

【4】〔長文読解〕《神戸大》

解答時間 30 分

次の文章を読んで、問 1～3 に答えなさい。

A team of researchers from the University of St. Andrews in Scotland spent 266 days observing and filming a group of wild chimpanzees in Budongo Conservation Field Station*, Uganda. The team then studied 120 hours of footage* of the chimps interacting, looking for signs that the animals were intentionally signaling to each other. According to their research, the animals use at least 66 distinct gestures to communicate with each other.

The findings are published in the journal *Animal Cognition*. Previous studies on captive chimps have suggested the animals have about 30 different gestures. “So this result shows quite a large repertoire,” lead researcher Dr. Catherine Hobaiter told BBC News. “We think people previously were only seeing fractions of this, because when you study the animals in captivity you don’t see all their behavior. You wouldn’t see them hunting for monkeys, taking females away on ‘courtships*,’ or encountering neighboring groups of chimpanzees.”

“I’ve spent two years studying these animals, so they know me,” said Dr. Hobaiter. “I follow them through the forest and they just (A) me completely and get on with their daily lives.” She and her colleague, Professor Richard Byrne, carefully examined the footage and categorized each distinct gesture. They looked for clear signs that the animals were making deliberate movements that were intended to generate a response from another animal. “We looked to see if the gesturer was looking at the audience,” explained Professor Byrne. “And we looked for persistence; if their action did not produce a result, they would (B) it.”

The team is still studying the footage for the next stage of their project to figure out what each gesture means. For some of these gestures, the meaning seems obvious to us, perhaps because — as great apes* — we make similar movements. A chimp will often beckon to another group member, or a youngster will hand shake at another juvenile to entice* it to play.

In one piece of footage captured by Dr. Hobaiter, a mother reaches with her left arm towards her daughter. “The mother wants to move away and is gesturing to request that her daughter ‘climbs on’ her,” Dr. Hobaiter explained. “She could just grab her daughter, but she doesn’t. She reaches and holds the gesture while waiting for a response.” When the youngster starts to approach, the mother repeats the gesture and (C) a facial expression — a “bare-teeth grin,” at which point the daughter climbs on and they move away.

“But actions often have effects that their maker did not intend,” said Professor Byrne. “So to understand the intended meaning, it’s no good just discovering a gesture’s typical effect. (1) We have to look for what effect makes the signaler stop gesturing and appear satisfied with the outcome, to be sure that that was what they intended.”

(2) The results have provided clues about the origins of chimps’ gestures, suggesting that they are a common system of communication across the species, rather than each movement being a learned custom or ritual within one social group. In fact, by (D) these observations with those of gestures made by gorillas and orangutans, the researchers showed there was significant overlap in the signals used throughout the family of great apes. Dr. Hobaiter said, “This supports our belief that the gestures that apes use (and maybe some human gestures too) are (E) from ancient shared ancestry of all the great ape species alive today.”

注

Budongo Conservation Field Station ブドンゴ保全調査基地；
footage 撮影フィルム； courtship(s) 求愛行動；
great ape(s) 大型類人猿； entice 誘う

問 1 第 1 段落および第 2 段落の内容に基づき、St. Andrews 大学のチームが今回の研究成果を挙げることができた理由を、「St. Andrews 大学のチームは」に続けて、50 字以内の日本語で書きなさい。ただし、句読点も 1 字に数えます。

問2 空所(A)～(E)に入る最も適切な動詞を下から選び、必要があれば適切な形にして記入しなさい。ただし、それぞれの語は一度しか使えません。

add compare derive ignore repeat

問3 下線部(1), (2)を日本語に訳しなさい。

【4】〔長文総合〕 observe A [əbzə:rv] 「Aを観察する」 intentionally [inténʃəneli] 「故意に」 distinct [distɪŋkt] 「異なる」「際立つ」 a repertoire [répərtwə:r] 「レパートリー」 a fraction [frækʃən] 「かける」「破片」 captivity [kæptɪviti] 「拘留」 (in captivity 「飼育状態」) a colleague [káli:g] 「同僚」 categorize A [kætəgəraiz] 「Aを分類する」 deliberate [dɪlɪbərit] 「入念な」「意図的な」 generate A [dʒénərèit] 「Aを生み出す」 persistence pəsɪstəns 「根気強さ」 footage [fútidʒ] 「(映画の)コマ」 figure out A 「Aを理解する」 beckon to A [béken] 「Aに手招きする」 juvenile [dʒú:vənel] 「子供の」 grab A [græb] 「Aを掴む」 typical [típikel] 「典型的な」 outcome [áutkʌm] 「結果」 ritual [rítʃuel] 「儀式」 overlap [əʊvəp] 「全体に渡る」

発展問題 【1】 range [reɪndʒ] 「範囲」 a mode [maʊd] 「方法」 is subject to A 「Aを受けやすい」 constant [kánstent] 「絶え間ない」 modification [mɔːdɪfíkéiʃən] 「修正」 association [əsəʊsiéiʃən] 「結合、連想」 adopt A [ədápt] 「Aを採用する」 on the contrary 「それどころか」 transmit A from B to C [trænsmít] 「AをBからCへと伝達する」 a loyalty [ləɪəlti] 「忠誠」 mobile 「移動可能な」 accordingly [əko:rdɪŋli] 「適宜に」

【2】 utter A [ʌtər] 「Aを発する」 an article [á:rtɪkl] 「記事」 issue A [íʃu:] 「Aを発行する」「Aを発表する」 a notion [núʃən] 「考え、意見」 processing 「処理(すること)」 a fraction of A [frækʃən] 「ひとかけらの」 (fraction 「かけら」「断片」) operation [ləpəréiʃən] 「操作」