

1〔60 点〕

設問 1.〔10 点〕

【解答例】

人を観察したり、人と交流したり、人を理解したりすること、特に自分とは文化的に異なる人を理解したりすることなど、言語や人に対する情熱があったから。（72 字）

設問 2.〔10 点〕

【解答例】

20 代でアメリカに移住した彼女の母は、アメリカの習慣に疑問を持つことが多かったが、彼女のアウトサイダーとしての視点のおかげで、Lara Braff は他の人が「普通」と考えていることに健全な懐疑心を抱くようになった。（100 字）

設問 3.〔5 点〕

【解答例】

anthropos は「人間」を、logy は「～の研究」を意味し、文字通りに言えば、人間を研究する学問となる。（45 字）

設問 4.〔5 点〕

【解答例】

毎年博士号を取得して修了する人の数が「文化人類学」分野が最も多いことから。（37 字）

設問 5.〔15 点〕

【解答例】

イヌイットのことをほとんど知らずに彼らの生活に入り込む調査を行い、1 年の大半を厳しい環境条件の中で小屋で共に暮らす家族の間では、怒りや強い否定的な感情は表現されないことが明らかになった。（93 字）

設問 6. [15 点]

【解答例】

ある人類学者は物質的な生活や物（道具、衣服、技術など）を重視し、別の人類学者は文化を無形の信念の体系として重視し、さらに別の人類学者は日常生活の実践や習慣を重視している。

(85 字)

2 [各 3 点×10 問=30 点]

- ① cares ② conducted ③ seen ④ reached ⑤ recognize
⑥ required ⑦ do ⑧ taken ⑨ suggest ⑩ play

3 [各 5 点×8 問=40 点]

1. a 2. a 3. c 4. c 5. b 6. b 7. b 8. a

【スクリプト】

Interviewer: We all know how to be more healthy. And yet we also seem to be remarkably good at NOT doing what we know is good for us. We know we shouldn't have another slice of cake, but we do. We keep meaning to get fit, but too often the sofa seems more appealing than going for a run.

My guest on The Life Scientific today has spent several decades working out why despite the best of intentions, so many of us fail to adopt healthier lifestyles.

Back in the 90s, it seemed reasonable to assume that telling people they were at high risk of dying if they didn't change their behaviour would do the job. Now we know better. Thanks in large part to research pioneered by Theresa Marteau, we now have a much more sophisticated understanding of what drives our behaviour. Spoiler alert - smaller wine glasses really do make you drink less! And it's the thinking that we're not aware we're doing that exerts the strongest influence on our behaviour. This insight led to a dramatic change in emphasis in public health policies. Moving the focus away from trying to get individuals to consciously change their minds towards designing interventions that will nudge us all into making better decisions. Professor Dame Theresa Marteau, director of the Behaviour and Health Research Unit at Cambridge University and member of the government scientific advisory group SAGE, welcome to The Life Scientific.

Theresa Marteau: Thank you.

I: Now, Theresa, we all know what we should do, alright? You know, eating healthier foods, exercising more, drinking less alcohol, quitting smoking, and so on. How much of a difference would it make if we all adopted a healthier lifestyle?

T: Well, it's been estimated that up to forty percent of cancers and around seventy-five percent of diabetes, type-two diabetes, and cardiovascular disease would be

prevented if none of us smoked, we ate more healthily, didn't overconsume alcohol, and were physically active. So that's pretty big.

I: It is pretty big and I'm guessing it's not just that we would all live longer but our quality of life in old age would improve too.

T: That's absolutely right. So this is about saving lives, but also increasing the number of years that we live healthily.

I: The advice is so simple, isn't it? Eat less, exercise more. We hear it all the time. But if it was that simple to achieve, we would all have adopted healthy lifestyles years ago, right?

T: Changing behaviour is difficult. That's one thing we're very clear about. I think over the last twenty, thirty years we've made some progress. Some important progress in terms of rates of smoking. These have come down considerably, although the rates have come down faster amongst the most affluent groups with actually some pretty shocking differences particularly in smoking in pregnancy. Recently they're showing that in Blackpool for instance, 25 out of 100 women who are pregnant smoke throughout their pregnancy compared with just 2 out of 100 in Westminster. So that's a very important gap that needs to be addressed. If we look at alcohol the amount that's being drunk across the population, that's come down over the last 15 years but we still got around 30 percent of men and 25 percent of women who are drinking at a level that can harm their health with the impact of harmful drinking greatest in those who are in the lowest income groups. And finally, we've made really very little progress in reducing rates of obesity and we've got about sixty-three percent of the population in the UK who are overweight or obese. And, again, looking at how that varies with deprivation. If we just take children aged eleven, around 35 percent are overweight or obese in England. But if we look in the most affluent areas it's 24 percent which is pretty big but in the least affluent areas that's 42 percent of 11 year old children are overweight or obese. And it's not for want of trying. So this is very difficult.

4 【各5点×8問=40点】

1. c 2. b 3. c 4. b 5. b 6. b 7. a 8. c

【スクリプト】

Interviewer: Adam Levy

Hello there. How old are you? How tall are you? How many siblings do you have, and how much money do you have in your wallet right now? Whatever your answers, they reveal a fundamental way in which we see the world - through numbers. But how did our ancient ancestors start to think in numbers, and how can researchers even begin to unearth the history of such an intangible idea? Well, in this week's Nature, reporter Colin Barras has written a feature all about the efforts to uncover the human history of numbers.

Interviewee: Colin Barras

It's something that seems so familiar and yet when you begin to look into the origins of something like numbers it sort of quickly becomes a little unfamiliar when you realise how strange it is that, that we do this.

Interviewer: Adam Levy

So, what is it about numbers that is strange and unique to us humans? After all, other species can roughly assess quantities. But humans have formalised numbers into concrete ideas and symbols far beyond what any wild animal does. We can...

Interviewee: Colin Barras

Understand quantity using these abstract ideas such as twoness or symbols such as the number '2' written on a piece of paper or words like the number 'two' spoken out loud.

Interviewer: Adam Levy

To answer this question of how we built up our understanding of numbers, researchers are using evidence from across the globe and spanning disciplines of science. Through such work, scientists hope they can begin to dig up the origins of humans' relationship with numbers. Archaeologist Francesco d'Errico has found instances of bones marked by humans, hinting at the origins of counting, one of these dates back some 40,000 years, uncovered in a cave in South Africa as Francesco describes.

Interviewee: Francesco d'Errico

A fibular of a baboon with 29 notches deeply cut into it, which showed that they have not just decoration, so the best interpretation for that is that something was recording numerical quantities.

Interviewer: Adam Levy

One theory is that humans first created notches on bones for other purposes, maybe through butchering meat or through decoration. This allowed them to make the mental leap that these symbols could be used for counting. But interpreting such evidence, let alone creating a complete theory from it, is incredibly challenging. Here's Colin again.

Interviewee: Colin Barras

It's fascinating but very, very difficult to understand what an individual who was living 50,000-60,000 years ago was thinking, what they had in mind when they were doing particular activities. All we have is artefacts that they leave behind and then we have to try to interpret what those artefacts might mean.

Interviewer: Adam Levy

For cognitive archaeologist Karenleigh Overmann, the artefacts that researchers uncover can only tell a part of the story. She argues that the first steps humans took could have been much the same as the first steps we all take today as little kids - representing numbers with fingers on the hand.

Interviewee: Karenleigh Overmann

Sooner or later, you need to use your hand for something other than representing quantity, so you might go to some kind of device that does what the hand does but can do it for longer and a typical device that you might use would be a tally or maybe

a group of stones.

Interviewer: Adam Levy

Of course, a group of stones, let alone finger counting, can't be preserved easily in the archaeological record, so researchers are using evidence from fields as wide-ranging as psychology, anthropology, archaeology and evolutionary biology to shed light on the matter.

Interviewee: Karenleigh Overmann

You have to look at a wide variety of different sources of evidence and then infer from them how it might have worked in the past.

Interviewer: Adam Levy

For Karenleigh, contemporary cultures have a lot to teach us about the evolution of numbers in our ancestors. Researchers can, for example, look at certain hunter-gatherer societies today who only have words for the first few numbers - 'one', 'two', 'three', perhaps before jumping to 'many'. The varying use of numbers across different groups suggests that their use is strongly connected to possessions and materials.

Interviewee: Karenleigh Overmann

So, we do tend to count the things that are important to us. If you're worried about survival then you might be counting how much food you need to get you through the long, cold winter into the spring when the food comes back.

5 (80点)

設問 1. 要約 (200 語) (40 点)

【解答例】

Climate change is a difficult issue for many people to imagine so we must think about how we talk to people about it. There are three important points to communicating information about this issue. The first is that clear and vivid language must be used. Instead of saying scientific terms like "climate change" use simple terms like "extreme weather." To make the issue easily imaginable, use visual phrases like "pollution blanket." The second point is that the issue must seem relevant and personal to the listeners. Talking about local flooding was more effective at getting people's attention than talking about "zero emissions." And sharing the scientists' personal stories about studying the climate for their children's futures was more effective at getting parents to be concerned about climate change than looking at graphs of global temperatures. The final point is to have the message delivered by someone who is just like the listeners. If people listen to someone with a similar background, the message's effectiveness increases greatly. In Florida, when a famous conservative man expressed concern about climate change on the internet, other young conservative men also became concerned. This showed the importance of who delivers the message. Once we have these three points, we can take action. (206 words)

設問2. 意見文 (200 語) [40 点]

【解答例①】

I was effectively taught about environmental issues in one of my elementary school classes. The teacher always used clear and vivid language which we easily understood. For example, one time she wrote the words “reduce,” “reuse,” and “recycle” on the blackboard. Underneath the words, the teacher placed cute pictures illustrating each concept. This simple and visual exercise helped us understand the terms and also what we could do to help the environment. In another exercise, the teacher had us write a journal for a month about where we had seen garbage in our neighborhood. This activity made us aware of how environmental problems like garbage could affect us personally. Towards the end of the year, we gave group presentations about several different environmental issues. It was fun to present and to watch my friends’ presentations. Now I realize that, as the lecturer mentioned, having these messages delivered by classmates was much more effective than the teacher just telling us about them. My teacher did a very good job in educating us about the environment by keeping the terms simple and vivid, making the issue seem relevant and personal, and having us learn about the topic from people like ourselves. (199 words)

【解答例②】

In one of my high school classes, I had an experience where we were supposed to learn about the dangers of social media. However, the teacher did not present the material using the three keys mentioned in the lecture. First of all, he gave us a lot of difficult and boring material to read. The terms were impossible to understand, and I could not even imagine what the text was trying to say. There should have been a simple glossary for the technical terms and maybe even some illustrations for easier understanding. Also, the reading mentioned many abstract ideas such as ‘free speech’ and ‘privacy’ but did not relate it to daily life. This made it difficult to imagine why it was relevant to me. I think there should have been some real-life examples to show how this issue affects me, personally. Also, the teacher lectured us a lot about this issue. However, since he is older than us, he mentioned social media sites that young people don’t use or even know about. It would have been much better to hear about this issue from someone like us who knows what it’s like to be a high schooler using the internet. (201 words)

【スクリプト】

What is your take on climate change? Scientists would agree that it will make it very hard for us to live on our planet safely. However, many people remain unconcerned about this pressing issue.

My job is to educate people about climate change. And I experiment with the images and the terms we use to talk about climate change, and test them on millions of people. Let me tell you what I’m learning. For so many people, climate change seems too big to imagine.

The way to fix this is to think about how we talk to people about the issue. And this includes three important keys.

The first key is clear, vivid language. People get confused and bored by scientific words like “net zero” and “emissions.” What we need is easy, visual language that everyone can understand.

Here’s an example of clear, plain language. Instead of saying “climate change” talk

about “extreme weather.” “Climate” may not be clear to some people, but everyone knows what “the weather” is.

And what about vivid language? Pollution stays in the air for thousands of years, creating a thick blanket that traps heat in the atmosphere. The term “pollution blanket” is one of the most effective phrases we’ve tested at getting people to understand the issue. “Pollution blanket” is visual and vivid. When people hear this term, they can imagine it and they become significantly more engaged.

So that’s the first key: clear, vivid language for understanding.

The second key is to make climate change feel relevant – like something that matters to you personally.

In one experiment, we presented two messages to a group of people. One was “Demand zero emissions to stop climate change.” And the other was, “Stop my flooding.” The latter message was over four times more effective in getting their attention. Local flooding was so much more relevant and personal than ‘zero emissions.’

Here’s another example. We work with a team of remarkable women climate scientists. We asked them about why they study the climate. And they told us about their children, about wanting to keep the world safe for their children. And when we shared their personal stories with other parents, those parents started to care far more deeply about climate change than they did from just looking at graphs of global temperatures. So, the second point is to make the issue relevant and personal.

Finally, the third key is that people need to hear the message from someone just like them. When the message is delivered from someone with a similar background, we see double-digit increases in message effectiveness.

Listen to this example… Northern Florida is a conservative area and many people there see climate change as just a liberal, environmentalist issue. However, when a well-known local conservative man got on the internet and expressed concern about how climate change was affecting his life, climate concern among young conservative men increased significantly throughout the entire state. So to bring everyone into an issue, you need someone like them to deliver the message.

Once we have these three keys, we will be ready to take action.