

小 論 文

注 意

1. 問題は全部で5ページである。
2. 解答用紙に氏名・受験番号を忘れずに記入すること。
3. 解答はすべて解答用紙に記入すること。
4. 問題冊子の余白等は適宜利用してよいが、どのページも切り離してはいけない。
5. 解答用紙は必ず提出のこと。この問題冊子は提出する必要はない。

I (1) 以下の文章を読み、英語ないし日本語で内容を簡潔に要約してください。

Read the following passage and briefly summarize the main points in either English or Japanese within the box provided on the Answer Sheet 小論文解答用紙(その1).

Climate is usually understood as the weather conditions prevailing in an area over a long period. It is a long-term pattern of variations among meteorological variables, including average temperature and variability across time in rainfall. Grasping climate change and its socioeconomic impacts requires a shift from automatic and associative to deliberative^(*1) and analytic thinking. The paradigmatic time period for identifying variations in climate — a 30-year window — is much more easily examined with long-term data sets and computer modeling techniques than with personal memories and conversations. Because analytic thinking is hard and attention is costly, people tend to use mental shortcuts to evaluate the evidence on climate change and its risks.

Typically, how people think about climate change is subject to the *availability heuristic*. The term refers to the human tendency to judge an event by the ease with which examples of the event can be retrieved from memory or constructed anew. A number of studies present strong evidence that a recent pattern of warm weather affects beliefs in climate change. For each 3.1 degrees Fahrenheit^(*2) increase in local temperatures above normal in the week before being surveyed, Americans become one percentage point more likely to agree that there is “solid evidence” that the earth is getting warmer — an effect size comparable to that of age and education but less than the influence of political party identification and ideology on assessments of scientific evidence. People typically do not systematically update their views over months and years but rather express views based on what they have experienced recently. Eventually, memories of personal experiences could

become a reliable indicator that the climate has changed, but this adjustment may be slow, given the inertia of the climate system and the nature of people's beliefs. Assuming that adjusting a mental model of climate requires three consecutive years in which the maximum temperature is a full standard deviation^(*3) or more above the historical high, Szafran, Williams, and Roth (2013) calculate, using a simulation based on U.S. weather station data from 1946 to 2005, that it will take the majority of people up to 86 years to adjust their mental models—too late for policies aiming to forestall climate disruption.

The way people respond to scientific communication about climate change seems to depend on whether, and how, messages trigger group identities and use charged language. For instance, the use of the word “tax” leads more individuals to focus on cheap options with lower environmental benefits, but the term “offset” does not have that effect. Moreover, when people choose between otherwise identical products or services, whether a surcharge for emitted carbon dioxide is framed as a tax or as an offset changes preferences for some political groups but not for others.

This means that even more information, however beautifully presented, might fail to move climate change opinion in a politicized environment. Indeed—in a related fashion but on another topic—a recent survey experiment found that presenting information, scientifically ratified data, images, and personal narratives all failed to convince people that the measles^(*4), mumps^(*5), and rubella^(*6) vaccine is safe. Parents who were already anxious about vaccine safety became less likely to have their children vaccinated after receiving any of those four modes of intervention. Similarly, a recent study observed that in the United States, politically conservative individuals were less likely to purchase a more expensive energy-efficient lightbulb labeled as environmentally friendly than to buy the identical product when it was

unlabeled. In general, scientific communication needs to be mindful of a potential *boomerang effect*, in which arguments trigger antagonistic^(*7) responses by threatening the attachment of individuals to their social groups or lead to unexpected and worse outcomes by highlighting low levels of support for what people believed to be a common social behavior.

International negotiations on climate are hampered by well-known problems related to collective action. Every country might want a global agreement to reduce carbon emissions, but what it might desire even more is for every other country to comply with the agreement and make the requisite economic sacrifices, while it does not. Recognizing this, some countries may decide to focus just on adapting to climate change, rather than also taking steps to mitigate it; resources spent on adaptation will benefit the country, whereas resources spent on mitigation may provide little gain if other countries do not live up to their end of the bargain. A second barrier to an international agreement is that the costs and benefits of reducing carbon emissions are not distributed equally. Poor countries and communities are generally more vulnerable to the effects of climate disruption and also bear significant costs during a transition to a low-carbon economy. Finally, just as countries cannot easily coordinate with one another, different political generations cannot coordinate effectively. Even if people made sacrifices today, future political leaders might reverse course.

In addition, nations need to converge on a working agreement, or at least an overlapping consensus, regarding fairness. Principles of fairness are the subject of intense competition and controversy among nations and social groups. There are many ways to distribute the burdens of mitigating and adapting to climate change; and there are several principles of distributive justice underlying those distributions, from the idea that the people and countries with the most emissions should contribute the most to abating^(*8)

greenhouse gases (“polluter pays”), to strict egalitarianism^(*9) of emissions rights on a per capita basis, to contributions linked to income levels, to equal percentage reductions for each country. Thus finding a shared view of fairness that promotes climate action is a major obstacle.

Moreover, efforts to identify an international standard of fairness are complicated by the widespread human tendency to select principles of fairness that happen to coincide with one’s interests (*self-serving bias*). Drawing on a survey of participants in workshops sponsored by the Intergovernmental Panel on Climate Change (IPCC), Lange and others (2010) show that there is a strong correlation^(*10) between the principles of distributive justice that negotiators endorse and their national self-interests. Taking this a step further, Kriss and others (2011) show that Chinese and U.S. students can agree how burdens for environmental challenges should be distributed between two anonymous countries but stake out very different views as soon as the countries are named as China and the United States. In other words, people may be able to agree on a fairness principle, but their social allegiances and mental models affect their moral reasoning. What psychological and social factors underlie individuals’ allegiances to fellow nationals, most of whom they will never meet? This is an intriguing topic on which more research is needed.

[Adapted from “Chapter 9, climate change”, *World Development Report 2015*]

注

*1 deliberative : 熟考的な

*2 Fahrenheit : 華氏(温度の単位)

*3 standard deviation : 標準偏差

*4 measles : はしか

*5 mumps : おたふく風邪

*6 rubella : 風疹

- *7 antagonistic : 対立する, 敵対する
- *8 abate : ~の勢いを減らす, ~を弱める
- *9 egalitarianism : 平等主義
- *10 correlation : 相関関係

(2) 気候変動への取り組みを阻害している要因を一つ取り上げ, その解決に向けて何をすればよいと考えるかを, 英語ないし日本語で具体的に論じてください。

Choose one of the obstacles that is inhibiting action on climate change, and write down your idea on possible solutions to it with supporting details in either English or Japanese within the box provided on the Answer Sheet 小論文解答用紙(その2).