

英 語

- 1 次の文章を読んで、後の設問に答えなさい。

There are many legends and stories about the invention of writing. Greek legend has it that Cadmus*, Prince of Phoenicia and founder of the city of Thebes, invented the alphabet and brought it with him to Greece. In one Chinese fable, the four-eyed dragon-god Cang Jie invented writing, but in another, writing first appeared to humans in the form of markings on a turtle shell. In other myths, the Babylonian god Nebo and the Egyptian god Thoth gave humans writing as well as speech. Rabbi* Akiba believed that the alphabet existed before humans were created; and according to Islamic teaching, the alphabet was created by Allah himself, who presented it to humans but not to the angels.

Although these are delightful stories, it is evident that before a single word was written, uncountable billions were spoken. The invention of writing comes relatively late in human history, and its development was gradual. It is highly unlikely that a particularly gifted ancestor awoke one morning and decided, "Today I'll invent a writing system."

The seeds out of (ア) writing developed were probably the early drawings made by ancient humans. Cave* drawings such as found in the Altamira cave in northern Spain, drawn by humans living over twenty thousand years ago, can be "read" today. They are literal portrayals of life at that time. We don't know why they were produced; they may be aesthetic expressions rather than pictorial communications. Later drawings, however, are clearly "picture writings," or pictograms*. Unlike modern writing systems, each picture or pictogram is a direct image of the object it represents.

There is a direct relationship between the form and meaning of the symbol. Comic strips* minus captions are pictographic — literal representations of the ideas to be communicated. This early form of "writing" did not have any direct relation to the language spoken, because the pictures represented objects in the world rather than the linguistic names given to these objects; they did not represent the sounds of spoken language.

Pictograms are used today in international road signs where the native language of the region might not be adequate. Such symbols can be understood by anyone because they do not depend on the words of any language. To understand the signs used by the National Park Service, for example, a visitor does not need to know English.

Once a pictogram was accepted as the representation of an object, its meaning was extended to attributes* of that object, (イ) concepts associated with it. Thus, a picture

◇M1 (051—2)

of the sun could represent “warmth,” “heat,” “light,” “daytime,” and so on. Pictograms thus began to represent ideas rather than objects. Such generalized, abstract pictograms are called ideograms* (“idea pictures” or “idea writing”).

The difference between pictograms and ideograms is not always clear. Ideograms tend to be a less direct representation, and one may have to learn what a particular ideogram means. Pictograms tend to be literal. For example, the “no parking” symbol consisting of a black circle with a slanting* red line through it is an ideogram: It represents the idea of no parking abstractly. A “no parking” symbol showing an automobile being towed* away is more literal, more like a pictogram.

Inevitably, pictograms and ideograms became stylized*, possibly because of the ambiguities that could result from “poor artists” or creative “abstractionists” of the time. The simplifying conventions that developed so distorted* the literal representations that it was no longer easy to interpret symbols without learning the system. The ideograms became linguistic symbols as they came to also stand for the sounds that represented the ideas — that is, for the words of the language. This stage represented a revolutionary step in the development of writing systems.

(注) Cadmus カドモス《ギリシア神話に登場する勇士；古代ギリシアの都市テーベを創建したと言われる》 rabbi ラビ《ユダヤ教の宗教的指導者》 cave 洞窟
pictogram 絵文字 comic strip 漫画 attribute 属性 ideogram 表意文字
slanting 斜めの tow レッカー車で移動する stylize 様式化する
distort ゆがめる

1. 空欄アに入れるのにふさわしいものを選択肢より1つ選び、記号で答えなさい。
A. them B. there C. where D. which E. those
2. 空欄イに入れるのにふさわしいものを選択肢より1つ選び、記号で答えなさい。
A. with B. or C. but D. of E. besides
3. 次のそれぞれの文について、本文の内容と一致する場合はT、一致しない場合にはFと答えなさい。
 - (1) Pictograms were originally direct representations of the objects that they described.
 - (2) Both the pictograms and ideograms became difficult to interpret as they were stylized.
 - (3) Pictograms were first used to represent the sounds of spoken language.
 - (4) It was revealed that a genius in ancient Greece invented the early forms of writing.
 - (5) International road signs are pictographic so that they can be interpreted intuitively by anyone.

◇M1(051—3)

- (6) Pictograms developed into ideograms as their meaning was extended to attributes of the objects that they described.
- (7) Ideograms came to represent the sounds of ideas in the process of their developing into linguistic symbols.
- (8) Later forms of cave drawings are just aesthetic expressions of the people at that time.

2 左端の単語と最も強く発音する音節の位置が同じ語をA～Eの中から1つ選んで、記号で答えなさい。

- | | | | |
|---------------------|-------------------|--------------------|-------------------|
| 1. con-fer-ence | A. po-ten-tial | B. op-po-site | C. ac-com-plish |
| | D. es-sen-tial | E. ma-chin-ery | |
| 2. in-di-vid-u-al | A. pros-per-i-ty | B. ha-bit-u-al | C. ther-mom-e-ter |
| | D. ar-ti-fi-cial | E. in-tel-li-gence | |
| 3. ex-ten-sion | A. mu-tu-al | B. cur-ren-cy | C. ob-sta-cle |
| | D. sym-pa-thy | E. dis-tinc-tive | |
| 4. ob-scure | A. con-gress | B. ne-glect | C. pri-mary |
| | D. ru-mor | E. un-ion | |
| 5. com-pre-hen-sion | A. in-ten-si-ty | B. am-big-u-ous | C. man-u-fac-ture |
| | D. in-her-i-tance | E. tem-per-a-ture | |

3 各英文の空所に補うものとして最も適切な語(句)をA～Eの中から1つ選んで、記号で答えなさい。

1. I will see you tomorrow () something unexpected happens.
 A. whether B. but C. unless
 D. nevertheless E. therefore
2. He is () person I would ask for advice.
 A. the own B. the last C. the most
 D. the latest E. the like
3. By and (), I enjoyed my trip to France.
 A. accident B. whole C. large
 D. far E. mistake
4. I can't even read German, () write it.
 A. even more B. much less C. even if
 D. instead of E. no matter

5 次の各会話の()内に入れるのに最も適切なものをA～Eの中から1つ選んで、記号で答えなさい。

1. Harry: "Let's go swimming after lunch."

Ron: ()

- A. So do I. B. Why not? C. Exactly.
D. That's all right. E. That will do.

2. Sandra: I would like to introduce Mr. Ted Thompson to you, John. He is a surgeon.

Ted, this is Mr. John Williams. He is a pianist.

John: How do you do?

Ted: I'm glad to meet you.

John: ()

- A. Sounds good. B. I am afraid it is. C. The pleasure is mine.
D. Fine with me. E. Don't mention it.

3. Molly: Oh, sorry. I've spilled some coffee on this tablecloth.

Katy: () I will take it to the dry cleaner's later.

- A. Mind your own business. B. I beg your pardon. C. Not at all.
D. Certainly. E. Never mind.

4. Son: Can I use your car tomorrow, Dad?

Father: () I'm driving to work tomorrow.

- A. No way! B. Sure! C. Of course.
D. Whatever you say. E. Good for you.

- 6 次の文章を読んで、その内容に合うように後の各文の空所を埋めるのに最も適切なものを1つ選び、記号で答えなさい。

Neuroscientists* consider it settled that the mind arises from the cooperation of billions of interconnected cells that, individually, are no smarter than amebas. But it's a shocking idea to some that the human mind could arise out of such an array of* mindlessness. Many express amazement that emotions, pain, sexual feelings or religious belief could be a product of brain function. They are put off* by the notion that such rich experiences could be reduced to mechanical or chemical bits. Or they worry that scientific explanations may seduce people into a kind of moral laziness that provides a ready excuse for any human failing: "My brain made me do it." Our brains indeed do make us do it, but that is nonetheless consistent with meaningful lives and moral choices. Writing for the President's Council on Bioethics* earlier this year, philosopher Daniel Dennett made the point that the knowledge about the biology of mental life may improve our decision making, even our moral decision making. And it could enhance our chances of survival as a species, too.

Your heart, lungs, kidneys and digestive tract* keep you alive. But your brain is where you live. The brain is responsible for most of what you care about—language, creativity, imagination, empathy and morality. And it is the repository* of all that you feel. The endeavor to discover the biological basis for these complex human experiences has given rise to a relatively new discipline*: cognitive neuroscience*. It has recently exploded as a field, thanks, in part, to decades of advances in neuroimaging technology* that enable us to see the brain at work. As Dr. Joel Yager, professor of psychiatry at the University of Colorado, has said, "We can now watch the mind boggle*!"

Certainly, you won't find an entry for "mind-boggling" in the index of a modern neuroscience textbook. You will also have a hard time finding the words "happiness" or "sadness," "anger" or "love." Neuroscientists do, however, have a rapidly growing appreciation of the emotional brain and are beginning to look closely at these subjective states, which were formerly the province* of philosophers and poets.

Until recently, there was relatively little research showing how the brain processes anger. Researchers, however, have been more focused on one of the consequences of anger—aggression—probably because it can be observed through behavior. It's known, for example, that men are overtly more aggressive than women because of differences in male and female hormones. But the brains of men and women are also different and some of those differences may affect aggression. In front of the brain, the orbitofrontal cortex* is recruited to help make decisions and temper* emotional responses. It lights up when people are making judgments. Adrian Raine and colleagues at the University of Southern California note that, on

◇M1 (051—7)

average, men have a lower volume of gray matter* in the orbitofrontal cortex than women. According to their analysis, this brain difference accounts for a healthy portion of the gender gap seen in the frequency of antisocial behavior.

Even a neuroscientist can see that murder and mayhem* are undesirable. But a neuroscientist can also see why that trait might still be in the gene pool. Aggression is often an advantage. Until recently in historical terms, a readiness to fight and the ability to kill was a way to consolidate* control over resources for survival.

Fortunately, diplomats have also evolved. Some of our ancestors who understood that aggression carried risks as well as advantages used their creative human brains to devise better solutions for resolving conflicts. Our predecessors also originated symbolic diversions* for aggression, like sports and chess.

(注) neuroscientist 神経科学者 an array of ... ずらりと並んだ ...
put off 人を不快にする bioethics 生命倫理 digestive tract 消化管
repository 貯蔵所 discipline 学問分野 cognitive neuroscience 認知神経科学
neuroimaging technology 脳の活動状態を画像化する技術
boggle ためらう, ひるむ province 領域, 分野
orbitofrontal cortex 眼窩前頭皮質 temper やわらげる gray matter 灰白質
mayhem 破壊行為 consolidate 強化する diversion わきへそらすこと, 転換

1. Neuroscientists _____.
 - A. think that the mind is made of billions of interconnected cells in the brain
 - B. think that the mind arises from the cooperation of a large number of cells in the brain that are connected with each other
 - C. think that an ameba is more intelligent than a single cell in the brain
 - D. doubt that emotions, pain, sexual feelings or religious belief could be a product of brain function
2. The excuse "My brain made me do it," is considered as a product of moral laziness because _____.
 - A. our brain often makes us do things that are consistent with meaningful lives and moral choices
 - B. it can be used as a convenient excuse to cover up the mistakes that we have made
 - C. our brain never makes us do something against our will
 - D. our brain activities are not consistent with meaningful lives and moral choices

3. Dr. Yager said, "We can now watch the mind boggle," because _____.
- A. we can now see the activity of the brain of a person who is alive thanks to the advance in the technology of neuroimaging
 - B. cognitive neuroscience is a new technology which enabled us to see the mind boggle
 - C. the technology of neuroimaging enabled us to see the activities of the human brain while people are working
 - D. other emotions besides boggling are still difficult to capture through neuroimaging
4. The research conducted by Adrian Raine and colleagues revealed that _____.
- A. the volume of orbitofrontal cortex in men's brain is larger than that of the orbitofrontal cortex in women's brain
 - B. women have a higher volume of gray matter in the orbitofrontal cortex than men do
 - C. the differences in male and female hormones have nothing to do with men's tendency to behave aggressively than women
 - D. the orbitofrontal cortex does not activate when people are making decisions or tempering emotional responses
5. The word "diplomats" in the final paragraph stands for those people who _____.
- A. are officials representing a country abroad
 - B. are good at repressing their anger and aggression
 - C. express their anger or aggression through sports and chess
 - D. try to settle things peacefully in times of conflict