

Navigating the Age of Information #1

There is a famous _____ that _____, “You are what you eat.” The health and well-being of your future self depend on what you take in every day. This is also the case with information. The information and opinions you _____ every day determine who you will be in the future. _____ humans are largely the _____ of their environment, if you wish your future self to be good, _____ particularly important to _____ yourself in a healthy information environment. Speaking of the information environment, _____ changing due to technological _____. Today, all people _____ have the potential to be connected, their relationships are sometimes _____, and everyone can be a _____ information. _____, the volume has become huge. The Library of Alexandria, built in the 3rd century BC, contained at least 100,000 books and truly _____ to be called a _____ knowledge in the _____ world. According to one estimate, in 2025, the amount of information _____ globally every 3 seconds is _____ to the entire content _____ by the Library, and not _____ reliable. Humans are not _____ to this situation, so we are in the _____ of creating the _____ and _____ for this new information environment. For a better self and a better society, how should we engage with information?

There is a famous proverb that goes, “You are what you eat.” The health and well-being of your future self depend on what you take in every day. This is also the case with information. The information and opinions you absorb every day determine who you will be in the future. Since humans are largely the products of their environment, if you wish your future self to be good, it is particularly important to put yourself in a healthy information environment. Speaking of the information environment, it is rapidly changing due to technological development. Today, all people on earth have the potential to be connected, their relationships are sometimes anonymous, and everyone can be a sender of information. Above all, the volume has become huge. The Library of Alexandria, built in the 3rd century BC, contained at least 100,000 books and truly deserved to be called a reservoir of knowledge in the ancient world. According to one estimate, in 2025, the amount of information generated globally every 3 seconds is equivalent to the entire content held by the Library, and not all of it is reliable. Humans are not yet accustomed to this situation, so we are in the midst of creating the norms and manners suitable for this new information environment. For a better self and a better society, how should we engage with information?

well-being	幸福、健やかな状態	volume	量、規模
absorb	吸収する	reservoir	貯蔵庫、蓄積
determine	決定する、左右する	equivalent	同等の
environment	環境	reliable	信頼できる
anonymous	匿名の	accustomed	慣れた
sender	発信者	norms	規範、基準

Navigating the Age of Information #2

We often witness celebrity scandals and gossip _____ on social media platforms. This kind of information is like junk food for the brain. Despite knowing _____ a waste of time and is emotionally draining, why do humans tend to be attracted to such information? The answer may lie in the hunter-gatherer lifestyle of _____, which largely _____ instincts. Until 13,000 years ago, all humans were living in a small _____ 150 people. Everyone knew each other, and there were no such things as _____ who were known _____ by many. Also, internal information sharing was crucial for a _____ to _____. Negative information was particularly important to _____ potential threats and conflicts. In a small band, it was _____ to know who was ill, who was _____, and who was in _____ with _____. As a result, Homo sapiens _____ with a built-in _____ to learn and share information _____, especially negative ones. The problem is that this tribal instinct sometimes backfires today. Your instinct doesn't understand the _____ celebrity on the screen is not an acquaintance of yours, there is most likely no chance to meet him or her _____, and therefore, the celebrity has almost nothing to do _____ life. The very instinct that _____ our ancestors to share information about their community members now _____ you to push the share _____ about celebrity gossip. However, if you know that this is a malfunction of your mind, you can better _____. Next time you feel like tapping the link to a _____ gossip, talk to yourself, "This is just my hunter-gatherer brain malfunctioning. _____ no gain—only _____—from consuming this information, why should I learn it?"

We often witness celebrity scandals and gossip circulated on social media platforms. This kind of information is like junk food for the brain. Despite knowing that it is a waste of time and is emotionally draining, why do humans tend to be attracted to such information? The answer may lie in the hunter-gatherer lifestyle of our ancestors, which largely shaped our instincts. Until 13,000 years ago, all humans were living in a small band of around 150 people. Everyone knew each other, and there were no such things as celebrities who were known one-sidedly by many. Also, internal information sharing was crucial for a tribe to operate effectively. Negative information was particularly important to avoid potential threats and conflicts. In a small band, it was vital to know who was ill, who was committing wrongdoing, and who was in conflict with whom. As a result, Homo sapiens have evolved with a built-in impulse to learn and share information about acquaintances, especially negative ones. The problem is that this tribal instinct sometimes backfires today. Your instinct doesn't understand the fact that the celebrity on the screen is not an acquaintance of yours, there is most likely no chance to meet him or her in person, and therefore, the celebrity has almost nothing to do with your life. The very instinct that prompted our ancestors to share information about their community members now prompts you to push the share button about celebrity gossip. However, if you know that this is a malfunction of your mind, you can better deal with it. Next time you feel like tapping the link to a trivial gossip, talk to yourself, "This is just my hunter-gatherer brain malfunctioning. If there is no gain—only harm—from consuming this information, why should I learn it?"

scandal	スキャンダル、不祥事	crucial	極めて重要な
gossip	ゴシップ、うわさ話	wrongdoing	不正行為、悪事
drain	疲れさせる、消耗させる	impulse	衝動、本能
ancestor	祖先	backfire	裏目に出る
hunter-gatherer	狩猟採集民	acquaintance	知人
band	集団、小集団	malfunction	機能不全、誤作動

Navigating the Age of Information #3

Since the rise of web media, every single citizen can be an active _____ the information. Those who had distrust of the traditional media, in particular, _____ the _____ of information, and they are willing to seek out information _____ and uncover the _____. But can we really celebrate it? One of the most important insights about human nature in this information age is that we _____ confirmation bias. Confirmation bias is our psychological tendency to search for or _____ information _____ your existing belief, and overlook or _____ against your opinions. This is also called “_____ reasoning,” indicating our desire to _____ look for information that justifies what you want to believe. Therefore, when we _____ gathering information _____, we may already be _____. If you just _____ to protest that you are gathering information fairly and correctly, you might already be caught in confirmation bias. Your mind tried to _____ the inconvenient information that _____ your _____ identity as an information-_____ person. _____ the situation even worse is a phenomenon called “the _____” on social media. To _____ its audience, social media algorithms are designed to show you only the posts you might like. As a result, your information environment _____ being occupied with opinions you agree with. Much like eating only sweets _____ physical health, we need to _____ the consequences of _____ to _____ information. In order to stay _____, open-minded, _____, and worthy of respect, we need to be exposed, _____, to opposing viewpoints and _____. It may feel uncomfortable at that moment, but in the _____, _____ to be good for you.

Since the rise of web media, every single citizen can be an active sender and receiver of information. Those who had distrust of the traditional media, in particular, celebrated it as the democratization of information, and they are willing to seek out information on their own and uncover the untold truth. But can we really celebrate it? One of the most important insights about human nature in this information age is that we possess confirmation bias. Confirmation bias is our psychological tendency to search for or interpret information that supports your existing belief, and overlook or ignore elements against your opinions. This is also called “motivated reasoning,” indicating our desire to selectively look for information that justifies what you want to believe. Therefore, when we set about gathering information ourselves, we may already be prejudiced. If you just felt an urge to protest that you are gathering information fairly and correctly, you might already be caught in confirmation bias. Your mind tried to ignore the inconvenient information that threatened your sense of identity as an information-literate person. What makes the situation even worse is a phenomenon called “the filter bubble” on social media. To entice its audience, social media algorithms are designed to show you only the posts you might like. As a result, your information environment ends up being occupied with opinions you agree with. Much like eating only sweets leads to poor physical health, we need to reflect on the consequences of constant exposure to pleasant information. In order to stay humble, open-minded, balanced, and worthy of respect, we need to be exposed, at least occasionally, to opposing viewpoints and different values. It may feel uncomfortable at that moment, but in the long run, it proves to be good for you.

democratization	民主化	selectively	選択的に
distrust	不信、不信任	prejudiced	偏見をもった
uncover	暴く、明らかにする	filter bubble	フィルターバブル
confirmation bias	確認バイアス	entice	引きつける、誘惑する
tendency	傾向	exposure	接触、触れること
motivated reasoning	動機づけられた推論		

Navigating the Age of Information #4

_____ of the Internet and social media, cancel culture and public backlash have become increasingly _____. What we need to know about the Internet _____ information literacy is that extreme and aggressive people are _____, but, in fact, very small in number. First of all, one would not dare to _____ and energy to share one’s view _____ a quite strong opinion or _____ for a certain topic. This creates a dynamic in which the online space—_____—_____ toward more extreme distribution of opinions than in reality. _____ participants are likely to be excluded. Also, if we _____ a hundred critical posts on a particular subject, we might conclude that the entire society has the same view, but it is an illusion. According to a study _____ public _____, only one out of every 70,000 users _____ the firestorm. Still, if the total online population _____ ten million, the _____ would _____ more than a hundred people making _____. Furthermore, it is not uncommon for this tiny minority to post _____ and _____. For example, when a journalist’s blog received more than 700 negative comments, a check of the IP addresses _____ that only four users were behind them. In short, participants of the online backlash are often a tiny minority, and the most extreme _____ fewest people in that minority are creating the illusion of extreme public opinions. If your social media _____ is _____ hundreds of negative comments every day, it would _____ the whole world is against you, but, in reality, they are only a few. The _____ of online voices can be _____. Marcus Aurelius wrote in *Meditations*, “Is it possible that shameless people do not exist in the world? It is not possible. Then, do not _____ impossible. This person is also _____ shameless people who must be in the world by necessity.” Obviously, _____ unacceptable to speak in person, we must not say it on the Internet either. Also, the pain and suffering of those who become the target of online _____ is _____. At the same time, however, it is unrealistic to hope that such people do not _____. Here are two things we really need to do: try not to lose our _____ by being influenced by them; and be reminded that they are extremely small in number and therefore do not _____ the general public.

With the growth of the Internet and social media, cancel culture and public backlash have become increasingly prominent. What we need to know about the Internet in terms of information literacy is that extreme and aggressive people are conspicuous, but, in fact, very small in number. First of all, one would not dare to spend time and energy to share one’s view unless they have a quite strong opinion or motives for a certain topic. This creates a dynamic in which the online space—at least among vocal participants—skews toward more extreme distribution of opinions than in reality. Moderate participants are likely to be excluded. Also, if we witness a hundred critical posts on a particular subject, we might conclude that the entire society has the same view, but it is an illusion. According to a study on a certain public backlash, only one out of every 70,000 users took part in the firestorm. Still, if the total online population reaches ten million, the ratio would yield more than a hundred people making hostile remarks. Furthermore, it is not uncommon for this tiny minority to post obsessively and repeatedly. For example, when a journalist’s blog received more than 700 negative comments, a check of the IP addresses revealed that only four users were behind them. In short, participants of the online backlash are often a tiny minority, and the most extreme yet fewest people in that minority are creating the illusion of extreme public opinions. If your social media account is flooded with hundreds of negative comments every day, it would seem like the whole world is against you, but, in reality, they are only a few. The volume of online voices can be deceptive. Marcus Aurelius wrote in *Meditations*, “Is it possible that shameless people do not exist in the world? It is not possible. Then, do not require what is impossible. This person is also one of those shameless people who must be in the world by necessity.” Obviously, if it is unacceptable to speak in person, we must not say it on the Internet either. Also, the pain and suffering of those who become the target of online outrage is immeasurable. At the same time, however, it is unrealistic to hope that such people do not exist at all. Here are two things we really need to do: try not to lose our conscience by being influenced by them; and be reminded that they are extremely small in number and therefore do not represent the general public.

backlash	反発、激しい反動	illusion	幻想、錯覚
prominent	目立つ、顕著な	ratio	比率
conspicuous	目立つ、顕著な	obsessively	執拗に
motive	動機	hostile	敵意のある
skew	偏らせる	deceptive	誤解を招く
moderate	穏健な	conscience	良心

Navigating the Age of Information #5

Human society in the 21st century is _____ an _____ volume of information—both true and false, valuable and worthless. How can we _____ the _____ and get close to a correct understanding of things? A French economist and political adviser Jacques Attali defined the truth as follows: the truth is merely a _____ among sincere experts who are independent _____ and socially _____, and the more experts, the better. First, why should _____ experts? For example, is it possible for a single individual who does not belong to a _____ institution to _____ a _____ necessary _____ to know whether the global temperature is increasing? How could an ordinary citizen engage in tasks such as _____ Antarctic _____ to analyze _____, or examining tree rings _____ the _____ to reconstruct climate _____? Also, when a _____ politician is _____, if all citizens _____ their work and homes and begin an investigation on the issue, the society would not function. This approach— that since experts and the media cannot be trusted, individuals who make the effort themselves can find the truth— may sound scientific and independent, _____ impossible in reality. Then, the experts must have integrity and independence _____ power. They have to work for the _____ and the truth, rather than their own _____ interests. For example, the truth should not be _____ by the _____ of a _____ who wants to prioritize the economy over the environment. Politics and the truth are two _____ things, so it is a possible _____ that we recognize that the climate is changing _____ prioritizing _____ prosperity and abandoning environmental measures. Experts need to be independent even from the _____ of the _____. Even if the majority of the residents want to believe in the story that humanity _____ a _____ ancestors, experts should not _____ the fact that humans _____ from apes as archaeological and biological evidence _____. Why are more experts better? Not all experts have _____, and all of them are potentially _____. _____ is that the system _____ other experts to point out mistakes when a fellow specialist makes a _____ argument. Most importantly, the truth is a _____. The truth is an explanation that _____ from the largest group of experts at the time, and it is always ready to be updated. The objective universal truth may exist, but _____ a limit to how precisely humans can _____. The truth as we perceive it is dynamic, constantly shifting, and being _____. Perhaps the most _____ in the 21st century is flexibility to always abandon and update the beliefs we _____ yesterday.

Human society in the 21st century is inundated with an enormous volume of information—both true and false, valuable and worthless. How can we separate the wheat from the chaff and get close to a correct understanding of things? A French economist and political adviser Jacques Attali defined the truth as follows: the truth is merely a provisional consensus among sincere experts who are independent from power and socially accepted, and the more experts, the better. First, why should it be by experts? For example, is it possible for a single individual who does not belong to a research institution to conduct a series of necessary investigations to know whether the global temperature is increasing? How could an ordinary citizen engage in tasks such as drilling Antarctic ice cores to analyze ancient atmospheric components, or examining tree rings across the globe to reconstruct climate patterns? Also, when a certain politician is suspected of corruption, if all citizens neglect their work and homes and begin an investigation on the issue, the society would not function. This approach— that since experts and the media cannot be trusted, individuals who make the effort themselves can find the truth— may sound scientific and independent, but it is impossible in reality. Then, the experts must have integrity and independence from power. They have to work for the common good and the truth, rather than their own personal interests. For example, the truth should not be distorted by the motive of a person in power who wants to prioritize the economy over the environment. Politics and the truth are two separate things, so it is a possible scenario that we recognize that the climate is changing while prioritizing immediate prosperity and abandoning environmental measures. Experts need to be independent even from the will of the majority. Even if the majority of the residents want to believe in the story that humanity originated from a certain pair of ancestors, experts should not twist the fact that humans evolved from apes as archaeological and biological evidence suggests. Why are more experts better? Not all experts have integrity, and all of them are potentially fallible. What matters is that the system allows other experts to point out mistakes when a fellow specialist makes a flawed argument. Most importantly, the truth is a provisional consensus. The truth is an explanation that earns approval from the largest group of experts at the time, and it is always ready to be updated. The objective universal truth may exist, but there is a limit to how precisely humans can perceive it. The truth as we perceive it is dynamic, constantly shifting, and being revised. Perhaps the most important ability in the 21st century is flexibility to always abandon and update the beliefs we held until yesterday.

inundated	あふれた、氾濫した	integrity	誠実さ、高潔さ
separate the wheat from the chaff	良し悪しを見分ける	corruption	腐敗、不正
provisional	暫定的な	distorted	歪められた
consensus	合意、共通認識	fallible	誤りうる
sincere	誠実な	flawed	欠陥のある
independent	独立した	flexibility	柔軟性