秋田大学

平成30年度個別学力検査問題(医学部医学科)

英 語

前期日程

注 意 事 項

- 1 試験開始の合図があるまで、この問題冊子の中を見てはいけません。
- 2 この問題冊子は、13ページあります。解答用紙は3枚あります。問題は3題 あります。3題すべてに解答しなさい。

試験中に問題冊子の印刷不鮮明、ページの乱丁・落丁および解答用紙の汚れ等 に気付いた場合は、手を挙げて監督者に知らせなさい。

- 3 監督者の指示に従って、解答用紙に受験番号を記入しなさい。
- 4 解答は、解答用紙の該当欄に記入しなさい。
- 5 配付された解答用紙は持ち帰ってはいけません。
- 6 試験終了後、問題冊子は持ち帰りなさい。

Ⅰ 以下の英文を読んで、設問に答えなさい。

How We Make Sense of Time

- [1] The Yupno*1 man we were interviewing, Danda, paused to consider his answer. A group of us sat on a hillside in the Yupno Valley, a remote nook*2 high in the mountains of Papua New Guinea. Only days earlier we had arrived on a single-engine plane. After a steep hike from the grass airstrip*3, we found ourselves in the village of Gua, one of about 20 Yupno villages dotting the rugged terrain*4. We came all the way here because we are interested in *time* in how Yupno people understand concepts such as past, present and future. Are these ideas universal, or are they products of our language, our culture and our environment?
- [2] As we interviewed Danda and others in the village, we listened to what they said about time, but we paid even closer attention to what they did with their hands as they spoke. Gestures can be revealing. Ask English speakers about the difference between yesterday and tomorrow, and they might thrust a hand over the shoulder when referring to the past and then forward when referring to the future. Such unreflective*5 movements reveal a fundamental way of thinking in which the past is at our backs, something that we "leave behind," and the future is in front of us, something to "look forward" to. Would a Yupno speaker do the same?
- [3] Danda was making just the kinds of gestures we were hoping for. As he explained the Yupno word for "yesterday," his hand swept backward; as he mentioned "tomorrow," it leaped forward. We all sat looking up a steep slope toward a jagged ridge*6, but as the light faded, we changed the camera angle, spinning around so that we and Danda faced in the opposite direction, downhill.

With our backs now to the ridge, we looked over the Yupno River meandering*7 toward the Bismarck Sea. "Let's go over that one more time," we suggested.

- [4] Danda obliged, again using his hands to enliven*8 his explanation. But as we expected, his gestures had changed. As he referred to "yesterday," he now gestured, not backward, but forward. As he explained "tomorrow," he gestured back over his shoulder, up toward the ridge. Inconsistent as these movements may seem, Danda was not confused. His gestures expressed the Yupno way of understanding time, one in which the future is not something in front of you—it is uphill. By having interviewees change sitting positions, we were able to show that it does not matter whether the slope is in front of you, behind you, to your left or to your right. The Yupno conception of time is not anchored to the body, as the Western one is, but to the world and its contours*9. By investigating cases such as these, we and other researchers are starting to piece together an answer to a question that has puzzled thinkers for centuries: How are human beings able to make sense of time?
- [5] Humans, like creatures ranging from amoebas and bees to mockingbirds and elephants, come with built-in equipment for perceiving some aspects of time, such as the rhythms of night and day, the waxing and waning*10 of the moon, and the turning of the seasons. What separates humans from other animals is that we do not stop at merely sensing time's passage. We tackle time head-on—or at least we try. We dice it into units, even ones that go beyond what is perceivable*11, such as milliseconds, or that transcend*12 our life span, such as millennia. We depict*13 time graphically, talk about it ceaselessly and even make gestural*14 models of it in the air as we talk. In short, humans everywhere create and rely on time concepts—ideas about the nature of time that allow us to make plans, follow recipes, share memories and discuss possible futures.

[6] But what are our time concepts made of? What is going on in the mind of a speaker of Yupno, or English for that matter, when answering our question about the difference between yesterday and tomorrow? Recent research in cognitive*15 science is uncovering a surprising answer. Across cultures, human time concepts depend, in large part, on metaphor*16—in particular, on what cognitive scientists call conceptual*17 metaphor, in which we think about something, in this case time, in terms of something else, in this case space. Thus, we build our understanding of duration, of time's passage and of sequences of events out of familiar spatial*18 ideas such as size, movement and location. The latest findings reveal that this basic "time is like space" metaphor appears to be universal around the world—yet it also takes strikingly different forms from one culture to the next.

出典: Kensy Cooperrider & Rafael Núñez, "How We Make Sense of Time."

Scientific American Mind. November 1, 2016. (一部改変)

Yupno*1 パプアニューギニア(Papua New Guinea)の地名

 $nook^{*2}$ 人里離れた所,へんぴな場所

airstrip*3 (仮設の)滑走路

rugged terrain*4 起伏の多い地形

unreflective*5 じっくり考えたわけではない

jagged ridge*6 ぎざぎざにとがった山の背

meandering*⁷ 曲がりくねって流れる

enliven*8 生き生きと行なう

contours*9 輪郭,外形

waxing and waning*10 満ち欠け

perceivable*11 認知できる

transcend*12 超える

depict*13 描く

gestural*14 身振りの

cognitive*15 認知の

metaphor*16 隠喩(ある物事を直接他のものになぞらえて表現する方法)

conceptual*17 概念的な

spatial*18 空間的な

- 問 1 第1段落を読み、筆者がユプノ谷(the Yupno Valley)を訪れてダンダ (Danda)に会った理由としでもっとも適切なものを以下の選択肢から選び、その記号を書きなさい。
 - (a) To do research about geographical features of Yupno villages.
 - (b) To find out how the sunlight is useful in Yupno villages.
 - (C) To find out how the Yupno understand time.
 - (d) To do research about the modern development of the Yupno way of life.
- 問 2 第 2 段落を読み、ユプノの人々が時間(time)について話す時に、筆者たちが話の内容よりも彼らの手の動きにより注意を払った理由としてもっとも適切なものを以下の選択肢から選び、その記号を書きなさい。
 - (a) To understand how time is perceived by observing what they do unconsciously.
 - (b) To understand whether or not their gestures about time are different from words.
 - (C) To understand how time is perceived by imitating their hand movements.
 - (d) To understand whether or not English speakers are more active.
- 問 3 第2段落の下線部 "do the same" は何を意味しているか。もっとも適切なも (1) のを以下の選択肢から選び,その記号を書きなさい。
 - (a) to say about the time
 - (b) to pay attention to hand movements
 - (C) to move a hand backward when referring to the future and forward when referring to the past
 - (d) to move a hand backward when referring to the past and forward when referring to the future

問			t落の下線部 "t <u>t</u> (2) で で で で で で で で で で で で で で で で で で で				,もっとも適切	」なも	のを以下
	(a)	cha	nging sitting po	sitio	ns				
	(b)	exp	laining about tii	me w	ith gesture	8	>		
	(c)	exp	laining about lig	ght a	nd camera	angle			
	(d)	look	ting over the Yu	ıpno	River				
問			没落の内容をまる						こ入るもっ
	ځ	こも通	適切な語句を以了	下の選	選択肢から選	び, その	記号を書きなる	きか。	
	he yes pat	face terda tern.	o man produces es uphill, yeste ay is (2) l These gesture	erday nim. es ex	is (1 His gestur) him. es for "to Yupno wa	When he formorrow" refle	aces	downhill e opposit
	as	(3	and the fu	ture	as.(4)		:		
	1	(a)	behind			(b)	in front of		
		(C)	to the left of			(d)	to the right of		
	2	(a)	behind			(b)	in front of		
		(C)	to the left of			(d)	to the right of		
	3	(a)	backward	(b)	downhill	(C)	forward	(d)	uphill
	4	(a)	backward	(b)	downhill	(c)	forward	. (d)	uphill

- 問 6 第 5 段落によると、時間に関して人間だけに見られる行動は何か。以下の選択肢から適切なものを 2 つ選び、その記号を書きなさい。
 - (a) Being aware of night and day.
 - (b) Dividing the flow of time.
 - (C) Communicating time visually.
 - (d) Feeling the passing of time.
 - (e) Feeling the seasonal change.
- 問7 第6段落で筆者が結論づけた時間概念と文化の関係のまとめとして、もっと も適切なものを以下の選択肢から選び、その記号を書きなさい。
 - (a) Time concepts are universal and expressed in the same ways across cultures with the same spatial metaphors.
 - (b) Time, unlike space, is the only concept in this world that is the same for all human beings, irrespective of cultures.
 - (C) Spatial metaphors are the same across cultures, whether time is perceived as fast or slow in each culture.
 - (d) The metaphor of space is used universally to describe time, but specific ways of understanding time are not the same across cultures.

Ⅱ 以下の英文を読んで、設問に答えなさい。

Why Is Yawning Contagious*1?

- [1] If seeing someone mid-yawn makes you involuntarily stretch out your mouth, you're not alone. (2), you're among the 60-70 % of people who find that seeing a person yawn in real life or a photo—or even reading about it—compels them to do the same thing.
- [2] While a whole assortment of creatures, including hippos, pigs, snakes, chimpanzees and sharks, have been known to yawn, fewer species have been proven to "catch" yawns off one another in the way that humans (and even dogs) are prone*2 to do.
- [3] For a long time, scientists believed that all yawning was a precursor*3 to sleep, but recent research has suggested that the act bears no relation to dipping*4 energy levels. Instead, catching yawns on a regular basis seems to indicate more about your (3) than your sleepiness. Here are some of the leading theories to answer the age-old question: Why is yawning so contagious?

Yawning is a sign of [A]

[4] Catching yawns may be an unconscious sign that you're attuned*5 to other people's emotions, in the same way you might automatically smile or frown at someone when they do the same to you. Researchers from the University of Connecticut backed up this theory in a small 2010 study, where they found that most children did not begin so-called "contagious yawning" until they were around four years old—generally the age when empathy*6 skills begin to develop.

- [5] The study's authors also found that young people with autism*7, who may have trouble feeling empathy, were less likely to yawn contagiously than their peers*8 without autism; children who showed more severe autistic symptoms were much less likely to yawn contagiously than those with milder symptoms.
- [6] It's still a controversial*9 theory, and more research is needed. But a 2015 report found that people with certain psychopathic traits*10 may be less likely to catch a yawn from others. After taking a standard psychological personality test, 135 college students were shown 10-second video clips of different facial movements including yawning. The test showed that the less empathy a person had, the less likely he or she was to catch a yawn.
- [7] "What we found tells us there is a neurological*11 connection—some overlap—between psychopathy and contagious yawning," said Brian Rundle, a psychology and neuroscience doctoral student at Baylor University and the study's lead researcher. "This is a good starting point to ask more questions."

Yawning is a sign of [B]

- [8] Another theory claims that contagious yawning is a primitive form of unconscious communication and bonding that helped our ancestors stay safe and avoid danger long ago, far before smoke signals and Skype*12.
- [9] A 2010 study demonstrated that the number of times small parrots yawn contagiously increases when the temperature increases. In the study, 16 birds were exposed to four 10-minute periods of changing temperatures, and their yawning was found to (6) correlate*13 with ambient*14 temperatures during the trial. This behavior, the researchers think, might serve as a warning sign to others of potential threats.

Yawning is a sign of [C]

Studies show that ([10]

).

In one study of 328 people who were shown a three-minute video of people yawning, 82% of people under 25 contagiously yawned, while just 60% of people ages 25 to 49 contagiously yawned. Only 41% of people over age 50 were contagious yawners.

More research is needed, but the study authors speculate that people may [11]generally become less susceptible*15 to contagious yawning as they age, possibly because they pay less attention to the behavior in others.

出典: Kate Samuelson, "Why Is Yawning Contagious?" Time. June 8, 2017. (一部改変)

contagious*1 人にうつりやすい, 伝染性の

prone*2 傾向があって

precursor*3 前兆

dipping*4 低下した

attuned*5 調子を合わせて、順応して empathy*6 共感、感情移入

autism*7 自閉症(対人関係への無関心やコミュニケーション障害等の特徴があ

り、これらの特徴が原因で社会生活が困難になっている状態のこと。)

peer*8 (年齢や立場が)同等の人, 仲間

controversial*⁹ 議論を引き起こす

psychopathic traits*10 精神疾患的特性

neurological*11 神経学的な,神経性の

Skype*12 インターネットによる通話が可能なソフトウェア

correlate*13 相互に関連する

ambient*14 周囲の

susceptible*15 影響を受けやすい

問 1	"Why Is Yawning Contagious?" に対する答えとして、文章中に3つの説が書かれています。それぞれの説の内容を表す適切な見出しになるように、空欄[A],[B],[C]に入る、もっとも適切な英単語を以下の語群からひとつずつ選んで書きなさい。								
	age connection empathy relaxation tiredness warning								
問 2	第1段落の下線部 involuntarily にもっとも意味が近い単語を以下の選択肢(1) から選び、その記号を書きなさい。								
	(a) advisedly (b) automatically (c) generally (d) potentially								
問 3	第1段落の空欄(2)に入る、もっとも適切な語句を以下の選択肢から選び、その記号を書きなさい。								
	(a) In fact (b) Therefore (c) Regardless (d) However								
問 4	第3段落の空欄(3)に入る、もっとも適切な語句を以下の選択肢から選び、その記号を書きなさい。								
	(a) action (b) energy (c) personality (d) satisfaction								

- 第4段落の a small 2010 study が報告している2つの研究結果を日本語で説 明しなさい。
- 間 6 第 6 段落 の a 2015 report が報告する研究において、用いられた方法と導き 出された結果について日本語で説明しなさい。
- 第9段落の空欄(6)に入る、もっとも適切な語句を以下の選択肢から選 問 7 び、その記号を書きなさい。

- (a) likely (b) positively (c) unlikely (d) negatively
- 問8 第10段落の空欄(7)に入る、もっとも適切なものを以下の選択肢から 選び、その記号を書きなさい。
 - (a) you are likely to catch yawns off your co-workers regardless of your age
 - (b) as you become older, you are more likely to catch yawns off your co-workers
 - (C) catching yawns off your co-worker interests both the young and the old
 - (d) the younger you are, the more likely you are to catch yawns off your co-workers

- 問 9 この文章の内容に合っているものを以下の選択肢からひとつ選び、その記号 を書きなさい。
 - (a) Yawning is observed to be contagious in most creatures.
 - (b) Recent studies have scientifically showed that yawning is a sign of tiredness.
 - (C) The contagiousness of yawning is suggested to be associated with threats, according to the trial using parrots.
 - (d) The author of this text insists that further research is unnecessary for the theory that the contagiousness of yawning is strongly related to youth.

Many people are beginning to think that the legal age of majority* should be lowered to 18 years old. Are you for or against the idea? Answer in English in about 100 words. Start by stating your position and give at least two reasons for your opinion.

the legal age of majority* 成人年齡