

We humans have evolved into quite strange beings. (1) Whatever happens in the future is unlikely to be more odd than what has already happened in the past. We differ from other animals (2) in that we cook our food and wear clothes. Other unusual (3) traits are unnecessary aggressiveness, and a mild preference for making love face to face. But perhaps the most important (a) feature is human language. This extraordinary system allows us to communicate about (4) anything whatsoever, whether it is present, absent, or even non-existent.

Humans are the exception. We are a zoological curiosity, as bizarre in our own way as the hoatzin, a South American bird with a bright blue face, big red eyes and orange crest, which inhabits the Amazon rain forest. Alone among birds, the hoatzin has developed a digestive system similar to that of a cow. We humans are equally strange, because language with its fast and precise sounds (5) has more in common with birdsong than with the vocal signals of our ape relatives.

All (6) primates, the animal “order” to which humans belong, have some overlap in their sound-producing and hearing abilities. But the vocal production of our primate relatives is less informative) than was once hoped. A straight comparison between chimp and human vocalizations is limited in what it can (b). More informative, perhaps, is a comparison with the animal communication system which has most in common with human language: birdsong.

Birds talk, but they do not have “language” (7) humans understand it. Yet, like humans, they have an ability to make distinctive sounds that is rare in the animal world, even though the method they use to produce them is rather different from that used by humans. But this is not the only similarity between birds and humans. There are several others.

Many birds (c) two types of sounds: calls, such as a danger call or a summons call, which are mostly (8) innate, and songs, which often involve learning. Humans also have built-in “calls,” the cries (d) by babies, at least two of which are distinguishable worldwide: a pain cry and a hunger cry. But language itself requires learning, and it exists alongside this old “call” system. Birds and humans therefore share a dual system, with one part in place at birth, and the other acquired later.

In birdsong, each individual note is meaningless, whereas the (9) sequence of notes is all-important. Similarly, in humans, a single segment of sound such as *b* or *I* does not normally have a meaning. The output makes sense only when sounds are strung together. This double-layering provides a further (10) parallel. And in both birds and humans, sound segments are fitted into an overall rhythm and intonation pattern.

As with human languages, the song of a single species of bird may have different but related “dialects.” The white-crowned sparrow, a California resident, has dialects so different, even within the San Francisco area, that someone with a (e) ear would be able to tell where he or she was in California, blindfolded, simply by listening to their songs. And both birdsong and human language are normally controlled by the left side of the brain, even though the mechanisms by which this control is (f) are quite different.

Young birds have a period of sub-song, a type of twittering which (g) before the development of full song. This is like the “babbling” of human infants who experimentally produce repetitive *bababa*, *mamama* type sequences when they are a few months old. Many birds have to acquire their song during a short “critical period,” when they are young; otherwise they never learn to sing normally. Similarly, humans acquire language best during a “sensitive period” in the first few years of life.

But some very real differences also exist. Mostly, only male birds sing. Females remain songless, unless they are (h) with the male hormone. And considerable variation is found between the songs of different species of

birds, more than between different languages. In addition, bird communication is a fairly long-distance affair, compared with the intimacy of human language. Sometimes, the effect can (i) over several kilometers, as with the New Zealand kakapo, a flightless parrot which makes spectacular booming sounds, somewhat like the note produced by blowing across the top of a bottle, in its efforts to obtain a mate. These kakapo booming sounds can go on all night, and leave the kakapo in a state of sexual excitement.

A link between language origin and mating has sometimes been proposed. "Language was born in the courting days of mankind. The first utterances of speech, I (j) to myself, were something like the nightly love-lyrics of a cat upon a roof or the melodious love-songs of the nightingale," suggested a Danish linguist. However, this theory has been attacked. "If our human ancestors used song in sexual advertisement and courtship, more recent selective forces have made such a habit rarer," was one response to his ideas. Or as still another noted, "As for courtship, if we are to judge from the habits of the bulk of mankind, it has usually been a silent activity." At the most, perhaps, language was an additional aid. Courtship was not its primary role.

In short, humans use language for many more purposes than birds use song. Birds do not, for example, sing of the beauties of nature or discuss a problem in order to solve it. They do not make puns or jokes, either. Human language can cope with any topic, including imaginary ones. It is unique.

Puzzles (k) concerning human language. The similarities between birdsong and human language have led to an important discovery: parallel systems can emerge independently in quite different species. Certain features have apparently proved useful for sophisticated sound systems. Yet (A) [as, as, it, many, observation, problems, raises, solves, this]. The origin of our extraordinary communication system is still a mystery.

(原文出題校=東京外語 S A44)

1. 文中の下線を引いた語句(1)～(12)について答えなさい。[10点]

- (1) Whatever= _____
- (2) in that ≒ _____
- (3) trait= _____
- (4) anything what(so)ever ≒ anything _____
- (5) has A in common with B= _____ A with B
- (6) primate= _____
- (7) _____ humans understand it
- (8) innate= _____
- (9) sequence= _____
- (10) parallel= _____

2. 空所(a)～(k)に入る最も適切な動詞を, 与えられた語群の中から選んで補いなさい。ただし必要な場合には語形を変化させること。[11点]

- | | | | |
|-----|-----|-----|-----|
| (a) | (b) | (c) | (d) |
| (e) | (f) | (g) | (h) |
| (i) | (j) | (k) | |

utter / exercise / emit / distinguish / cultivate / reveal / abound
emerge / fancy / travel / inject

3. 下線部(B)の[]の語を最も適切な語順に並べ替えなさい。[5点]

4. (最後の二つの段落の表現を参考にして)次の日本語を英語に訳しなさい。[14点]

(1) 人間の言語は、架空の出来事や現象、つまり実際には存在しないことでさえ表現することができる。[6点]

(2) 人間と他の生き物との音声体系の違いが、重要な生物学の発見につながった。
[4点]

(3) どうしてこうした伝達体系の違いが生じたのかは、依然として謎である。[4点]

[英作文解答例]

(1) Human language can describe even imaginary events or phenomena, that is (to say), what really does not exist.

Human language can express even fictitious events or phenomena, in other words, what in fact does not exist.

(2) The differences in the sound system between human beings and the other creatures (have) led to [brought about] important [significant] discoveries in biology .

The differences in the sound system between human beings and the other creatures led to [brought about] important biological discoveries.

(3) Why these differences [distinctions] in the communication system emerged is still a mystery.

The reason this difference in the communication system arose (still) remains a mystery.

1. (1) anything that (2) since (3) at all (5) shares
(7) as *as humans understand it (形容詞節 ← 副詞節)
(10) 類似点

“I shall never believe that God plays dice with the world,” Einstein famously said. Whether or not he was right about the general theory of relativity and the universe, his statement is certainly not true of the games people play in their daily lives. Life is not chess but a game of backgammon, with a throw of the dice at every turn. As a result, it is hard to make predictions. But in a world with any regularity at all, decisions informed by the past are better than decisions made at random. That has always been true, and we would expect animals, especially humans, to have developed sharp intuitions about probability.

However, people often seem to make illogical judgments of probability. One notorious example is the “gambler’s fallacy.” “Fallacy” means a false idea widely believed to be true, and you commit the gambler’s fallacy if you expect that when a tossed coin has fallen on the same side, say, three times in a row, this increases the chance of it falling on the other side the next time, as if the coin had a memory and a desire to be fair. I remember to my shame an incident during a family vacation when I was a teenager. My father mentioned that we had suffered through several days of rain and were likely to have good weather. I corrected him, accusing him of the gambler’s fallacy. But long-suffering Dad was right, and his know-it-all son was wrong. (1) Cold fronts, which cause rain, aren’t removed from the earth at day’s end and replaced with new ones the next morning. A cloud must have some average size, speed, and direction, and it would not surprise me now if a week of clouds really did predict that the edge of the clouds was near and the sun was about to appear again, just as the tenth railroad car on a passing train suggests more strongly than the fifth one that the last one will be passing soon.

Many events work like that. They have a characteristic life history, a changing probability of occurring over time. A clever observer should commit the gambler’s fallacy and try to predict the next occurrence of an event from its history (2) so far. There is one exception: devices that are designed to make events occur independently of their history. What kind of device would do that? We call them gambling machines. Their reason for being is to beat an observer who likes to turn patterns into predictions. If our love of patterns were not sensible because randomness is everywhere, gambling machines should be easy to build and (3) gamblers easy to beat. In fact, roulette wheels, slot machines, even dice must be made with extreme care and (4) precision to produce random results.

So, in any world but a casino, the gambler’s fallacy is rarely a fallacy. Indeed, calling our intuitive predictions unreliable because they fail with gambling devices is unreasonable. A gambling device is an artificially invented machine which is, by definition, designed to defeat our intuitive predictions. It is like calling our hands badly designed because their shape makes it hard to (5) get out of handcuffs. (原文出題校=東大前期 S A29)

1. 下線部(1) – (5)の語句について答えなさい。[5点]

(1) cold fronts =

(2) so far = as _____

(3) gamblers easy to beat (省略されてる語句を補って書き換えなさい) [2点]
=

(4) precision = adjective form = _____

(5) get out of handcuffs =

2. 次の日本語を英語に訳しなさい。 [各10点-40点]

- (1) 歴史と文化に関する彼の一般的な理論が正しいかどうかは、その日常生活からは判断できない。
- (2) 私たちは、真実であると一般に信じられていることについて非論理的で、したがって誤った判断を下すことがよくある。
- (3) がっかりしたことに、私が間違いを犯したときに父はそのことで私を非難はしたが、私の言うことを訂正してはくれなかった。
- (4) 私たちの直感的な予測は不合理なので、私たちを打ち負かすように作られている人工的な装置が相手だと当てにならない、と私は思う。

[英作文解答例]

- (1) We cannot judge from his daily life whether (or not) his general theory about [on] history and culture is right [correct].
Whether (or not) his general theory about [on] history and culture is right [correct] we cannot judge from his daily life.
- (2) We often make illogical and therefore false judgments about what is generally [largely] believed (to be) true [the truth].
We often make an illogical and, therefore, false judgment about ...
- (3) To my disappointment, when I made [committed] a mistake [an error], my father accused me of the mistake [error], but he did not correct me [what I said].
When I made a mistake, to my disappointment, my father did not correct me though he blamed me for that.
- (4) I think that our intuitive predictions are unreasonable and that they are unreliable with artificial devices (which are) designed to defeat us.
I think that as they are unreasonable, our intuitive predictions are unreliable with artificial devices designed to defeat us.

1. (2) as yet
(3) gamblers should be easy to beat

Review Exercises

Peter Unger, a philosopher, tells us the following (1) parable. (A) ボブは定年間近かである. He has invested most of his savings in a very rare and valuable old car, a Bugatti, which he has not been able to insure. The Bugatti is his pride and joy. In addition to the pleasure he gets from driving and caring (a) his car, Bob knows that its rising (2) market value means that he will always be able to sell it and live comfortably after retirement. One day when Bob is out for a drive, he parks the Bugatti near the end of a railway siding and goes for a walk up the track. As he does so, he sees that a runaway train, (b) no one (3) aboard, is running down the railway track. Looking farther down the track, he sees the small (4) figure of a child very likely to be killed by the runaway train. He can't stop the train and the child is too far away to warn (c) the danger, but he can throw a switch that will send the train down the siding where his Bugatti is parked. Then nobody will be killed — but the train will destroy his Bugatti. Thinking of his joy in owning the car and the financial (5) security it (6) represents, Bob decides not to throw the switch. The child is killed. For many years to come, Bob enjoys owning his Bugatti and the financial security it represents.

Bob's conduct, most of us will immediately respond, was seriously wrong. Unger agrees. But then he (B) 私たちにも子供の命を救う機会があることを私たちに思い出させる [気づかせる]. We can give to organizations like UNICEF or Oxfam. How much would we have to give one of these organizations to have a high probability of saving the life of a child threatened by easily preventable diseases? (I do not believe that (C) 子供のほうが大人よりも救う価値がある, but since no one can argue that children have brought their poverty on themselves, focusing on them simplifies the issues.) Unger called up some experts and used the information they provided to offer some realistic estimates that include the cost of (7) raising money, administrative expenses, and the cost of delivering aid where it is most needed. By his calculation, a gift of two hundred dollars would help a sick two-year-old transform (d) a healthy six-year-old — offering safe (8) pass through childhood's most dangerous years. But how many would donate such an amount of money to the organizations? We seem to lack a (9) sound basis for drawing a clear moral line between Bob's situation and that of any reader with two hundred dollars to spare who does not donate it to an overseas aid agency.

Now, evolutionary psychologists tell us that human nature just isn't sufficiently good to make it likely that many people will (D) 見ず知らずの人間のためにそれほど多くを犠牲にする. On the facts of human nature, they might be right, but they would be wrong to draw a moral conclusion from those facts. If it is (10) the case that we ought to do things that, predictably, most of us won't do, then let's (11) face that fact directly. Then, if we value the life of a child more than going to fancy restaurants, (E) 次に外食をするときに we will know that we could have done something better with our money. If that makes living a morally (12) decent life extremely difficult, well, then that is the way things are. If we don't do it, then we should at least know that we are failing to live a morally decent life — not because it is good to indulge (e) guilt but because knowing where we should be going is the first step toward heading (f) that direction.

When Bob first grasped (13) the dilemma that faced him as he stood by that railway switch, he must have thought how extraordinarily unlucky he was (14) to

be placed in a situation in which he must choose between the life of an innocent child and the sacrifice of most of his savings. But he was not unlucky at all. We are all in that situation. (原文出題校=一橋 SA31)

1. 本文中の(1)～(14)の語句について答えなさい。[14点]

- (1) parable=
- (2) market value=
- (3) aboard= _____
- (4) figure=
- (5) security=①安全 ② ③
- (6) represent=① =stand for ②代表する
- (7) raise= = _____
- (8) pass の適切な語形= _____
- (9) sound=
- (10) the case=
- (11) face=
- (12) decent=
- (13) the dilemma that faced him=the dilemma that _____
- (14) to be placed in a situation ... =... な

2. 本文中の空所(a)～(f)に適切な前置詞を補いなさい。[6点]

- (a) (b) (c)
- (d) (e) (f)

3. 下線部(A)～(E)を英語に訳しなさい。[20点-各4点]

- (A)
- (C)
- (D)
- (E)

[英作文解答例]

- (A) Bob is close to retirement
- (B) reminds us that we too [also] have opportunities [chances] to save the lives of children [children's lives]
- (C) children are more woth saving than adults
- (D) sacrifice so much for strangers
- (E) the next time we dine [eat] out

- 1. (3) on board (4) 姿 (5) 安心, 安定 (7) collect
- (8) passage (9) 妥当な (10) 実情 (11) 直視する
- (12) まともな (13) he faced (14) 状況に置かれるとは

The importance of human gestures has been greatly underestimated. Students of linguistics are everywhere, and the analysis of human languages is a widely accepted scientific subject, but the gesture specialist is a rare bird indeed — not so much a vanishing species, as one that has hardly yet begun to evolve.

There are two reasons for this. (a) In the first place, gestures have quite wrongly been considered a trivial, second-class form of human communication. Because verbal exchanges are the crowning glory of humankind, all other forms of contact are viewed as somehow inferior and primitive. Yet social intercourse depends heavily on the actions, postures, movements and expressions of the talking bodies. (b) Where communication of changing moods and emotional states is concerned, we would (c) go so far as to claim that gestural information is even more important than verbal. Words are good for facts and for ideas, but without gestures, human social life would become a cold and mechanical process.

If this is so, then why has the science of gestures lagged so far behind the science of linguistics? The second factor working against such studies is a curious one and is difficult to express. It is as if, by their very nature, gestures do not like being written about. They resist verbal analysis. On reflection, this is not so surprising. Their very existence depends upon the fact that they provide a nonverbal channel of communication, and attempts to verbalize it (d) are bound to meet with a special set of problems. These are problems that every art critic will understand. To describe in words the visual qualities that make a painting by Rembrandt a great work of art is an almost impossible task, and to convey the precise significance of a fleeting gesture is equally challenging. But there is a way. We can greatly deepen our understanding of great works of art by investigating the geography and history of art movements. And with gestures, too, we can learn much from a detailed examination of the geographical and historical background of the so-called trivial actions we all take so much for granted.

We each of us use hundreds of expressive movements every day, as we pass through the social events that surround us from waking to sleeping. Each of these actions has a particular history — sometimes personal, sometimes cultural, and sometimes more deeply biological. By tracing the geographical range and the history of these actions, we can begin to see them more clearly as an understandable pattern of human behavior. To do this systematically is to open up a whole new area of comprehension, and one that is as exciting as any other area of the science of humankind. (原文出題校=宇都宮 S A47)

1. 下線部(a)-(d)について答えなさい。[4点]

(a) in the first place=

(b) where ... is concerned= _____ ... is concerned

(c) go so far as to V= _____ V

(d) be bound to V=① _____ ②

2. (本文中の表現を参考にして)次の日本語を英語に訳しなさい。

(1) 人間のしぐさの研究の重要性が過少評価されてきた理由は二つあるが、そうした理由がどのようなものであろうと、人間の言語の分析と同様に、人間のしぐさの分析も科学の主題として広く受け入れられるべきである。[12点]

- (2) しかし、しぐさの研究は、これまで過小評価されてきたというよりもほとんど無視されてきたと言ったほうが適切だろう。[8点]
- (3) 美術評論家は皆、芸術作品の視覚的特質を言葉で記述しなければならないという難しい問題に直面せざるをえない。[8点]
- (4) しぐさの一つ一つには特定の歴史があるが、それはときには生物学的な、ときには文化的な、そしてときには極めて個人的なものである。(ダッシュを用いず、接続詞を用いて) [8点]

[英作文解答例]

- (1) There are two reasons why the importance of the studies of human gestures has been underestimated. Whatever these reasons may be [are], as [like] the analysis of human languages, that [the analysis] of human gestures should be widely accepted as a scientific subject.
- (2) However, it would be more accurate to say that the studies of human gestures have been not so much underestimated as almost neglected [disregarded/ignored].
 ... the studies of human gestures have not been so much underestimated as practically [virtually] neglected.
 ... the studies of human gestures have been more or less neglected rather than underestimated.
 *neglect: pay too little attention to something
 *disregard: ignore something or treat it as unimportant
 *ignore: deliberately pay no attention to something that you have been told or that you know about
- (3) Every art critic cannot help facing [cannot (help) but face] the difficult problem that they must describe in words the visual qualities of works of art.
 All art critics are forced [compelled] to face the challenging problem that ...
- (4) Each of the gestures has a particular [specific] history, and it is sometimes biological, sometimes cultural, and sometimes quite personal.
1. (a) まず第一に (b) as far as
 (c) even (d) ① 必ずーする ② ーしなければならない

Despite our knowledge that children whose language development is below the normal standard for their age are at very high risk of educational, social, and emotional problems, (A) we still do not know exactly how helpless newborns essentially master their language in only four years.

The earliest theory of language development explained that a baby makes random sounds, and the adults around him “shape” those sounds by rewarding those closest to words. For example, the baby would frequently babble “mama” at an early age, and every time he did so his mother would appear. He would eventually link the word with her. The great linguist Noam Chomsky, however, rejected this view in the 1950s and 1960s. His theory put forth the idea that children are born with (1) innate capacity for language learning and when hearing language automatically begin to use what he called a “language (2) acquisition device (LAD)” to help them (3) make sense out of what they hear, and later on to help them to put sentences together for themselves. He considered that the amount of language the child was (4) exposed to and the kind of language the child heard was of little importance. According to Chomsky, we are born with a natural knowledge of grammatical rules. For example, we already know that nouns and verbs agree — that, for instance, “the boy jumps” is correct, as is “the girls jump,” but “the boy jump” and “the girls jumps” are not. This theory still assumes that language development is only possible because of this inborn knowledge, and that the amount and kind of speech the baby and little child hears is of little importance. Steven Pinker, another great linguist writing more recently, also holds the view that children have knowledge from the start of life about the different types of words and the (5) parts they play in language. The little child knows, for example, that (6) whatever causes an event is the subject of the sentence. Seeing the cat knock over a vase of flowers and hearing his mother say, “That (7) naughty cat,” he rightly assumes that the cat is the cause of the problem and therefore the subject of the sentence.

While there is still no final conclusion about the amount of innate knowledge we’re born with, there is a general agreement among experts that some kind of natural mechanism must be (a) in place to explain the amazing speed (b) at which human infants learn language.

The extent (c) to which such mechanisms are sensitive to input from the environment is another matter of considerable debate. Chomsky and Pinker, as we have heard, both claim that environment has little influence over early language, but other much acclaimed researchers stress the vital importance of social interaction and input to the process of language acquisition. It is their view that early language skills are acquired through children’s meaningful and active involvement (d) with the people in their lives.

While it is accepted that we are preprogrammed for language in some way, learning to develop this skill is (8) seen as extremely dependent upon the interaction between the child and his environment. The kind of language he hears significantly influences the extent (c) to which the child (9) realizes his potential, as evidenced by studies that examine the relationship between adult input and the (10) rate and nature of speech development. Much of this research was carried out in (11) response to Chomsky’s claim that there must be a “language acquisition device” in infants so they can decipher the complex, disorganized, and deviant language of the adults around them. (It appears that

Chomsky may not have had much contact with babies and small children as most adults instinctively do not speak to infants as they do to their friends!)

Although it is evident that certain language milestones are relatively independent (e) environmental influences (12) (_____ children begin to babble at the same time as do hearing babies, and the age at first word production is the same in children in both highly stimulating and in deprived backgrounds), there can be little doubt that environmental influences are critical in shaping future language and social development. There is, for instance, a substantial amount of evidence indicating that the quantity of speech (13) addressed to little children correlates positively with their development. Specifically, (B) 彼らは話しかけられれば話しかけられるほど、それだけ急速に言語を身につける. The content of speech has also been shown to have extremely important (14) implications for language learning. Studies also indicate that babies and young children show a (15) marked preference for certain kinds of speech. Indeed, the acquisition of specific vocabulary and grammatical structures seems to be directly related to the input the children receive from their caregivers.

In our own (16) clinical experience and research, we found that modifying the way parents speak to their children has been a crucial factor in their children's dramatic progress, and is (17) consequently an extremely important part of the BabyTalk program.

To summarize, while it does seem very likely that we have an inborn language learning mechanism, there is a substantial body of evidence that the way children are spoken to (18) has considerable bearing on their language development. Biologist E. Lenneberg, writing in the 1960s, summed up this middle position when he stated that infants are biologically programmed to develop language in the same way as much animal behavior is programmed. To occur satisfactorily, however, the (19) organism must be intact, and the environment provide an appropriate quantity of the right quality of input. Interestingly, this pattern is seen in other animal species as well. The basic song of the chaffinch, for example, appears to be innate, as it occurs in birds (20) reared (f) isolation, but the young bird needs to be exposed to singing from adults for the full song to develop. With BabyTalk, I can help you to help your baby to sing his or her fullest song! (原文出題校=早稲田理工 SA54)

1. 本文中の下線部(1)～(20)の語句について答えなさい。[20点]

- (1) innate = _____
- (2) acquisition の動詞形 = _____
- (3) make sense (out) of = ~を _____ cf. make sense = 意味が通じる
- (4) be ex _____ to ~ = ~に接する
- (5) parts = _____
- (6) whatever = _____
- (7) naughty = _____
- (8) seen = _____
- (9) realize = ① _____ ② _____
- (10) rate = _____
- (11) respond の正しい語形 = _____
- (12) de _____
- (13) address = _____
- (14) implication の動詞形 = _____

- (15) marked preference for ~ = ~ に対する
- (16) clinical =
- (17) consequently = _____
- (18) have bearing on ~ = have re _____ to ~
- (19) organism =
- (20) reared = ra _____

2. 本文中の空所 (a) ~ (f) に入る前置詞を書きなさい。 [6 点]

- (a) (b) (c)
- (d) (e) (f)

3. 下線部 (A) を日本語に訳しなさい。 [4 点]

4. 下線部 (B) を英語に訳しなさい。 [5 点]

5. 次の日本語を英語に訳しなさい。(第二, 第三段落参考) [5 点]

専門家の中に幼児が生得的な言語習得能力を持っているという一般的な意見の一致はあるが, なぜ幼児が驚異的な速さで言語を習得できるのかを説明するのは容易でない。(能力: ability ではない)

[英作文解答例]

There is a general agreement among specialists that infants have an innate capacity for acquiring language. However, it is not easy to explain why they can acquire language at an amazing speed [rate].

4. (B) the more they are talked [spoken] to, the more rapidly [quickly] they learn language.

- 1. (1) inborn/built-in/natural (5) roles (8) viewed/regarded (10) speed
(12) deaf (17) as a result/consequence (18) relation (20) raised