

I 次の英文(A)と(B)を読み, それぞれの下線部の意味を日本語で表しなさい。

(A) Rain forests may be known as the planet's lungs, but it's when standing before the seas, with their crashing waves and ceaselessly cycling tides, that we feel the earth breathe. The ocean, say scientists, is the source of all life on earth. It is also, say philosophers, the embodiment of life's greatest terror: the unknown and uncontrollable.

(Wolfson, Elijah. 2022. "Waves of Change: A Special Report." *TIME*, July 4/July 11.)

(B) Ask almost any painter or sculptor, famous or not, why they do what they do and they'll give you the same answer: it's a compulsion. Ask them what advice they might have for an aspiring artist and they'll probably caution you not to attempt a career as one unless you feel you have absolutely no other option. The seasoned artist knows, usually through bitter experience, that making art can be a miserable, endless cycle of frustration and disappointment. The French artist Paul Cézanne, perhaps the greatest painter of the modern era, died in 1906 thinking he had failed.

(Gompertz, Will. 2023. *See What You're Missing: 31 Ways Artists Notice the World — and How You Can Too*. Viking Press.)

## II 次の英文を読んで、以下の設問に答えなさい。

Stars and galaxies move around us at a pace that seems glacial on human time scales. Their dance is exceedingly gradual, taking place over billions of years. But if we could see time the same way the stars do, the neighborhood around our Milky Way Galaxy would appear surprisingly active.

Galaxies swing around one another, slowly spiraling together until they merge. Many don't travel alone but bring companions with them, in a dark <sup>(i)</sup> collision that may tear some stars from the heart of their homes and splay them across the sky. Other regions grow rich in gas and dust and begin, in their newfound opulence, to birth new stars. The dance of the galaxies is slow and <sup>(ii)</sup> violent, filled with both life and death.

The Milky Way drives the motion of the collection of more than 100 galaxies known as the Local Group. Within that group, only the Andromeda Galaxy is larger than the Milky Way — roughly 125 percent more massive — and like our galaxy, it has a spiral shape. Two smaller galaxies stand out: the Triangulum Galaxy, dancing around Andromeda, and the Large Magellanic Cloud (LMC), orbiting the Milky Way. The rest of the neighborhood is filled mostly with satellites of the pair, smaller galaxies hovering like adoring fans. These galaxies flit about, but eventually will meld with their larger companions. When that <sup>(A)</sup> happens, it will not be the first time our galaxy has bumped into another.

The Milky Way suffered its first major collision early in its lifetime, roughly 10 billion years ago. Prior to that, it probably had a handful of scrapes with smaller galaxies, but the dramatic crash into a galaxy referred to as Gaia Enceladus left lasting scars. For a long time, those scars were hidden, their <sup>(B)</sup> absence puzzling astronomers. It took the European Space Agency's Gaia space telescope to bring them to light in 2018, after years of hints.

“Before the Gaia data was released, we thought the Milky Way was a very quiet galaxy with no dramatic impact,” says Eloisa Poggio, an astronomer at the

Astrophysical Observatory of Turin in Italy. “It’s more complicated than we thought before.”

Gaia Enceladus was a dwarf galaxy, slightly smaller than the Milky Way, perhaps 2 billion years old when it crashed into us. The collision would have significant ramifications. The Milky Way was a stubby disk from which stars were flung out, creating its halo. Part of the disk then became unstable and collapsed into a barlike structure. Over time, a new, thin disk was created. When the show was over, the Milky Way was a different galaxy.

“This is a key pivotal moment in the Milky Way’s life,” says Vasily Belokurov, part of one of the two teams that co-discovered the ancient artifact. “It unleashed a sequence of transformations in the Milky Way that have changed it into the Milky Way we know.”

For the next few billion years, the Milky Way was quiet, consuming the occasional satellite galaxy but leaving the larger ones alone. That changed around 6 billion years ago when the Sagittarius\* Galaxy made its own grand entrance.

Sagittarius is an elliptical galaxy, one of the nearest neighbors to the Milky Way, and is coming to an agonizing end as it interacts with the larger object. Discovered in 1994, Sagittarius spirals around the Milky Way’s poles, a hundred to a thousand times less massive than our galaxy.

In 2018, scientists discovered a warp in the disk of the Milky Way. Large-scale distortions — collections of stars gravitationally shoved together — are common among spiral galaxies, and ours travels relatively slowly around the disk. A warp can form due to interactions within a galaxy, but the movement suggests an external origin. “The only possible model that can explain such large precession is interaction with a satellite [galaxy],” says Poggio, who measured and tracked the warp.

But who’s the culprit? While it’s possible that the Milky Way’s warp was caused by the LMC, Poggio thinks that the influence of Sagittarius might be

stronger, and she's working to prove it. Confirming her theory requires further simulations, which she is in the process of analyzing.

Sagittarius is also triggering waves of star formation in the Milky Way. Researchers have found patches of star formation that coincide with the closest approach, or pericenter, of the dying galaxy. Gravitational interactions push together piles of gas and dust to create regions ripe for starbirth. Tomás Ruiz-Lara, an astronomer at Kapteyn Astronomical Institute, the Netherlands, found bursts of stellar formation roughly 6.5 billion, 2 billion, and 1 billion years ago, and tied each one to several pericentric passes of Sagittarius.

“The main surprise is that something so small is able to cause all these effects,” says Ruiz-Lara. “Sagittarius is an important actor in the film of the origin and evolution of our galaxy.”<sup>(D)</sup>

(Tillman, Nola Taylor. 2022. “Milky Way’s Crash-Bang Neighborhood.” *Discover*, March–April より一部改変)

\*Sagittarius : いて座

設問(1) 下線部(i)~(vi)の語句の本文中での意味に最も近いものを、(イ)~(ニ)から1つ  
選び、解答欄の選択肢を塗りつぶしなさい。

(i) merge

(イ) accelerate      (ロ) combine      (ハ) halt      (ニ) separate

(ii) opulence

(イ) gravity      (ロ) space      (ハ) spark      (ニ) wealth

(iii) ramifications

(イ) causes      (ロ) consequences  
(ハ) explosions      (ニ) relationships

(iv) artifact

(イ) civilization      (ロ) creatures      (ハ) documents      (ニ) remains

(v) consuming

(イ) absorbing      (ロ) becoming  
(ハ) buying      (ニ) producing

(vi) ripe for

(イ) full of      (ロ) lacking in  
(ハ) ready for      (ニ) resulting from

設問(2) 下線部(A) that は具体的には何を指しているか、日本語で答えなさい。

設問(3) 下線部(B) their absence puzzling astronomers とはどのような状態を指す  
のか、本文の内容に即して日本語で説明しなさい。

設問(4) 本文において、下線部(C) who's the culprit? の答えの可能性として具体的に考えられているものは何か、本文中から英語ですべて抜き出さない。

設問(5) 下線部(D)において important と述べられている理由を、45字以内の日本語で説明しなさい。句読点も1字に数えます。

設問(6) 本文全体の主旨を最もよく表している文を下記の(イ)~(ホ)から1つ選び、解答欄の選択肢を塗りつぶしなさい。

- (イ) The fate of our galaxy is played out in a slow but surprisingly dramatic cosmic dance.
- (ロ) The Milky Way determines the movement of a large group of some 100 galaxies.
- (ハ) The myth of the astronomers and the development of our galaxy became a film in Europe.
- (ニ) The primary cause of the birth of new stars in the Milky Way remains debatable.
- (ホ) The speed at which stars and galaxies move seems very slow to human beings.

Ⅲ 大学において、あなたが理想とする学びとはどのようなものですか。具体例を挙げて、80語程度の英文で述べなさい。

Ⅳ 次の日本文(A)と(B)のそれぞれの下線部の意味を英語で表しなさい。ただし、(B)では文学部の志願者は(イ)を、文学部以外の学部の志願者は(ロ)を選んで解答しなさい。

(A) (すべての学部の志願者)

たとえば、「そもそも、人間は他人の心を理解できるのだろうか?」とか、「そもそも、他人を理解するとは、いったいどんなことか?」。あるいは、「そもそも、他人に心があるとどうして分かるのか?」。

こうした疑問は時間がたつにつれて、ふつうは忘れ去られてしまうようです。とはいえ、忘れたからといって、疑問が解決されたわけではありません。時々、思い出したり、疑問が広がったりするのではないのでしょうか。

実を言えば、いつの間にか忘れてしまった「そもそも」問題を、あらためて問い直すのが「哲学すること」に他なりません。哲学は、過去の哲学者の学説を知るのが目的ではありません。

(岡本裕一郎, 2023. 『哲学 100 の基本』東洋経済新報社 より一部改変)

(B)

(イ) (文学部の志願者)

たとえば、存命中のひとをモデルに小説を描く場合、何よりもまず当人のお許しを頂き、その上で、丹念に取材をさせて頂くことが必須です。フィクションだから何でも許される、というわけでは決してないのです。では、そのひとが既に故人だった場合はどうでしょう。「既にその死から何百年も経過している」「歴史上の偉人として研究し尽くされている」といったケースでは縛りが緩くなることもあるでしょうが、それに当たらない場合は、どうでしょうか。

かつて「あい 永遠に在り」という作品で、実在した関寛斎とその妻あいを描いた時に、随分と悩んだ問題です。

(高田郁, 2023. 『晴れときどき涙雨』角川春樹事務所(ハルキ文庫) より一部改変)



(ロ) (文学部以外の学部の志願者)

人々は以前ほどマスメディアの言うことを鵜呑みにはしなくなった。しかし、それで果たして社会は良くなったのであろうか。

取材をし、記事を書き、ニュースを発信するのが人間である以上、報道は全て正しいとは限らない。また、報道が届く人々の範囲の広さを考えても、個別の記事や番組に対する批判は、あつてしかるべき重要なものである。しかし、批判の対象が「マスメディア」「マスコミ」となったとき、それが本当に対象を理解したうえでの批判なのか、その批判が民主主義にとって有益なのかという問いに、今一度立ち戻るべきではないだろうか。

(稲増一憲. 2022. 『マスメディアとは何か』中央公論新社(中公新書) より一部改変)