

問題 1

問1 被験者全員の脳マップを平均化して、平均的な脳マップを作り出すという方法。

【別解】「平均的な脳」内の活動に関する分布図を作成するために、fMRI で被験者から得られた全ての個々の脳の活動に関するデジタル画像をまとめ合わせた上で、その平均を取るという方法で。

問2 平均的な脳は標準的・典型的な脳を表しているが、個別の脳はその平均的な脳の変異形であるという考え。

【別解】「平均的脳」は正常で、典型的な脳を象徴している、が一方で各々の個人の脳はこの正常な「平均的脳」の一変項に過ぎないという前提、この前提は、いわば「どれだけ正常に近いかを競い合うコンテスト」を開催することを促す動機となるような前提である。

問3 もしミラー氏が平均的な脳マップを発表することで自身の研究結果を報告したならば、他の神経科学の研究と同様に、特異なところのない平凡な研究になっていたであろう。

【別解】アメリカ合衆国、サンタ・バーバラの神経科学者、マイケル・ミラーが言葉の記憶に関する研究を行った際に、平均値を取ることで作成された、「平均的脳」の活動部位の分布図を発表することで、その研究結果を報告したならば、ごく通常の研究方法であり、何らの不可思議な点も存在しなかったであろう。

問4 個別の脳が平均的な脳とかけ離れていることが多いという事実。

【別解】個々の脳内の活動分布図のうちで、その大部分は「平均的脳」の分布図とは全く異なっていたという事実。

問5 最初の実験から数か月後に行った実験においても、個別の脳マップは類似したものとなり、それが平均的な脳マップとは相当かけ離れているという最初の実験と同様の結果になったこと。

【別解】同じ被験者に再度、同じ言葉の実験を行って脳のスキャンをしたが、結果は前回と同様であり、かつ各被験者の脳内活動分布図も、前回同様、「平均値を取って作られた脳内分布図」とは全く異なっていた、ということ。

問6 平均的な脳に基づいて思考や認識や性格に関する理論を構築した場合、それは誰にも当てはまらない理論になってしまっている可能性が高いということ。

【別解】もし、「平均的脳」に基づいて、思考・知覚・個性に関する理論を構築するならば、誰にも該当しない理論を構築している可能性が高く、何十年にも渡る神経科学の指針となってきた前提が根拠のないものとなる。「平均的脳」などというものは存在しないのだ、ということ。

問題 2

Question 1.

【解答例①】 The local council discontinued the route, because of (steep) budget cutbacks stemming from the Conservative-led government's decade-long austerity program.

【解答例②】 This was because the council in Cumbria was responding to steep budget cutbacks caused by the Conservative-led government's decade-long austerity program.

Question 2.

【解答例①】 Because the council is starting to recognize that the cuts of bus subsidies it introduced have contributed to the problem of rural isolation and the impact on people's mental health.

【解答例②】 This is because there is increasing recognition of how the council's cuts to various services have been responsible for the problem of rural isolation and the impact on people's mental health.

Question 3.

【解答例①】 Because the bus service he used to use to Carlisle, the city in which Morrison's is located, was abolished with the withdrawal of bus subsidies.

【解答例②】 This is because of the withdrawal of bus subsidies. He tried taking the new bus, but it only waits in Carlisle for an hour and a half before returning. That is just not enough time to get anything done, and if he misses the bus, he is doomed.

Question 4.

A) T

E) F

B) T

F) T

C) F

G) F

D) T

問題 3

【解答例①】

(If I could,) I would travel back to the very beginning of my junior high school days.

This is because I feel very unsatisfied with my days at both junior high and high school. Firstly, I would like to re-study the five core subjects, those being, Japanese and English languages, mathematics, science and social science. At that time I did not know how to study effectively. Now that I am better at it, I would do my best to study properly. I would plan and prepare for each class. Also, I would pay attention to the lesson content and review everything thoroughly.

After such intensive study at junior high, I would enter one of the country's most prestigious high schools and continue to study even harder. I would like to see just what I could achieve after six years of such study.

Moreover, I would like to build up far better and satisfying relationships with family members, and friends, while truly understanding how important love and friendship can be. I feel that when I was younger, I was unable to establish good relations with others. I spent days without showing sufficient kindness or gratitude towards my parents. I now realize that I should have been more grateful for everything they did for me. Also, looking back, I cannot help thinking that I took friendship for granted, and did not cherish the valuable relations with classmates, or show true appreciation to the girls who showed love and kindness toward me.

It follows from this that I would like to return to the time when I first entered junior high school. (266words)

【解答例②】

Assuming I could go anywhere, I would definitely choose to go back to the past.

In retrospect, I have made so many mistakes in every year of my life that I would like to return to any one of them, correct those mistakes and (thus) be in a different reality today. I guess most people would use a time machine to go somewhere to have fun or satisfy their curiosity, but I would use it to preach to my younger self and save him from feelings of remorse. For instance, I would choose to go back to the time when I was a 10th grader. One of the mistakes I made then was to lose the trust of people around me because of my selfish behavior. At that time, I was so self-interested that I thought I was the center of the universe. I was not above saying bad things without caring about their feelings and I sometimes even turned violent. As a result, no one trusted me and I was forced to spend the rest of my school life with almost no friends to talk to.

I have made so many mistakes in the past that I can see clearly now, yet could not at

the time. It would be nice to correct some of them by going back to the past. I know my story does not sound like an exciting adventure, but this is what I would really like to do if I could travel in time. (253)