

Ⅲ期（一般・社会人）

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武蔵野大学大学院 人間社会研究科 人間学専攻 言語聴覚コース 入学試験問題（3月10日）

[英語] 下記の英文を読んで、問いに答えなさい

Several groups of scientists have nevertheless spent years training captive gorillas, common chimps, and pygmy chimps to understand and use artificial languages based on plastic chips of different sizes and colors, or on hand signs similar to those used by deaf people, or on consoles like typewriters with each key bearing a different symbol. The animals have thereby learned the meanings of up to several hundred symbols, and a pygmy chimp has recently been observed to understand (but not to utter) a good deal of spoken English. At minimum, ^①these studies of trained apes reveal that they possess the intellectual capabilities for mastering large vocabularies, begging the obvious question whether they have evolved such vocabularies in the wild.

It's suggestive that wild gorilla troops may be seen sitting together for a long time, grunting back and forth in seemingly undifferentiated gibberish, until suddenly all the gorillas get up at the same time and head off in the same direction. One wonders whether there really was a transaction concealed within that gibberish. ^②Because the anatomy of apes' vocal tracts restricts their ability to produce the variety of vowels and consonants that we can, the vocabulary of wild apes is unlikely to be anywhere near as large as our own. Nevertheless, I would be surprised if wild chimp and gorilla vocabularies did *not* eclipse those reported for vervets and comprise dozens of "words," possibly including names for individual animals. In this exciting field in which new knowledge is being added rapidly, we should keep an open mind on how large the vocabulary gap is between apes and humans.

The remaining unanswered question concerns whether animal vocal communication involves anything that could be considered grammar or syntax. Humans don't just have vocabularies of thousands of words with different meanings. We also combine those words and vary their forms in ways prescribed by grammatical rules (such as rules of word order) that determine the meaning of the word combinations. Grammar thereby lets us construct a potentially infinite number of sentences from a finite number of words. To appreciate ^③this point, consider the different meaning of the following two sentences composed of the same words and endings but with different word order:

"Your hungry dog bit my old mother's leg."

or

"My hungry mother bit your old dog's leg."

If human language did not involve grammatical rules, those two sentences would have exactly the same meaning. ^④Most linguists would not dignify an animal's system of vocal communication with the name of language, no matter how large its vocabulary, unless it also involved grammatical rules.

No hint of syntax has been discovered in the studies of vervets to date. Most of their grunts and alarm calls are single utterances. When a vervet gives a sequence of two or more utterances, all analyzed cases have proved to consist of same utterance repeated, as has also been the case when one vervet has been recorded responding to another vervet's call. Capuchin monkeys and gibbons do have calls of several elements used only in certain combinations or sequences, but the meanings of these combinations remain to be deciphered (by us humans, that is).

I doubt that any student of primate vocalizations expects even wild chimps to have evolved a grammar remotely approaching the complexity of human grammar, complete with prepositions, verb tenses, and interrogative particle. However, it remains for the present an open guess whether any animal has evolved syntax. The necessary studies on the wild animals most likely to use grammar —pygmy or common chimps—simply have not yet been attempted.

In short, while the gulf between animal and human vocal communication is surely large, scientists are rapidly gaining understanding of how that gulf has been partly bridged from the animal side. Now let's trace the bridge from the human side. We have already discovered complex animal "language"; do any truly primitive human languages still exist?

To help us recognize what a primitive human language might sound like if there were any, ^⑤let's remind ourselves of the ways in which normal human language differs from vervet vocalizations. One difference is the one of grammar that I just mentioned. Humans, but not vervets, possess grammar, meaning the variations in word order, prefixes, suffixes, and changes in word roots (like *they/them/their*) that modulate the sense of the roots. A second difference is that vervet vocalizations, if they constitute words at all, stand only for things that one can point to or act out. One could try to argue that vervet calls do include the equivalents of nouns ("eagle") and verbs or verb phrases ("watch out for the eagle"). Our words clearly include both nouns and verbs as distinct from each other, plus adjectives. Those three parts of speech referring to specific objects, act, or qualities are termed

"^⑥lexical item." But up to half of the words in typical human speech are purely ^⑦grammatical items, with no referent that one can point to.

Those grammatical words include prepositions, conjunctions, articles, and auxiliary verbs (words like "can," "may," "do," and "should"). It's much harder to understand how grammatical items could evolve than it is for lexical items. Given someone who understands no English, you can point to your nose to explain what that noun means. Apes might similarly come to agree on the meanings of grunts functioning as nouns, verbs, or adjectives. How, though, do you explain the meaning of "by," "the," and "did" to someone who understands no English? How could our ancestors have stumbled on such grammatical terms?

(JARED DIAMOND, *The Third Chimpanzee* より一部改変)

<註> common chimp : コモンチンパンジー、pygmy chimp : ピグミーチンパンジー、grunt : うなる、gibberish : ちんぷんかんぷんな言葉、vocal tract : 声道、vowel : 母音、consonant : 子音、vervet : ベルベットモンキー、capuchin monkey : オマキザル、gibbon : テナガザル

- 問 1. 下線部①these studies の内容について、本文に忠実に日本語で述べなさい。(160～200 字程度)
- 問 2. 下線部②を和訳しなさい。(80 字程度)
- 問 3. 下線部③this point が指し示す内容について、本文に忠実に日本語で述べなさい。(40 字程度)
- 問 4. 下線部④ 大半の言語学者は動物の音声コミュニケーションを「言語」と見なしているか否か。理由も含めて本文の内容に即して日本語で述べなさい。(80～120 字程度)
- 問 5. 下線部⑤ 人間の言語とベルベットモンキーの音声の違いとはどのようなことか。本文の内容に即して日本語で述べなさい。(80～120 字程度)
- 問 6. 下線部⑥lexical item および⑦grammatical items について、本文に書かれている具体例を日本語でそれぞれ 3 つ以上挙げなさい。
- 問 7. その言語を知らないものにとって、lexical item と grammatical item のどちらに属する語の方が理解しやすいか、理由も含めて本文の内容に即して日本語で述べなさい。(80～120 字程度)