大阪医科大学

平成26年度入学試験問題(前期)

英 語

注 意

- 1. 合図があるまで表紙をあけないこと。
- 2. 受験票は机上に出しておくこと。

T 下線部を和訳せよ。

The miraculous piece of human intelligence that enables us to solve various problems is what we call common sense.

Common sense is so ordinary that we tend to notice it only when it's missing, but it is absolutely essential to functioning in everyday life. Common sense is how we know what to wear when we go to work in the morning, how to behave on the street or the subway, and how to maintain harmonious relationships with our friends and coworkers. It tells us when to obey the rules, when to quietly ignore them, and when to stand up and challenge the rules themselves. It is the essence of social intelligence, and is also deeply embedded in our legal system, in political philosophy, and in professional training.

For something we refer to so often, however, common sense is surprisingly hard to pin down. Roughly speaking, it is the loosely organized set of facts, observations, experiences, insights, and pieces of received wisdom that each of us accumulates over a lifetime, in the course of encountering, dealing with, and learning from, everyday situations. But it can also refer to more specialized knowledge, as with the everyday working knowledge of a professional, such as a doctor, a lawyer, or an engineer, that develops over years of training and experience.

We can identify two features of common sense that seem to differentiate it from other kinds of human knowledge, like science or mathematics. The first of these features is that, unlike formal systems of knowledge, which are fundamentally theoretical, common sense is overwhelmingly practical, meaning that it is more concerned with providing answers to questions than worrying about how it came by the answers. From the perspective of common sense, it is good enough to know that something is true, or that it is the way of things. One does not need to know why in order to benefit from the knowledge, and arguably one is better off not worrying about it too much. In contrast with theoretical knowledge, in other words, common sense does not reflect on the world, but instead attempts to deal with it simply "as it is."

The second feature is that while the power of formal systems resides in their ability to organize their specific findings into logical categories described by general principles, the power of common sense lies in its ability to deal with every concrete situation on its own terms. Whereas a formal system of knowledge would try to derive an appropriate behavior in various situations from a single, more general "law," common sense just "knows" what the appropriate thing to do is in any particular situation, without knowing how it knows it. It is largely for this reason, in fact, that commonsense knowledge has proven so hard to replicate in computers—because, in contrast with theoretical knowledge, it requires a relatively large number of rules to deal with even a small number of special cases. Let's say, for example, that you wanted to program a robot to navigate the subway. It seems like a relatively simple task. But as you would quickly discover, even a single component of this task such as the "rule" against asking for another person's subway seat turns out to depend on a complex variety of other rules—about seating arrangements on subways in particular, about polite behavior in public in general, and about life in crowded cities—that at first glance seem to have little to do with the rule in question. In order to program a robot to imitate even a limited range of human behavior, you would have to, in a sense, teach it everything about the world. As soon as it encountered a situation that was slightly different from those you had taught it to handle, it would have no idea how to behave.

People who lack common sense are a bit like the hapless robot in that they never seem to understand what it is that they should be paying attention to, and they never seem to understand what it is that they don't understand. And for exactly the same reason that programming robots is hard, it's surprisingly hard to explain to someone lacking in common sense what it is that they're doing wrong. You can take them back through various examples of when they said or did the wrong thing, and perhaps they'll be able to avoid making exactly those errors again. But as soon as anything is different, they're effectively back to square one*.

(出典: Duncan J. Watts, Everything is Obvious: How Common Sense Fails Us. Crown Business, 2012. 一部変更あり)

^{*}square one: the situation from which you started to do something

Ⅱ 下線部を和訳せよ。

No wonder babies sleep so much. They have a lot of hard work ahead of them. Infants come equipped with a set of basic abilities for learning. But that still leaves a lot of items on their to-do list. In the first year of life, babies must lay the foundations for all their adult abilities, from language to locomotion. Their brains are changing more quickly at this age than they ever will again. Many of those changes help babies learn about the specific environment into which they have been born.

People can live in an astounding variety of places, from the frozen tundra to the sweltering desert, and in a vast array of social systems as well. Growing up in London or Barcelona is a very different experience from growing up in a subsistence village* in the Amazon, but babies come into both of those situations with nearly all the same genes.

Unlike many animals, people are not hardwired to be a good fit to their environment at birth. Instead, babies arrive equipped with the skills required to adapt flexibly to a wide range of conditions, which has allowed people to survive all over the world. The benefits of that approach are enormous, and so are the costs: children need a lot of care for a long time before they become independent. This high-risk, high-reward reproductive strategy affects the shape of most people's lives for decades, first as children and then as parents.

Babies are driven to explore and test their ideas about the world—which is why they seem to be getting into things all the time—and they love making things happen. When a baby learns to push a bowl from her high chair to make a crashing mess, you can see the glee as she triumphantly proceeds to do it again and again. Being effective in the world is enormously rewarding for children and adults alike. Infants, though, sometimes get confused about how they caused something to happen, so you can see them trying to talk an object into behaving. This confusion between physical and psychological causality usually disappears by the first birthday.

Just as babies have been shaped by evolution to be very effective learners, adults have become equally effective teachers. It may look like a game of peekaboo**, but there's serious stuff going on here. Babies are extremely good at getting what they need from their adult carers—not only food and shelter, but also information and examples. As a mother coos to her baby that he's such a good boy, he is learning about language, relationships, and much more.

Because of innate abilities of the brain, even newborns are not passive recipients of adult instruction. Instead, babies actively seek out the information that is most useful to them at a particular stage of development, and their behaviour reliably elicits the kind of help that they need from adults. For instance, many people speak to babies in motherese—a high-pitched, sing-song, and slow version of regular language with elongated vowel*** sounds. Babies prefer to hear motherese and interact more intensely with people who speak this way, as most adults and older children do instinctively. It is probably not a coincidence that the properties of motherese, including clear pronunciation and pauses between words, are also very well suited for helping babies learn about language.

(出典: Sandra Aamodt and Sam Wang, Welcome to Your Child's Brain: How the Mind Grows from Conception to College. Bloomsbury, 2012. 一部変更あり)

Ⅲ 下線部を英訳せよ。

我々が日々行う選択のほとんどは、熟考のすえ下した決断の産物であるように思われるかもしれない。しかし、実はそれらは(1) 習慣なのである。習慣とは、我々がある時点で意識的に選択するが、その後は自動的に取り続けている一連の行動である。それ(2) ぞれの習慣はそれ自体ではほとんど意味を持たないように見えるが、長い目で見ると、何を食べるか、どのくらいの頻度で運動(3) するか、お金を貯めるか使うかといったことが、我々の健康や財政的安定や幸福に甚大な影響を与えるのだ。

^{*}a subsistence village: a village where people just have enough food or money to stay alive

^{**} peekaboo: a game you play to amuse young children, in which you hide your face and then show it again

^{***}vowel: sound such as the ones represented in writing by the letters 'a', 'e', 'i', 'o' and 'u', which you pronounce with your mouth open, allowing the air to flow through it