

英語問題

2023(令和5)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. 試験開始の合図まで、この問題冊子を開いてはいけない。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。





〔 I 〕 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。

^(ア) A study combining linguistic, genetic and *archaeological evidence has traced the origins of the family of languages including modern Japanese, Korean, Turkish and Mongolian and the people who speak them to *millet farmers who inhabited a region in northeastern China about 9,000 years ago.

The findings detailed on Wednesday document a shared genetic *ancestry for the hundreds of millions of people who speak what the researchers call Transeurasian languages across an area stretching more than 5,000 miles (8,000 km).

The findings illustrate how humankind's embrace of agriculture following the Ice Age powered the *dispersal of some of the world's major language families. Millet was an important early crop as hunter-gatherers transitioned to an agricultural lifestyle.

There are 98 Transeurasian languages. Among these are Korean and Japanese as well as various Turkic languages including Turkish in parts of Europe, Anatolia, Central Asia and Siberia; various Mongolic languages including Mongolian in Central and Northeast Asia; and various Tungusic languages in Manchuria and Siberia.

^(イ) This language family's beginnings were traced to *Neolithic millet farmers in the Liao River valley, an area encompassing parts of the Chinese provinces of Liaoning and Jilin and the region of Inner Mongolia. As these farmers moved across northeastern Asia, the *descendant languages spread north and west into Siberia and the *steppes and east into the Korean peninsula and over the sea to the Japanese *archipelago over thousands of years.

The research *underscored the complex beginnings for modern populations and cultures.

^(ウ) “Accepting that the roots of one's language, culture or people lie beyond the present national boundaries is a kind of surrender of identity, which some people are not yet prepared to make.” said comparative linguist Martine Robbeets, leader of the Archaeolinguistic Research Group at the Max Planck Institute for the Science of Human History in Germany and lead author of the study published in the journal Nature.

“Powerful nations such as Japan, Korea and China are often pictured as representing one language, one culture and one genetic profile. But a truth that makes people with nationalist agendas uncomfortable is that all languages, cultures and humans, including those in Asia, are mixed,” Robbeets added.

The researchers devised a dataset of vocabulary concepts for the 98 languages, identified a core of inherited words related to agriculture and fashioned a language family tree.

Archaeologist and study co-author Mark Hudson of the Max Planck Institute for the Science of Human History said the researchers examined data from 255 archaeological sites in China, Japan, the Korean peninsula and the Russia Far East, assessing similarities in *artifacts including pottery, stone tools and plant and animal remains. They also *factored in the dates of 269 ancient crop remains from various sites.

The researchers determined that farmers in northeastern China eventually supplemented millet with rice and wheat, an agricultural package that was transmitted when these populations spread to the Korean peninsula by about 1300 BC and from there to Japan after about 1000 BC.

The researchers performed genomic analyses on ancient remains of 23 people and examined existing data on others who lived in North and East Asia as long as 9,500 years ago.

For example, a woman’s remains found in Yokchido in South Korea had 95% ancestry from Japan’s ancient Jomon people, indicating her recent ancestors had migrated over the sea.

“It is surprising to see that ancient Koreans reflect Jomon ancestry, which so far had only been detected in Japan,” Robbeets said.

The origins of modern Chinese languages arose independently, though in a similar fashion with millet also involved. While the *progenitors of the Transeurasian languages grew *broomcorn millet in the Liao River valley, the originators of the Sino-Tibetan language family farmed *foxtail millet at roughly the same time in China’s Yellow River region, *paving the way for a separate language dispersal, Robbeets said.

(出典 Will Dunham, “Japanese-Korean-Turkish language group traced to farmers in ancient China,” *Reuters*, Nov. 11, 2021, 一部改変)

Notes

archaeological (*adj.*) < archaeology (*n.*): the study of the buildings, graves, tools, and other objects that belonged to people who lived in the past.

millet: a plant that is similar to grass, or the small seeds from this plant that can be eaten.

ancestry: the members of one's family who lived a long time ago.

dispersal: the process of spreading something over a wide area.

Neolithic: relating to the period when humans used tools made of stone.

descendant: one coming from an ancestral source.

steppe: a large flat area of lands with grass.

archipelago: a group of islands.

underscore: to show the importance of something or someone.

artifact: an object that has been made by a person.

factor in: to consider something additional.

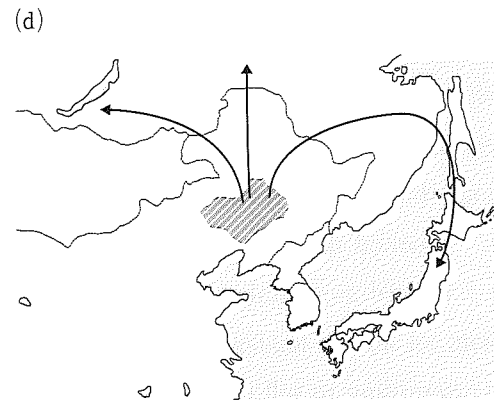
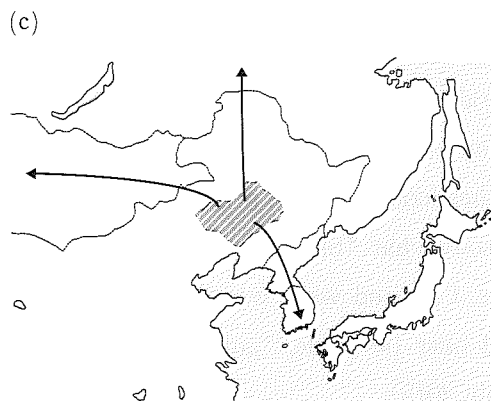
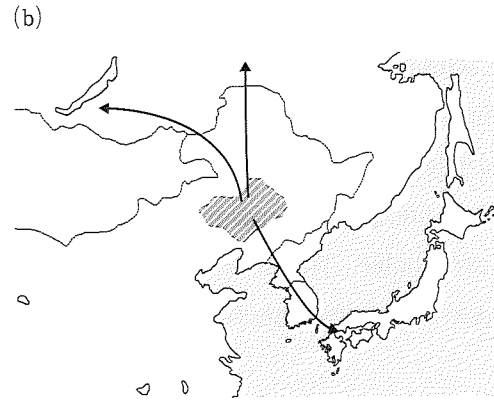
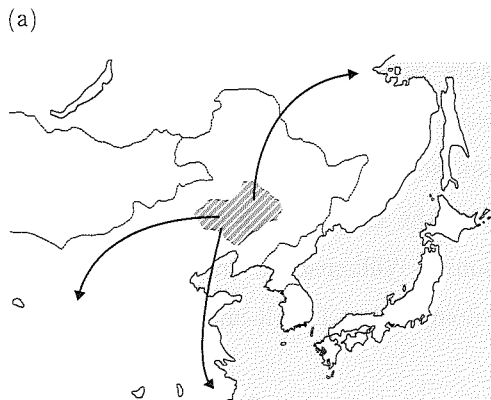
progenitor: the direct ancestor of a person.

broomcorn millet: キビの一種.

foxtail millet: アワの一種.

pave the way: to make it possible for something to happen.

- (1) 下線部 (ア) について、どのような言語学的証拠が、本文で示された研究結果を導いたのか。その研究手法に言及しながら、本文に即して日本語で簡潔に説明しなさい。
- (2) 下線部 (イ) の語族は、どの地域にどのように広まったのか。以下の地図よりもっとも近いものを選び、記号で答えなさい。



- (3) 下線部 (ウ) を和訳しなさい。
- (4) 下線部 (エ) の具体的な内容を、本文に即して日本語で簡潔に説明しなさい。
- (5) トランスユーラシア語族とシナ・チベット語族について、下線部 (オ) が示す内容を、本文に即して日本語で簡潔に説明しなさい。

〔 II 〕 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。

Figuring out who we are in light of messages to “be ourselves” or be “true” to ourselves can be a struggle. Consider the example of Starr, the central character in Angie Thomas’ book, *The Hate U Give*. Starr lives in the mostly poor Black neighborhood of Garden Heights but attends an elite private school called Williamson *Prep. She sees herself as having a different self in each world, going so far as to give a separate name to her “school self.” Her school self, “Williamson Starr,” doesn’t use slang—if a rapper would say it, she doesn’t say it, even if her white friends do. Slang makes them cool. It makes her ‘hood.’ Williamson Starr holds her tongue when people *piss her off so nobody thinks she’s the ‘angry Black girl.’ Williamson Starr is approachable. Williamson Starr is *nonconfrontational. Williamson Starr doesn’t give anyone a reason to call her *ghetto. I can’t stand myself for doing it but I do it anyway” (Thomas 2017, 71).

Consider also the words of Kiara, the author of a post on beauty on *Femsplain* and *Teen Vogue*. “After years of consuming anxiety-inducing ads that alert me of my ‘flaws’ (my blackness, my shortness, etc.), I’ve begun to realize the alarming ways in which I, at times, view myself. I admit that, during one of my most vulnerable moments, I’ve asked Google, ‘What is inherently ugly about being short?’ I went deeper and deeper into this wide web, *stumbling on blogs that offered various answers including: ‘Clothes look best on a proportioned, lengthened body.’ I looked down at my short *torso and my somewhat *bloated stomach and *despised what I viewed as mistakes.... While I *lurked online, I noticed what was being *touted as the solution: an ad for leg-lengthening surgery. I could hear the male, *authoritative advertising voice attempting to sell the surgery to me” (Femsplain 2015).

As Starr’s and Kiara’s stories help us see, we can act in ways with which we do not identify. The mere fact that a person acts does not yet tell us whether the “real” her is doing the acting. Starr performs the role of Williamson Starr but says she hates herself for it. Kiara says that the call to hate her body comes from a “male, authoritative advertising voice.” Yet their stories also suggest reasons not to dismiss the idea that behaviors and motivations with which we disidentify belong to us in some sense. Starr clearly becomes Williamson Starr because it is consistent with goals that are important to her. Even if Starr hates herself when she becomes Williamson Starr, her choice to represent herself as that person is strategic. She knows what she is doing, and she is doing it with a specific goal in mind: to be perceived in a certain way by her white, upper-class peers. She even writes in other parts of the book that her code-switching is so routine and integrated into her everyday behavior as to have become effortless, to seem as

though it happens *to* her without her participation. For example, she writes, “My voice is changing already. It always happens when I’m around other people” (Thomas 2017, 95). Though Kiara does not seem to explicitly have the goal of *complying with oppressive beauty standards, the male advertising voice seems deeply embedded within her to the extent that she looks at her own stomach as a “mistake” and believes at times that she is going to get an objective answer about what is “inherently ugly” about being short from asking Google.

Philosophers use the concept of personal *autonomy to describe the ability to lead lives that are our own, lives that reflect reasons and values that genuinely belong to us. It might seem that there is a straightforward answer to questions about autonomy, namely, that our *autonomous views are the ones that have not been socially shaped.

Most philosophers reject the claim that autonomous values and motivations are characterized by not being socially shaped because of its strange *implications. One disturbing implication is that *none* of our existing beliefs and desires are autonomous (see Meyers 1991; Christman 2004). All of us are subject to processes of social shaping that begin before birth. We are fed certain foods and not others, spoken to in certain languages, raised in certain religions and cultures, and we learn by mirroring caregivers who have their own values and habits. It might seem as though this is only true until a certain age, perhaps our teens, and then we become able to form desires that are not socially shaped. The teenage “self” that thinks it is choosing has already been shaped by forces beyond its control,^(x) however. It is no surprise that if a person grew up eating spicy food, she is more likely to choose to eat spicy food when she is older, or that if she grew up in a household of musicians, she is more likely to want to become a musician. It might seem as though if we just dig deep enough we will find a “true” self that has not been socially influenced, but the further into our histories we dig, the more layers of socialization^(*) we find. We always make decisions based on some preexisting set of wants and beliefs, and if we look far enough back in our own histories, we will find beliefs and wants that we did not *instill on our own.

(出典 Serene J. Khader, “Autonomy: On Being True to Ourselves,” *Philosophy for Girls: An Invitation to the Life of Thought*, edited by M. M. Shew & K. K. Garchar, Oxford University Press, 2020, 一部改変)

Notes

Prep. < preparatory school: private high school.
piss off: to annoy someone.
nonconfrontational: behaving in a way that is unlikely to upset anyone or cause an argument.
ghetto: a very poor area of a city.
stumble on: to discover something by chance.
torso: the main part of the body, not including the head, arms, or legs.
bloated: rounded and larger than normal.
despise: to feel a strong dislike.
lurk online: to spend time on a social media website and read what other people have posted.
tout: to advertise.
authoritative: having the power of special knowledge.
comply with: to obey a rule or an order.
autonomy: the ability to make your own decisions without being controlled by anyone else.
autonomous(*adj.*) < autonomy (*n.*)
implication: a suggestion of something that is made without saying it directly.
instill: to put a feeling, idea, or principle gradually into someone's mind.

- (1) 下線部 (ア) について, Starr が実践していることを2つ, 本文に即して日本語で簡潔に述べなさい。
- (2) 下線部 (イ) の広告はどのような視点から作られたものか。それを表す語句を本文中から英語で抜き出さなさい。
- (3) 下線部 (ウ) を和訳しなさい。
- (4) 下線部 (エ) について, 自分の体験などの事例を英語で具体的に書きなさい(30 ~ 50 words)。
- (5) 下線部 (オ) の具体例を1つ, 本文に即して日本語で簡潔に述べなさい。

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。

Dr. Montague joined the many scientists who have long studied the remarkable abilities of *cuttlefish, from their camouflage to their speed when hunting. In recent years, a string of high-profile papers has reported that they are capable of surprising *cognitive feats, including rejecting easy meals while holding out for better food in the future.

Cuttlefish are more closely related to insects than to humans.

They have no true bones in their bodies, just an internal shell filled with air that helps them float. Their blood gets that blue-green *tint from hemocyanin, which they use instead of hemoglobin to carry oxygen. The smallest species are scarcely more than an inch long and the largest may reach more than two feet. Most species tend to live alone, and they can be found in the waters of every continent, although there are relatively few species in the Americas.

And the creatures, which have some of the largest brains of any *invertebrate, start learning while still in the egg, Ludovic Dickel and other researchers in France have found. Cuttlefish can see through the walls of their translucent homes into neighboring tanks of prey animals; after they hatch, they much prefer the prey that they saw while unborn.

Soon after they emerge, they begin to hunt, and to hide in plain sight.

A cuttlefish's most marvelous treasure may be its skin—Dr. Hanlon has called it electric.

It is full of muscles and nerves wrapped around millions of tiny *sacs of red, yellow and brown *pigment. When the muscles *contract, the sacs are pulled out into flat discs of color like pixels, with each pattern of contraction yielding a different effect. Below the pigments in the skin glisten blue and green reflectors and structures that scatter white light.

As a cuttlefish glides over a landscape of rocks and seaweed, neurons fire and muscles *twitch and it fades into the colors of its background.

A cuttlefish can drift unseen past a fish, then *engulf it in an explosive flash of limbs. If a predator, like a dolphin or a shark, is nearby, it can become one with the weeds.

Their intimate control of their body's appearance is also involved in *mating. Most cuttlefish live solitary lives, gathering in threes and fours to court and mate. But inhabitants of the small Australian steel town of Whyalla tipped scientists off in the late 1990s that giant Australian cuttlefish were swarming on the coast to mate, with the number once nearing 200,000. In this aggregation, in which there are more males than females, big males defend their chosen mates and fight would-be challengers. Smaller males *disguise themselves, however, *retracting one arm and holding three others in a posture that usually only females take. They *nip past the gatekeepers to *deposit their own sperm, with a fair rate of success.

And then, just like that, they die. Cuttlefish live only a single year, maybe two. For all their sophistication, they have a very short existence.

Nicola Clayton didn't start out studying cuttlefish. A professor of comparative cognition at Cambridge, she focused on the remarkable behavior of the scrub jay, a small blue-black bird that stores food for later. In 1998, she and colleagues showed that the birds can remember how long it's been since they hid food items. They can plan for the future, hiding food in places where they have reason to believe they'll be hungry later.

Their behavior is more sophisticated than simply learning that food will appear if you push a button or recognize a pattern, something that many animals can do. Apart from apes and other corvids, like crows, few animals studied so far possess the full portfolio of mental abilities demonstrated by these birds.

But cuttlefish and other *cephalopods may be an intriguing test case. Dr. Clayton, Dr. Schnell and their colleagues have started to ask: Do cuttlefish have a sense of the future and the recent past? 彼らはこの先起こると思われることについて決定を下すことができるだろうか？

Octopuses have long amazed observers with their apparent canniness—in one YouTube clip with more than two million views, an octopus scoops up coconut shells and carts them off, perhaps to use them later as tools. Squids also have large brains and sophisticated behavior. But cuttlefish are easier to grow in the lab than squid and easier to work with than octopuses, which are often standoffish and may refuse to engage with an experimenter, Dr. Schnell said.

There is, of course, the Houdini factor, too.

“You get little escape artists with octopuses. You come in in the morning and it doesn't matter how tight you have closed an aquarium tank, you'll find them crawling out,” she said.

She added, “I've never had that happen with cuttlefish,” perhaps because their internal shells, which keep them buoyant, make them less able to squeeze through small spaces.

To see if cuttlefish can make decisions about the future based on their experience, in a pair of experiments published in 2020, the team gave cuttlefish *crabs each morning. At night, they gave *shrimp, a treat that some, but not all, cuttlefish greatly prefer. Cuttlefish that reliably got shrimp stopped eating crab, waiting for the better food, while those that got them only occasionally stuck with crabs. If shrimp were provided only once every 48 hours, as shrimp time drew near, the creatures would still refrain from eating crabs, saving room.

(出典 Veronique Greenwood, “Second billing, but quite a character.” *The New York Times*, July 14, 2021. 一部改変)

Notes

cuttlefish: コウイカ .

cognitive: related to the process of knowing, understanding, and learning something.

tint: a small amount of a particular color.

invertebrate: 無脊椎(むせきつい)動物 .

sac: a part inside a plant or animal that is shaped like a bag.

pigment: a natural substance that makes skin, hair, plants etc. a particular color.

contract: to become shorter or tighter in order to effect movement of part of the body.

twitch: to make a sudden quick movement.

engulf: to surround or cover something completely.

mating: sex between animals.

disguise: to change someone's appearance so that people cannot recognize them.

retract: to draw or pull back.

nip: to go quickly.

deposit: to put something down in a particular place.

cephalopod: 頭足類(タコ, イカなど).

crab: カニ .

shrimp: 小エビ .

- (1) 下線部 (ア) を具体的に述べた1文を, 本文中から英語で抜き出しなさい。
- (2) 下線部 (イ) を可能とする, コウイカの体内のしくみを, 本文に即して日本語で説明しなさい。
- (3) 下線部 (ウ) は何を指すか。本文に即して日本語で簡潔に説明しなさい。
- (4) 下線部 (エ) を英訳しなさい。
- (5) 下線部 (オ) について, その理由を, タコとコウイカの体の構造上の違いに言及し, 本文に即して日本語で簡潔に説明しなさい。
- (6) 下線部 (カ) を和訳しなさい。



