth that is covering very old objects buried in the ground.

hide: the skin of an animal, used for making leather.

anomaly: something that is noticeable because it is different from what is usual.

projectile: an object that is thrown or shot forwards with force.

hefty: large and heavy.

nodules: a small mass of rounded or irregular shape.

discrepancy: an unexpected difference.

wean: to cause a baby or young animal to stop feeding on its mother's milk and to start eating solid food instead.

- (1) 下線部(ア)について、本文の中で同じ意味で使われている1語を、英語で抜き出しなさい。
- (2) 下線部(イ)について、新たな発見とそれをきっかけに行われた調査内容とその結果を、本文に即して、日本語で具体的に説明しなさい。
- (3) 下線部(ウ)を英訳しなさい。
- (4) 下線部(エ)の理由を、本文に即して、日本語で簡潔に説明しなさい。
- (5) 下線部(オ)の内容を、本文に即して、日本語で具体的に説明しなさい。

英語の試験問題〔Ⅱ〕は次に続く。

以下の文章は、自動車関連の新たな税の導入の賛否について、2人の論者がそれぞれの立場から論じたものです。

*が付いている語句には本文の後ろに注があります。

Steve Tuckwell, *MP for Uxbridge and South Ruislip

Most drivers don't go out and about just for fun. We have to take our children to school, get to work or run our *errands. Many of us need to drive grandparents or parents who cannot get out and about on public transport. Sometimes, we might have to drive to *A&E late at night.

Of course we all know the roads we use every day need to be maintained, but it should be done fairly. That means not treating drivers as cash machines. Bringing in a pay-per-mile tax would do just that, increasing costs for millions who rely on their vehicles daily.

For many people, driving is a necessity. They have no choice but to use their cars. Public transport is virtually non-existent in many rural areas, and even in outer London train or *Underground stations are few and far between, and are principally designed to ferry commuters in and out of the city.

*Penalising motorists for <u>making unavoidable journeys</u> is simply unfair and would hit the lowest-income families the hardest. For them, driving isn't a luxury, it is a necessity to stay employed and access essential services. Adding an extra tax per mile could force some people to choose between driving to work or saving money by staying at home.

Some of the most vocal supporters of a pay-per-mile charge claim it would be good for the environment, reducing emissions by discouraging driving, but this does not address the root causes of pollution.

Instead of taxing motorists simply for leaving their *driveway, investing in cleaner technologies and improving public transport, such as greener buses, would be a fairer way to achieve environmental goals without punishing those who can't afford the extra cost.

Not only does pay per mile fail to fix the problem it is seemingly trying to tackle, it would hit the pockets of low-income drivers for whom driving is a need, not a luxury. Sounds like a tax *grab to me.

Dillon Smith from the Centre for Policy Studies, a think tank

Let's start with some simple truths. If you drive a *petrol or diesel car, in effect you already pay per mile—the more you drive, the more fuel you consume, and thus the more fuel duty you pay. The trouble is, the same doesn't apply to electric vehicle (EV) drivers.

While EVs will be liable for vehicle excise duty (road tax) from next year, there is no equivalent to fuel duty for zero-emission vehicles. So right now, EV drivers are not paying their fair share.

Of course from an environmental perspective we want to encourage the *take-up of EVs, and their cheaper running costs is a great argument for making your next car an electric one. However, as EVs become more common, this will blow an increasing hole in the government's budget.

We believe the solution lies in per-mile charging; we have a once-in-a-generation opportunity to build a much better and fairer system of road taxation. In addition to being eye-wateringly high, fuel duty is inherently *regressive and unfair. Why should rural residents who have no choice but to drive pay the same duty as *urbanites who have *a plethora of public transport options?

We propose that EV drivers pay a flat per-mile rate, and that there would be an *allocation of "free" miles that would vary by factors such as where you live. The rate should be set at a level that still ensures that EVs are cheaper to run, while also not kicking in until later this decade.

To ensure there are no concerns about privacy, you should be able to submit mileage readings however you like, from *mileometer read-outs to an automatic system with GPS. This would not require location tracking—only the raw miles would matter. Petrol or diesel drivers would also pay fuel duty as they do now.

Per-mile charging isn't about *fleecing the motorist further. Rather, the transition to EVs gives us a rare opportunity to replace a regressive and outdated system with one that is smarter, and built for the 21st century.

(出典 Steve Tuckwell and Dillon Smith, "The big question: Should drivers pay road tax per mile?" *The Times*, May 25, 2024, 一部改变)

Notes

MP: Member of Parliament.

errand: a visit to a store, the post office, or other place to complete an everyday task.

A&E: an accident and emergency department at a hospital.

Underground: a subway, especially the one in London.

penalise: to punish someone.

driveway: a short road leading from a public road to a house or garage.

grab: a sudden attempt to take something.

petrol: gasoline.

take-up: the rate at which people accept something.

regressive: (of a tax) imposing a smaller burden on those who are wealthier.

urbanite: a person who lives in a town or city.

a plethora of: plenty of.

allocation (n.) < allocate (v.): to give something officially to someone for a particular purpose.

mileometer: a device in a vehicle that measures and shows the distance it travels.

fleece: to take a lot of money from someone by charging them too much.

- (1) 下線部(ア)の具体例として、本文で挙げられているものを、3つ日本語で答えなさい。
- (2) 下線部(イ)を和訳しなさい。
- (3) 論者が下線部(ウ)のように考える理由を、日本語で説明しなさい。
- (4) 下線部 (エ) とは、どのようなものに起因するか。それを示す語句を、本文から英語で抜き出しなさい。
- (5) 本文で論じられている新税導入についての2つの意見を踏まえて、どちらに賛成するか、自分の意見を英語で書きなさい $(30\sim 50 \text{ words})$ 。

英語の試験問題[Ⅲ]は次に続く。

【 **Ⅲ** 】 次の文章を読んで、下の問いに解答欄の範囲内で答えなさい。 *が付いている語句には本文の後ろに注があります。

Perhaps you've met dogs who are so *aloof that they seem like cats, or cats who are so *affiliative that they're more like dogs. My family used to have a pet *betta fish named Ariel who seemed more puppy than fish. She'd allow us to pet her without complaint, and when we dropped food in the fish tank she'd *nuzzle our fingers.

This topic might seem *frivolous, but it reveals a superpower of the human brain. We can consider a physical object, such as a fish, and impose new functions on it that are not part of its physical nature, using only our collective minds. To my family, Ariel was a puppy, even though nothing about her body was dog-like.

We simply agreed that Ariel had puppyish qualities, and that agreement became our reality. (The perceptive reader may have noticed that I've referred to Ariel as 'she', even though the colourful bettas sold in pet shops are always male. Our daughter, who was three at the time and in love with Walt Disney's *The Little Mermaid*, informed us in no uncertain terms of Ariel's preferred pronoun.)

This superpower to modify physical reality is called 'social reality'. You or I can simply make something up and communicate it to other people, and if they treat it as real, it becomes real. For better or for worse.

Social reality has an astonishing level of influence on our lives. We impose functions on bits of paper and metal and they become money. We draw imaginary lines in the dirt and they become the borders of a country, and the people on opposite sides of those imagined lines transform into citizens with rights, and foreigners without them.

(中略)

Social reality is so powerful that it even influences our genetic evolution as a species. Money, for example, is entirely made-up, but it's so real to us that people who have more money live longer. They can eat healthier foods, live more comfortably, and obtain better medical care. These factors influence who is available and healthy enough to *reproduce, and how likely it is for their offspring to survive and thrive.

As another example, various cultures in history have established laws or norms for who may reproduce with whom. Some rules prohibit sex between people of different skin tones, such as the *segregation laws in the United States during times of slavery. Others limit childbirth, such as China's former one-child policy which, in a culture that values sons over daughters, led to more male offspring than female and ultimately to millions of Chinese men who cannot marry Chinese women.

Social reality can even shape physical reality. For example, it's a stereotype to think that girls aren't good at maths. When people believe the stereotype, which is social reality, they may expose girls to fewer maths and physics problems than they do boys, creating a *self-fulfilling *prophecy that *perpetuates the stereotype and wastes the potential of half the population.

A more *pernicious example is childhood poverty. Research shows that early and long exposure to poverty is harmful to developing brains and may lead to poorer performance in school. Less education increases children's risk of living in poverty when they grow up and have children of their own. Through a vicious cycle, society's stereotypes about poverty, which are social reality, can become the physical reality of brain wiring.

Social reality is normally constrained by physical reality. We could all agree that we can fly through the air by *flapping our arms, or that it's healthy to eat glass. But mere agreement won't change the physical nature of things and make these ridiculous ideas true.

Nevertheless, social reality can become completely *untethered from physical reality, as we are seeing today. Viruses like COVID-19 are physically real. They don't care about human categories; all they require is a nice, wet pair of lungs to occupy. And yet, in the current pandemic, despite abundant physical evidence, many people still believe and behave like the deadly virus is not a serious problem, leading to further spread.

This potential for untethering leaves social reality fragile and vulnerable to manipulation. Consider democracy, which is social reality on a large scale. The act of voting for a leader, by making and *tallying little marks on paper, is meaningful only because we give it meaning and agree on that meaning.

Now witness what happened when a US president claimed to have won an election that he verifiably lost by a large margin of little marks. Millions of citizens believed his story anyway,

thereby creating an alternative social reality, and a crowd of them broke into a government building in protest, stole and destroyed property, and even caused death.

The building in question wasn't just any government building, but one that holds a sacred meaning in a social reality shared by both sides: *the US Capitol, home of the United States Congress. The same superpower that gives us achievements like democracy, can also destroy those achievements.

(中略)

An ensemble of human brains together create social reality, a superpower that can turn fish into puppies, boulders into currency, stereotypes into brain wiring, and a person into a president. どのような集団でも抽象的な概念を作り上げ、それを共有し、現実を組み立てることができる。 Consequently, we have more control over reality than we might think, and more responsibility for reality than we might realise or want.

(出典 Lisa Feldman-Barrett, "The bizarre science behind how our brains shape reality," *BBC Science Focus*, March 2023, 一部改变)

Notes

aloof: not friendly.

affiliative: relating to forming emotional relationships with others.

betta: a kind of fish.

nuzzle: to gently rub or press your nose against someone to show you like them.

frivolous: not serious or sensible.

reproduce: to produce young plants or animals.

segregation: the practice or policy of keeping people of different races, religions, etc., separate from each other.

self-fulfilling: happening because it is expected to happen.

prophecy: a statement that something will happen in the future.

perpetuate: to cause something to continue.

pernicious: having a very harmful effect.

flap: to wave something, especially wings when or as if flying.

untethered (adj.) < untether (v.): to free from.

tally: to calculate a total number.

the US Capitol: アメリカ合衆国議会議事堂.

- (1) 下線部(ア)とは、どのようなものか。本文に即して、日本語で簡潔に説明しなさい。
- (2) 下線部(4)の具体例を本文に即して、日本語で説明しなさい。
- (3) 下線部(ウ)を和訳しなさい。
- (4) 下線部(エ)とは、どのようなことか。本文中の具体例を1つ挙げて、日本語で説明しなさい。
- (5) 脆弱で操作されやすい性質をもつと筆者が考えている社会的現実の具体例を、本文から英語 1 語で抜き出しなさい。
- (6) 下線部(オ)を英訳しなさい。

