

I 次に掲げる *The American Way: An Introduction to American Culture* (by E.N. Kearny *et al.*)からの抜粋を読んで設問に答えなさい。

The way in which the national government is organized in the United States Constitution provides an excellent illustration of the American suspicion of governmental power. The provisions of the Constitution are more concerned with keeping the government from doing evil than with enabling it to do good.^(A) The national government, for example, is divided into three separate branches. This division of governmental power is based on the belief that if any one part or branch of government has all, or even most of the power, it will become a threat to the freedom of individual citizens.

The legislative or lawmaking branch of the government is called the Congress. The President, or Chief Executive, heads the second or executive branch, which has responsibility to carry out the law. The Supreme Court and lower national courts make up the third or judicial branch. The judicial branch settles disputes about the exact meaning of the law through court cases.

If any one of the three branches starts to abuse its power, the other two may join together against it to stop it. The Constitution is most careful in balancing the powers of the legislative and executive branches of the government なぜならこれらふたつが3部門のうちで最も強力なものだから。^(B) In almost every important area of governmental activity such as the power to make laws, the power to make war, or the power to conclude treaties with foreign countries, the Constitution gives each of these two branches enough power to prevent the other from acting on its own power alone.

The President and Congress have almost complete political independence from each other because they are both chosen in separate elections. For example, the election of the Congress does not determine who will be elected President, and the Presidential election does not determine who will be elected to Congress. It is quite possible in the American system to have the leader of one political party win the^(C)

Presidency while the other major political party wins most of the seats in Congress.

Observers from other countries are often confused by the American system. (D) The national government often seems to speak with two conflicting voices, that of the President and that of Congress. It is necessary for the President to sign bills passed by Congress in order for them to become law. A legislative bill passed by Congress dies if the President vetoes it, that is, if he refuses to sign it. On the other hand, a treaty with a foreign government signed by the President dies if Congress refuses to ratify it. It is necessary for the Senate to ratify such treaties by voting to accept them.

Although the American system of divided governmental power strikes many observers as inefficient and even disorganized, most Americans still strongly believe in it for two reasons: (1) it has been able to meet the challenges of the past, and (2) it gives strong protection to individual freedoms.

In addition to dividing government powers into three branches, the Constitution includes a “Bill of Rights” which is designed to protect specific individual rights and freedoms from government interference. Some of the guarantees in the Bill of Rights concern the freedom of expression. The government may not interfere with an individual’s freedom of speech or freedom of religious worship. The Bill of Rights also guarantees the right of a fair criminal procedure for (E). Thus, the Bill of Rights is another statement of the American belief in the importance of individual freedom.

- (1) 下線部(A)を日本語に訳しなさい。
- (2) 下線部(B)の日本語を英語に訳しなさい。
- (3) 下線部(C)を日本語に訳しなさい。
- (4) 下線部(D)の理由を 40 字以内の日本語で述べなさい。
- (5) 次の 5 つの単語を適切な順序に並べて、空欄(E)にふさわしい表現にしなさい。

accused, laws, of, breaking, those

II 次の英文を読んで設問に答えなさい。

Edison could not conceive of any experiment as a flop. As Israel puts it, “He saw every failure as a success, because it channeled his thinking in a more fruitful direction.” Israel thinks that Edison may have learned this attitude from his enterprising father, who was not afraid to take risks and never (①) undone when a business venture crumbled. Sam Edison would simply brush himself off and embark on a new moneymaking scheme, usually managing to shield the family from financial hardship. Israel says, “This sent a very positive message to his son—that it’s okay to fail—and may explain why he rarely got discouraged if an experiment didn’t work out.”^(A) In addition to teaching him what wouldn’t work, Israel says, failed experiments taught him the much more valuable lesson of what *would* work—albeit in a different context.

Very few challenges failed to yield to Edison’s brute intelligence,^(B) but one that did ultimately defeat him was the undersea telegraph. To help his experiments, Edison (②) a laboratory model of a transatlantic cable, in which cheap powdered carbon was used to simulate the electrical resistance of thousands of miles of wires. Alas, the rumble of traffic outdoors, clattering in the machine shop, or even the scientists’ footsteps (③) the equipment enough to change the pressure of the connecting wires on the carbon, thus altering its resistance. Since the accuracy of the model (④) upon constant resistance in the carbon, Edison finally (⑤) this approach. But later, when confronted with the problem of how to improve the transmission of voices over the telephone, he used a funnel-shaped mouthpiece to focus sound waves on a carbon button. The pressure of those vibrations (⑥) the resistance in the circuit in synchrony with

the speaker's voice. In other words, what (⑦) Edison's underwater-telegraphy experiments is exactly what made his telephone transmitter such a triumph. Indeed, this innovative transmitter rendered Alexander Graham Bell's telephone practical—so much so that it remained the industry standard for a century.

Edison (⑧) even disasters as an opportunity for learning. On one occasion his lab stove (⑨) out in the dead of winter, causing an assortment of expensive chemicals to freeze. On another occasion unprotected chemicals were damaged by sunlight. Instead of bemoaning the losses, Edison (⑩) aside all other projects to catalogue changes in the properties of the bottled substances. Keith Nier observes, "He knew how to turn lemons into lemonade."

(C)
—*The Atlantic Monthly* (December 1995)より

- (1) 下線部(A)を日本語に訳しなさい。
- (2) 下線部(B)を日本語に訳しなさい。
- (3) 下線部(C)が象徴しているものを表す言葉をこのパラグラフ内から抜き出さなさい。
- (4) 文中の空欄(①)から(⑩)に入る適当な動詞を下から選びなさい。
abandoned, altered, became, designed, depended, put, ruined,
shook, viewed, went

III 以下の文は *The Gardener's Book of Colour* (by Andrew Lawson) の一部です。これを読んで設問に答えなさい。(なお、本文中で “this diagram” と呼ばれている図はここには掲載されていません。)

Nature gives us a way in which we can arrange colours in order and establish relationships between them. This is the spectrum, which appears as the rainbow. The colours originate from different wavelengths of light and so the sequence in which they appear is immutable. ^(A) When the spectrum is bent round to make a circle, it forms a colour wheel, which is a very useful, simple guide to the most fundamental colour relationships in the garden.

The three primary colours, red, blue and yellow, are the three essential colours from which, in theory, all other colours are constructed. This is because there are only three types of colour-sensitive cells, known as cones, in the retina of the eye—one to respond to each of the primary colours. Each of the three secondary colours, green, orange and violet, is a 'mixture' of two primaries, and lies between them on the colour wheel. ^(B) Green, for instance, is perceived as a mixture of yellow and blue, and is shown half way between them. These six main colours of the rainbow are linked by infinite gradations of colour, represented here by six colours. Also missing from this diagram are black and white and the more subtle 'mixtures' of colours such as pinks and browns and greys. There are two reasons for this. Black, white and grey are inert colours, that do not react with other colours. Pinks, browns, and all the other muted colours could be plotted on a much more complex diagram, but they would obscure the simple message of the colour wheel. When using any of the more complicated 'mixtures' of colours, such as pink or lilac, be guided by its dominant component: pink, for instance, might be treated as a cool red, lilac as a muted violet.

The two most important approaches to planning colour schemes for the garden—using harmonious colours or contrasting colours—are best explained by studying the colour wheel. 調和のとれた色とは、カラー・^(C)ホイールにおいて隣り合っているか、近くにある色である。 Red, orange and yellow, for instance, make a harmonious scheme together. Colours from opposite sides of the wheel form contrasting schemes. The most intense contrasts are between colours that lie directly opposite one another: red with green, blue with orange, yellow with violet. These highly contrasting pairs are called complementary colours.

As the word suggests, a complementary colour makes up for everything that its opposite colour lacks. There is a fundamental physiological relationship between the two. Stare at a bright red patch for half a minute without deflection. Then turn your eyes immediately onto a sheet of white paper in good light. You should see a phantom green patch. There is a simple explanation for this.^(D) When the eye concentrates on the original red spot, the red-sensitive cones react and soon become fatigued, so they start to underperform. The new white subject ought to stimulate all the cone cells equally, but the fatigued cones for red will transmit a false message to the brain. They now suggest to the brain that there is a shortage of red; in other words that there is more of its complementary, which is green. So the brain perceives a green phantom on the white paper.

The principle of phantom images between complementaries has a bearing on our perception of colour in the garden. The eye is constantly being affected by what it has just seen.^(E) Take the following sequence of events. First we look at a blue flower; the blue-sensitive cones are stimulated and become fatigued. Next we look at orange. The eye, tired of blue, is already perceiving its complementary—orange, so the

orange appears enhanced. In other words, looking at the blue has made the orange all the more intense. The eye has been stimulated by one colour to see its complementary in the next thing it looks at. これはその^(F)
2色の違いがわずかに誇張されるということの意味する。

注 immutable : unchangeable	retina : 網膜
inert : 鈍い, 不活発な	muted : ぼかされた, 弱められた
plotted : (その位置を)記される	deflection : (目を)そらすこと
phantom : 幻影	bearing : 関係, 関連

- (1) 下線部(A)を日本語に訳しなさい。
- (2) 下線部(B)に即して, the primary colours と the secondary colours との関係日本語で簡潔に述べなさい。
- (3) 次の単語を並べ替えることによって, 下線部(C)を英訳しなさい。
colours, colour, are, are, the, that, those, wheel,
near-neighbours, Harmonious, adjacent, or, on
- (4) 下線部(D)の具体的な内容を日本語で簡潔に説明しなさい。
- (5) 下線部(E)を日本語に訳しなさい。
- (6) 下線部(F)の日本語を英訳しなさい。