

2014（平成26）年度

大阪大学医学部医学科

学士編入学試験問題

【英 語】

問題冊子

（注 意）

- 1 問題冊子及び解答用紙は、試験開始の合図があるまで開いてはいけない。
- 2 受験番号は、解答冊子の表紙及び各解答用紙の受験番号欄に左詰めで、正確に記入すること。
- 3 問題冊子は、表紙を除き5枚ある。ただし1枚目、5枚目は白紙である。
- 4 問題冊子又は解答用紙の落丁、印刷の不鮮明等がある場合は、解答前に申し出ること。
- 5 解答は、解答用紙の指定されたところに記入すること。枠からはみ出してはいけない。
- 6 問題冊子の余白は、適宜下書きに使用してよい。
- 7 問題冊子は、持ち帰ること。

I 次の文章 (Part1, Part2, Part3) を読んで、問1～問4に答えなさい。

Part 1

Perception ordinarily refers to any process by which we gain (1)immediate awareness of what is happening outside ourselves. The key word here is “immediate.” We can only gain immediate information about that part of the world that directly (2)impinges on our senses. The world we perceive is the world that we see, hear, smell, taste, and touch. My perceptual world at the moment is a room about twenty feet by twenty feet, normally furnished, rather silent. Through an open window I can smell something faintly sweet and hear a distant rumbling. This is a pretty (3)restricted perceptual environment, and becomes even more so when I focus on the page of yellow paper on which I am writing these words. I could make it less restricted by getting up and walking outside. But as an adult I have other resources as well. My world is not only perceptual, I have memory and knowledge. I can remember that the smell in my room comes from the jasmine outside in the garden, and I “hear” the rumbling noises outside as the sounds of a passing car. I can, to some extent, live in the future by thinking about what I am going to do. I can use TV, newspapers, and books to transport myself to worlds I will never perceive directly.

The newborn baby does not have these resources. He has few memories and probably no thoughts of the future. He lives in a completely perceptual world. But perception is also less useful to the baby than to us because he cannot actively control it as we can. He can refuse to look at things, as we can, but he cannot go out and look for things. If the baby is hungry, naturally he cannot look for food in the refrigerator, because he cannot walk and also because he does not know that food is inside refrigerators. Lack of knowledge means that the baby cannot use his perceptual system in the way that adults can.

All our knowledge of the world comes through our senses, initially. It is by means of his sensory (4)apparatus that the baby comes to know what his mother looks like, what food of certain colors tastes like, and so on. This sensory information is stored and transformed into a system of knowledge that in turn can direct the use of the perceptual system. Some psychologists argue that knowledge actually changes the way we see things, but this idea is very difficult to evaluate. Does a refrigerator look different once we know that it probably contains food? A difficult question, perhaps impossible to answer. What we can say, however, is that the *meaning*, or significance, of the sight of the refrigerator changes once we know it is a cold compartment in which to store food. Without this knowledge, the sight of a refrigerator may signify nothing more than a shiny surface or a large rectangular object. In a sense,

then, the world of the very small child must be relatively meaningless. Before the perceptual world (5)takes on adult meaning, the baby has to learn a great deal about the world, a great deal about what can be done with what. Much of the knowledge that informs our perceptions is not available to the baby. I say "much," not "all," because there is evidence that some knowledge does not have to be learned. For example, the baby seems to come into the world already knowing an amazing amount about human beings.

Part 2

Not so long ago many scholars argued that the baby's perceptual world is completely (6)bare of meaning, even the kind of meaning involved in *seeing* that a stone is *hard*. Some scholars delighted in pointing out that "hardness" belongs to the sense of touch; only by touching can we know that a stone is hard. When we say that we see something is hard, the argument goes, we are really saying that we see something we have learned is hard because we have already touched it. If this were true, then very young babies would not know which things are hard and which are not. Many psychologists have written about the baby as if he lived in a visual world of (7)insubstantial pictures, lacking any meaning. His visual world has been characterized as totally separated from the world of touch, the world of hearing, the world of smell. The baby was supposed to be unable to (8)coordinate information from two or more senses, something that we adults take totally for granted. Worse still, the baby was supposed to lack any constancy in his perceptual world, which would mean that perception of the size, the color, the position, and even the existence of objects would fluctuate depending upon the sensory quality of the environment. Consider what it would mean if babies lacked the most elementary constancies, such as *visual position constancy*. When you look at an array of objects, each object is projected onto the retina of your eye in an orderly way, and from there to your brain, resulting in perception of those objects in that particular place. When you move your eye, every one of these objects is projected to a different part of the retina, and from there to a different part of the brain. Despite these changes, you see the objects as retaining a constant position. Our perceptual system adjusts for the eye movement to (9)yield position constancy. If the baby lacks position constancy, as many have argued, his world would indeed be a flickering, evanescent whirl, filled with shadows, swinging around in no (10)predictable way.

Part 3

It is important to note that arguments of this kind were advanced largely by philosophers sitting in their proverbial armchairs. Their “data” were not garnered from observing babies. Despite the lack of evidence, the very antiquity of these ideas has given them respectability, and supporting arguments have been offered by scientists of various persuasions. Evolutionary biologists have long sought a reason for the extended duration of human childhood. The young of most other species are ready to live independently long before human children are. Some have argued that a lengthy infancy is required because the human is born with a nonfunctional brain (and therefore a nonfunctional perceptual system) that must be trained to function through experience. During this training period, the immature organism requires care and nurturing; hence the need for a long childhood. This argument ignores the general rule that the more capable a species is in adulthood, the more capable is the newborn of that species. Unless the human species is a glaring exception, this rule would lead us to expect high capability in the human newborn. Of course, human infants do not look very capable, and neurologists have pointed out that the brain of the baby is different from the adult’s: the cells are smaller and the connections between them poorly insulated. But it would be strange to conclude from this that the brain of the baby does not work at all. In the first place, we simply do not know enough about the relationship between brain structure and function to draw any such conclusion. Second, it is obvious that even the brain of a newborn baby supports some truly remarkable perceptual abilities.

These old ideas about the child’s perceptions grow out of general philosophical and biological considerations. They are plausible and familiar, but they advance hypotheses about the capacities of the newborn child that are not based on direct examination of the newborn’s capacities. Our task, then, is to take a direct look at the perceptual world of the young child, a world that must certainly be different from ours, but nonetheless one we can learn a great deal about through carefully arranged observations.

問1. 問題文の文脈において、下線部 (1) ~ (10) について、同じ意味をもつ語を4つの選択肢から選びなさい。

(1) immediate

- | | | | |
|-----------|----------|------------|--------------|
| 1. direct | 2. quick | 3. precise | 4. temporary |
|-----------|----------|------------|--------------|

(2) impinge on

- | | | | |
|----------|-----------|--------------|----------|
| 1. apply | 2. defeat | 3. influence | 4. touch |
|----------|-----------|--------------|----------|

(3) restricted

- | | | | |
|------------|-----------------|------------|------------|
| 1. widened | 2. well-defined | 3. limited | 4. amazing |
|------------|-----------------|------------|------------|

(4) apparatus

- | | | | |
|-----------|-----------------|-----------------|----------------|
| 1. organs | 2. distribution | 3. proclamation | 4. destruction |
|-----------|-----------------|-----------------|----------------|

(5) takes on

- | | | | |
|----------|------------|------------|--------------|
| 1. wears | 2. assumes | 3. departs | 4. overcomes |
|----------|------------|------------|--------------|

(6) bare of

- | | | | |
|------------------|-------------|--------------|-------------------|
| 1. occupied with | 2. empty of | 3. deep into | 4. connected with |
|------------------|-------------|--------------|-------------------|

(7) insubstantial

- | | | | |
|------------|-------------|---------------|-----------------|
| 1. perfect | 2. dogmatic | 3. conceptual | 4. unsatisfying |
|------------|-------------|---------------|-----------------|

(8) coordinate

- | | | | |
|--------------|-----------|------------|-------------|
| 1. integrate | 2. derive | 3. disjoin | 4. mismatch |
|--------------|-----------|------------|-------------|

(9) yield

- | | | | |
|-----------|------------|-----------|------------|
| 1. ensure | 2. give up | 3. damage | 4. enhance |
|-----------|------------|-----------|------------|

(10) predictable

- | | | | |
|--------------|----------------|----------------|--------------|
| 1. desirable | 2. respectable | 3. foreseeable | 4. agreeable |
|--------------|----------------|----------------|--------------|

問2. Part 1 で述べられている、生まれたばかりの子供と大人の知覚の違いを100字以内の日本語で書きなさい。

問3. Part 2 で述べられている「通説」を150字以内の日本語でまとめなさい。

問4. Part 3 で述べられている「通説」の問題点と、今後求められる研究の方向性について、150字以内の日本語で説明しなさい。

II Discuss in English “effective communication between medical doctors and patients” within 150 words, providing examples.