

INSPIRE YOUTH JOURNAL



The John Locke Institute, which organizes one of the world's most prestigious essay competitions, described the publication of their alumni's articles in Inspire Youth Journal as a "success" and a "fantastic achievement."

The 27th Edition

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EVOLUTIONARY DEAD END: A NATURAL OCCURRENCE OR A WAKE-UP CALL?

Ngoc Minh Le

There are thousands of different species with diverse characteristics and habitats. If we map all fauna and flora, a gigantic family tree will form, beginning with a common ancestor and spreading widely with branches of species. However, some branches in this family tree may reach a “brick wall” and disappear completely.

Brief explanation on evolutionary dead end:

The phenomenon itself has a name: an evolutionary dead end. When referring to dead ends, one would imagine a road with a huge brick wall waiting for them in adventurous films. An evolutionary dead end demonstrates the same thing; for that specific species, there is no choice, unlike action movie protagonists, but to gradually become extinct under the unpredictable forces of the elements.

It is crucial not to mistake an evolutionary dead end with an evolutionary continuum. On the one hand, in the evolutionary continuum, significant changes to a species throughout geological time are required for it to be classified as a different species from the next earliest representative of its lineage. The GPS Pigeon, in which another branch evolved so distinctively that it split into two species, is a notable instance of this type of evolution. An evolutionary dead end, on the other hand, occurs after dead-end extinctions or the end of an evolutionary lineage. Paleontologists discovered amusing dead branches of evolution, such as the hybrid eel, whose population prevented it from further existence.

How paleontologists identify dead branches of evolution

To discover dead links in a family tree of thousands of branches, scientists have developed several effective methods, including (1) finding and identifying transitional fossils and (2) examining DNA and genetic material:

(1) Transitional fossils, which appeared with structural features between two major groups of organisms, play a key role in determining the types of existence of the studied species. Depending on the variety and structure of such a species' fossils, paleontologists can identify whether that species is a dead branch of evolution.

(2) DNA and genetic material examination cast a new light on species classification and identification. For evolution's dead branches, materials are found in ancient skeletons or fossils, which can contribute to the genetic makeup or sequence of DNA samples in the scientist's identification process of that species.

Putting both together, those with fewer fossils in variety and number, hence, a unique genetic makeup that does not relate to other followings of one genus, might have experienced a dead-end extinction.



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Factors causing the evolutionary dead end:

Evolutionary dead-end strategies are characterized by short-term productivity benefits and long-term evolutionary costs. A combination of evolutionary dead-end strategies is integrated, rather than acting as a sole contributor, to cause an evolutionary dead-end. In this section, we will discuss two main evolutionary dead-end strategies: ecological specialization and sudden environmental changes.

Every animal has its own traits and characteristics, and relying on past experiences and evolutionary lessons, it will spend time and energy specializing and enhancing these ecological traits. Nevertheless, there is a saying: "Excess of anything is not good"; this saying is true to the high costs of general specialization. Take extreme sexual dimorphism in several male ostracod species, for example. In a recent study by the ecologist Fernandes Martins and her colleagues published in Nature, it was mentioned that "extinction rates in ostracods with the most pronounced sexual dimorphism of this type were 10 times higher than those with the least pronounced dimorphism." Such rates may lead to the evolutionary dead end of this specific type of ostracod. Not only morphological specialization, but also other kinds of specialization are likely to suffer from the same fate.

Scientists from the Muséum National d'Histoire Naturelle in Paris have recognized that "there is already a worldwide decline in specialist species as a consequence of human impact."

To further accelerate this process, sudden environmental changes from the elements pose a threat to specialized species. Temperature changes, water chemistry, habitat reduction, etc., are external factors leading to an evolutionary dead end. So abruptly do these changes occur that species, especially specialized ones, cannot adapt in time to survive, which disrupts the overall population of species, especially specialized ones. Certain events can also result in an evolutionary dead end, such as mass extinction events.

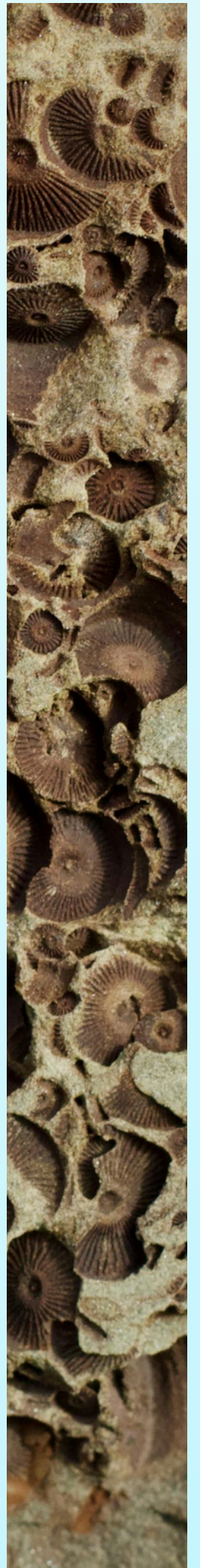
A wake-up call to humanity

In the past, evolutionary dead ends were merely considered natural phenomena, a misfortune for unlucky species. However, human activities are similar to "catalysts" in a chemical reaction. Our contributions to global warming have caused climate change and habitat loss. Deforestation, acid rain, and high greenhouse gas emissions indirectly disrupt the surrounding environment, which inadvertently increases the probability of an evolutionary dead end.

An evolutionary dead end is not merely a natural occurrence but a wake-up call to humanity to acknowledge its wrongdoings and save the world's biodiversity before it is too late.

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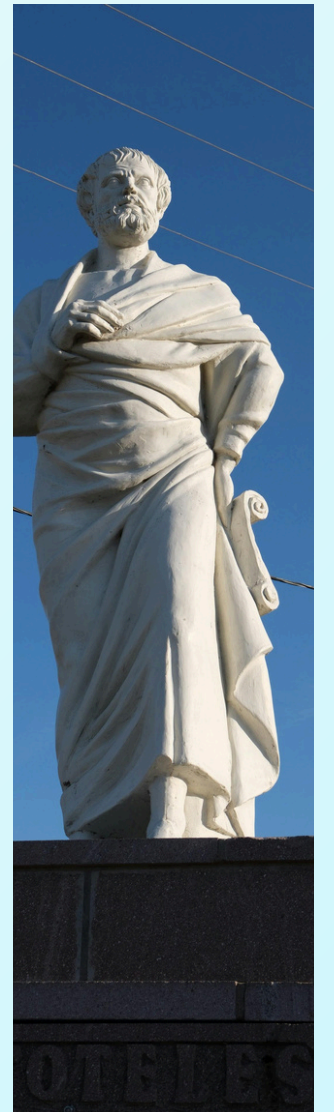
HOW DO DIFFERENT CULTURES UNDERSTAND A HAPPY LIFE?

Linh Nguyen Dieu

Happiness is often one of the most significant goals in human life. The truth is that people everywhere enjoy pursuing joy, satisfaction, and a sense of fulfilment. However, the meaning of happiness can vary greatly from culture to culture, making the idea of happiness increasingly diverse and expansive. Recognising the importance of this emotion, the United Nations officially established the International Day of Happiness, which is organised every year on March 20th. The organisation describes happiness as a fundamental human goal and encourages governments and communities to pay attention not only to national economic development but also to people's well-being. Yet, in an era of shifting social values and deep-rooted traditions, pinning down a single definition for "happiness" remains a challenge.

According to the World Happiness Report, Finland has the number one position in the ranking of the happiest countries in the world. This partly demonstrates that its people are living incredibly happy lives. However, if you walked down a street in Helsinki, you might not see many smiles. Finns are famously reserved, yet their high life satisfaction stems from something deeper than outward cheerfulness.

The World Happiness Report does not measure happiness by the outward cheerfulness of people from different countries. Instead, the researchers focus on deeper aspects of life satisfaction. They primarily analyse several factors, including social support, income levels, health, personal freedom, generosity, and the absence of corruption. In addition, people from each country were asked to complete a survey rating their overall life satisfaction on a scale of zero to ten. These factors help create a broader picture of what it means to live a good life. This understanding of happiness is quite similar to the ideas of the ancient Greek philosopher Aristotle. For Aristotle, happiness was not a temporary feeling of pleasure or excitement. Instead, he believed that true happiness came from living a meaningful and virtuous life. He described this idea using the concept of eudaimonia, which is often translated as human flourishing or well-being. In this sense, happiness is not simply about experiencing positive emotions but about building a fulfilling life over time. Furthermore, in many communities across Southern Africa, people follow the philosophy of Ubuntu, which can be translated as "I am because you are". According to the philosophy of Ubuntu, a person's happiness cannot exist independently of others. Kindness, compassion, and cooperation are considered essential values for building a harmonious society. In addition, influential leaders such as Nelson Mandela and Archbishop Desmond Tutu helped popularise this idea by encouraging people to see themselves as part of a larger human family. Similarly, in Japan, happiness is often connected to the cultural philosophy of omotenashi, which is usually understood as hospitality. Omotenashi encourages people to care for others with sincerity and attention to detail. In daily life, this principle manifests through straightforward behaviors, including bowing as a sign of respect during greetings, presenting small tokens of appreciation to neighbors, and prioritizing the comfort and welcome of guests. Distinct from service motivated by gratuities or external incentives, omotenashi embodies authentic benevolence and thoughtfulness toward others. Another interesting example is Denmark, which is a country that consistently ranks among the happiest in the world. One important cultural concept there is hygge, a word that describes a feeling of coziness, comfort, and peaceful togetherness. Hygge may involve spending time with family, sharing a meal with friends, or simply enjoying a quiet evening at home. Rather than seeking excitement or luxury, the Danish approach to happiness focuses on simple pleasures and meaningful social connections.



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These perspectives have illustrated an important truth, which is that happiness is not only about personal feelings but also about relationships and community. When people feel supported, respected, and connected to others, they are more likely to experience a sense of well-being. Moreover, research has also shown that happiness brings many benefits to individuals and society. The results of these studies have shown that people who maintain a positive outlook on life are more likely to adopt healthy lifestyles and remain physically active. Additionally, happiness can also improve productivity in the workplace and enhance creativity and problem-solving abilities. Furthermore, happy individuals tend to communicate more effectively and build stronger relationships with family, friends, and colleagues.

Despite these benefits, the idea of happiness can still be difficult to define.

Some cultures value calmness and contentment, while others emphasize excitement and achievement. People often evaluate their happiness based on what they believe a good life should look like.

Finally, happiness is a complex and deeply personal experience. While global reports and scientific studies provide useful insights, they cannot fully capture the richness of human emotions and cultural traditions. What we can learn from exploring happiness around the world is that there is no single path to a happy life. Different cultures may define happiness in different ways, but most cultures share a common belief that happiness is cultivated through kindness, connection, and a sense of belonging.

In the end, happiness may not just involve smiling more or feeling joyful every day. Instead, it is found in the way we build meaningful lives where individuals feel connected, supported, and valued. For happiness to truly flourish, people must continually develop themselves while nurturing compassion, understanding, and a spirit of sharing. When these positive values spread within communities and across the world, humanity can work together to create a happier and more sustainable life for all.

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PRECISION MEDICINE AT THE NANOSCALE: THE ROLE OF NANOTECHNOLOGY IN TARGETED DRUG DELIVERY

MD ALID BHUIYAN

Today, medicine has advanced significantly in the management of many diseases. However, one of the problems that has continued to persist is how to target the site where the drug is needed. In conventional medicine, the use of medication or injections ensures that the medicine is distributed throughout the body. However, this does not target the site where the medicine is needed. As a result, the medicine may not work as desired, leading to adverse effects. In addressing the challenge of medicine delivery, the use of nanotechnology has been adopted.

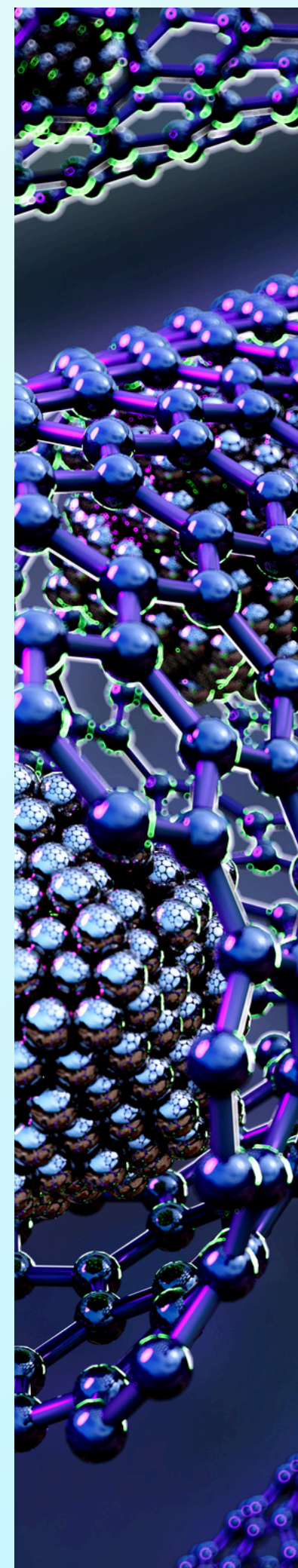
Nanotechnology is a growing field that is offering solutions to the challenges that have been encountered.

Nanotechnology is a technology used to manipulate and engineer materials at a nanoscale level, ranging from 1 to 100 nanometers. This is an extremely small level of material, and at this level, materials are known to have unique physical and chemical properties that are very different from those of larger materials. This allows researchers to develop nanoparticles that are capable of carrying drugs through the bloodstream without any degradation and then delivering them to the target site of disease. This has given nanotechnology a new role in helping to improve medical treatments.

One of the most important applications of nanotechnology is its use in cancer treatment. Chemotherapy drugs, for instance, are distributed throughout the body and target rapidly reproducing cells, both cancerous and non-cancerous. This nonspecific nature of the drugs often results in severe side effects, such as fatigue, nausea, and weakened immunity. Nanotechnology-based drug delivery systems have the potential to solve the problem. Nanoparticles, for instance, can be designed to have special molecules attached to their surfaces, which have a strong binding affinity for cell membrane receptors. These receptors are often present on the surfaces of cancer cells. Once the nanoparticles come into contact with the cancer cells, they release their drug payload into the cancerous environment, maximizing the effectiveness of the treatment and protecting the surrounding non-cancerous tissues.

Currently, there are a number of nanoparticles that are under investigation for use as nanocarriers for targeted drug delivery. Liposomes are one of the earliest nanoparticles to be used for this purpose. These are microscopic vesicles consisting of a lipid bilayer. Due to their membrane-like structure, liposomes are capable of carrying drugs and delivering them safely within the body. Another class of nanocarriers for targeted drug delivery includes polymeric nanoparticles. These are composed of biodegradable material, which allows for the controlled release of drugs. This allows for the maintenance of therapeutic levels of drugs for a long time.

Metallic nanoparticles, such as gold nanoparticles, have also emerged as an area of research due to their multifunctional characteristics. Apart from drug delivery, these particles have the ability to conduct medical imaging and photothermal therapy. In photothermal therapy, gold particles accumulate in the tumor region, where light is converted to heat, resulting in the destruction of cancerous cells. This process does not harm normal cells, thereby showing the promising capabilities of nanotechnology in developing a multifunctional drug delivery system.



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Besides cancer therapy, targeted nanomedicine is also being investigated for other diseases such as infections and neurological disorders. For instance, nanoparticles are being used to target bacterial infections with antibiotics. This will allow the antibiotic to more effectively penetrate bacterial biofilms that are resistant to antibiotic treatments. Furthermore, nanocarriers may also allow drugs to cross the blood-brain barrier. The blood-brain barrier is a highly selective membrane that prevents drugs from entering the brain. This may be a very useful tool in treating other diseases such as Alzheimer's and Parkinson's.

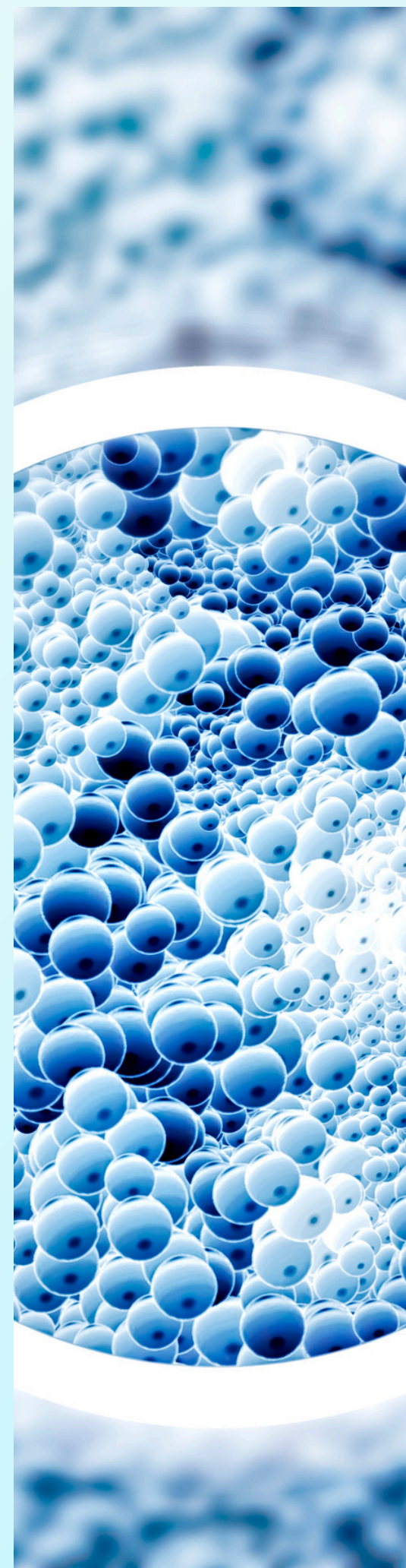
Despite these encouraging advances, several challenges are associated with nanotechnology-based drug delivery systems. Firstly, there are concerns about the toxicity and long-term effects of nanoparticles in the human body. Due to their extremely small size, nanoparticles can accumulate in the body or react with the body in ways that are not yet well understood. Therefore, it is necessary to carry out thorough investigations to determine the safety of nanoparticles and to ascertain that they are compatible with the human body and can be broken down by the body. In addition, the large-scale production of nanomedicine drugs can be costly.

However, ongoing breakthroughs in materials science, biotechnology, and biomedical engineering continue to overcome these limitations. More intelligent nanoparticles, for instance, are being designed to react to environmental stimuli, e.g., pH levels, temperature, or the presence of specific enzymes associated with diseased tissues. These more targeted nanocarriers enable more precise treatment by releasing drugs only when a particular biological condition is present.

In conclusion, nanotechnology has the ability to revolutionize contemporary medicine by changing the way drugs are delivered in the human body. This is achieved by drug delivery, where the efficacy of drugs can be improved and, at the same time, minimize the adverse side effects that accompany traditional drugs. Even though there are challenges that need to be addressed, nanotechnology is sure to have an important place in the future of medicine.

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HUMAN GENOME EDITING: PROMISE AND ETHICAL CHALLENGES

Minh Thư Nguyễn

Contemporary biotechnological advancements have unveiled unprecedented opportunities for genetic modification, particularly through CRISPR-Cas9 technology. The profoundly controversial nature of human genome editing has precipitated intense philosophical debates among bioethicists worldwide. These revolutionary techniques enable scientists to manipulate hereditary material with surgical precision, consequently fundamentally altering humanity's evolutionary trajectory.

So, what exactly is CRISPR?

CRISPR, invented in 2012, is a powerful tool that allows researchers to control gene expression in plants, animals, and humans. It enables scientists to remove undesirable traits and introduce beneficial ones into the genome, thereby paving the way for new treatments for genetic diseases. Moreover, CRISPR allows for faster and more precise genetic modifications compared to earlier techniques.

It is indisputable that CRISPR gene-editing technology has undeniably marked a turning point in contemporary scientific research. One of the most significant advantages of this technology is that it holds great promise for the treatment and prevention of genetic disorders. This is because it enables scientists to precisely modify specific genes, thereby allowing for more targeted and effective medical interventions while reducing the likelihood of unintended side effects. As a result, patients can benefit from more efficient treatments that are not only highly accurate but also more cost-effective in the long run. Furthermore, this technology is poised to revolutionise multiple sectors beyond healthcare, as it can be applied in agriculture to improve crop resistance and productivity, as well as in biotechnology to accelerate scientific research and innovation.

Its advantages notwithstanding, the proposal remains controversial. A notable example is the case of Chinese scientist He Jiankui, who used CRISPR to create genetically modified babies resistant to HIV, sparking widespread ethical criticism. This highlights the potential misuse of gene-editing technology and the need for strict regulation. First of all, privacy can be violated when an individual's genetic information is collected or used by unauthorised individuals for various purposes. Additionally, editing the germline has sparked much controversy because these genetic changes can be passed on to future generations, while contemporary scientists still do not fully understand their long-term effects. Moreover, genetic technology can increase social stratification and inequality, as only those with financial means can access treatment or gene enhancement methods. Finally, the ability to create "designed humans" with pre-selected traits reduces genetic diversity and weakens the species' adaptability, raising ethical questions about human interference with natural laws.

To minimise potential risks in the future, governments and international organisations must establish clear legal frameworks and strict monitoring procedures for the use of this technology. For example, access to such therapies should be tightly controlled to prevent misuse and reduce social and economic inequalities, while long-term studies should be conducted to assess their potential impacts more thoroughly. Only through such measures can society fully harness the benefits of CRISPR without compromising ethical principles or public safety.



HUMAN GENOME EDITING: PROMISE AND ETHICAL CHALLENGES

Minh Thư Nguyễn

In summary, CRISPR technology raises serious ethical, social, and safety concerns, although it offers many significant prospects for improving healthcare and daily life. Therefore, its benefits can only be fully realised by minimizing potential risks through comprehensive regulation and safe application.

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YOUR ZIP CODE IS YOUR DESTINY: HOW GEOGRAPHY SHAPES ECONOMIC OPPORTUNITIES

Ayush Ranjan

On the same date and city, two children are born in proximity to each other in time. A child from a large suburban hospital at the north end of town and another from an insufficiently staffed clinic located downtown.

Although no decisions have been made by either child, nor have they spoken, as one is taking their first breath, the two children's lives have already diverged due to location.

The School Funding Paradox

In the US, public elementary and secondary education relies on local property taxes, resulting in a fundamental societal flaw - geographic differences in education quality. Areas with higher wealth levels tend to have greater property tax revenue and therefore have more money to allocate toward educational resources, teacher salaries, building renovations, and more courses offered and extracurricular activities available. In contrast, less affluent areas do not have enough resources to adequately fund their education systems, and therefore, cannot adequately pay their teachers.

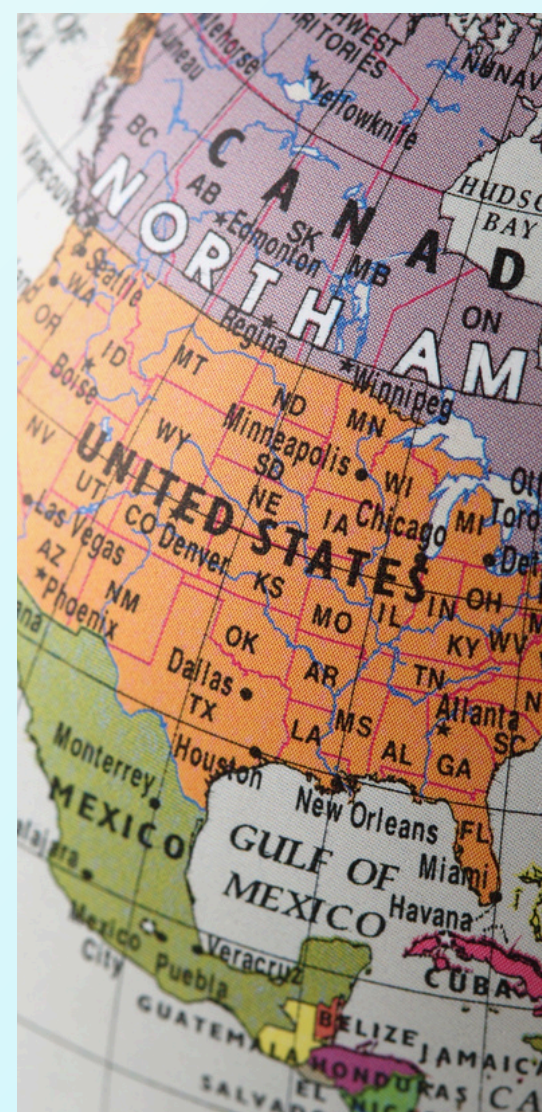
This reinforces a continuing cycle of education, where a community's wealth will bring families into the community who can afford to live there, and the families live in expensive homes that have a higher tax base, which continues this cyclic process. As noted by Darling-Hammond (2010), this cycle will be difficult to break from within the system itself.

The average national spending per student in public elementary and secondary education is approximately \$13,000 per year. However, this statistic includes a broad range of variance. For example, some school districts spend about \$25,000 per student, whereas other school districts spend \$7,000 per student; however, both of these districts can be located in the same metropolitan area (National Center for Education Statistics, 2022).

The Geography of Opportunity

Economically based workforce or job opportunities tend to be geographically concentrated. Industries like finance, technology, and healthcare tend to congregate in specific metros, which brings jobs and people into a somewhat smaller area if scaled. For young and emerging adults who grow up outside of these hubs, getting ahead often means leaving home. This relocation brings real costs: moving expenses and lost family support communities, and the burden falls the biggest on families with limited resources.

Research conducted by Dr. Raj Chetty, William A. Ackman Professor at Harvard and Opportunity Insights, demonstrates that the geography in which a child is raised is the biggest predictor of their long-term economic success, more than almost any other factor, including inherent intelligence and motivation (Chetty, 2014). Some counties or localities may be considered "economic escalators", others are viewed as "economic traps", depending on local policies that have been in place for years or even decades before the child's birth.



YOUR ZIP CODE IS YOUR DESTINY: HOW GEOGRAPHY SHAPES ECONOMIC OPPORTUNITIES

Ayush Ranjan

The Historical Architecture of Inequality

This geography did not emerge on its own. It was built over time. Ranging from the 1930s until the 1960s, redlining (a federally sanctioned practice of denying mortgages and financial services to residents of Black neighborhoods) blocked wealth accumulation in certain communities (Rothstein, 2017). This exclusion hindered the progression of Black business districts through the name of urban renewal.

This economic map that most Americans deal with today is, in many parts, the result of those decisions. This is not about handing blame to anyone, but rather about understanding that the playing field was designed on purpose, meaning that it can be redesigned on purpose, too.

What Does Reform Actually Look Like?

Several policies have shown promise in this regard. The efforts aimed at improving the funding of schools at the state level, as well as the attempts to create more equitable funding rather than relying on local property values, have shown promise in states such as New Jersey and Massachusetts (Baker et al., 2020). According to the findings of Chetty et al, if poor children are moved to areas that provide access to opportunities by the time they are 13, they would be able to earn 35% more than poor children who did not experience the change (Chetty & Hendren, 2018). These statistics should clearly illustrate that if the environment is changed early enough, it would be able to create a significant and positive impact.

Some of the other positive policies that could be created in order to create equity (even though there are ongoing debates regarding the efficiency of these policies) include mixed-income housing, local investment programs, and public transportation that connects poor people with employment centers such as the Opportunity Zones.

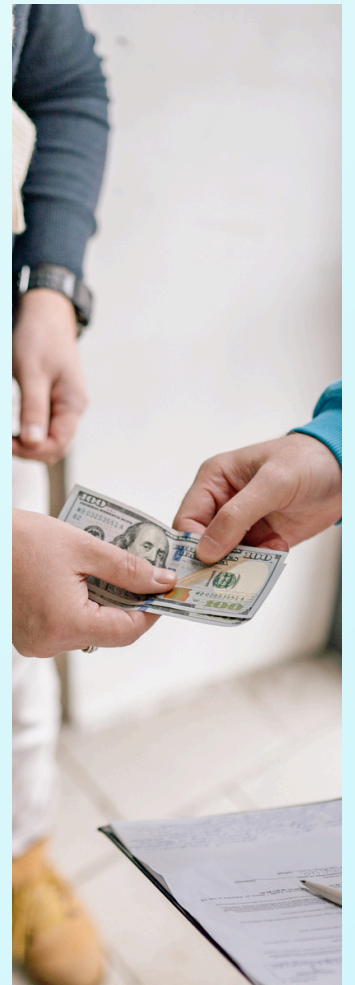
It must be noted that these policies may not be simple, inexpensive, or popular, but it is an advancement in the right direction.

A Deeper Analysis

The American promise has always been straightforward: work hard, play hard. This promise is worth taking seriously, which is why the zip code problem needs attention. This is not because the system is broken, but because inefficiency is bad economics regardless of the political stance.

When talent becomes wasted because a kid was born on the wrong side of town, that is a waste of human potential, of economic productivity, and of tax dollars spent on schools that don't deliver. A country that leaves promising people behind does not just fail those people; it deteriorates itself. From a practical standpoint, a more economically mobile society makes more entrepreneurs, more taxpayers, more inventors, and less dependence on the government.

None of this needs the belief that the system is broken or that individual effort does not matter; it really does. This requires accepting that society gets bigger returns when the starting conditions are less arbitrary. Fixing the zip code problem isn't about giving handouts. It's about making the competition more fair so that everyone can reach their true potential, regardless of where they were born or where they came from.



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LOST MEMORIES: CAN THEY STILL INFLUENCE US?

Hoang Bao Tran Luong

Is it true that when we forget about something, it will be deleted completely from our brain, and we will no longer be affected by it?

The Brain's Hidden Archive

In neurology, the hippocampus and amygdala are crucial components of the brain system. While the hippocampus is the storage of contextual, spatial, and temporal information, the amygdala manages human emotion and reaction. Noticeably, Bechara and colleagues had an important finding about the working mechanism of these components. In fact, patients with a damaged Hippocampus may forget the event itself, yet their body still exhibits an emotional reaction (like fear) because the amygdala remains functional. Regarding patients with a damaged amygdala, they can remember the information and events, but do not have any reaction towards the situation.

The effect of "infantile amnesia."

What is interesting is the fact that, normally, we cannot remember anything in our first three years of life. However, it does not mean that they do not matter.

According to the Center on Developing Child of Harvard University, human brains are built over time, forming simple neural connections before forming more complex circuits. It is during those first years of life that our brains are most active in establishing neural connections, though new connections can be formed in later years. During the infantile periods, the supervisors play an important role. The interaction between the baby and caregiver is one of the most influential elements in the process of developing the brain. Without it, the baby will suffer from long-term problems related to their behavior, health, and the ability to learn, though they do not remember any of these early life events.

The effect on daily life

"Memories do not need to be consciously retrieved to influence our behavior." This is the confirmation of Chris Simms in the article "Lost memories can still influence you," published in ScienceDirect. Interestingly, our brain continuously analyses and compares situations we face with those in the past, including those that we forget, before making the final decision.

We might have asked ourselves some questions, such as "What is wrong with me?" or wondered why we acted like that. Under these circumstances, it is important to realize our actions are also formed from the data that has been forgotten. If we were left alone and feeling afraid in a spacious place without anyone when we were a child, we might still feel like that when being left in a similar situation when we grew older.



LOST MEMORIES: CAN THEY STILL INFLUENCE US?

Hoang Bao Tran Luong

Conclusion: Moving Forward with Understanding

If we forget something, it does not mean that the event will totally leave our lives unaffected. Our experience in the past might not be consciously retrieved, but it will create the framework for our personality and social interaction. By understanding this scientific knowledge, we learn to be self-controlled. Whenever we face challenges that we do not know the reason for, remember that it could be the result of our experience in the past. Therefore, we can try to get over it instead of avoiding it.

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BECOMING THE SCIENTIST OF YOUR MIND: METACOGNITION IN LEARNING (LESSONS FROM THE OLYMPIC CHAMPION EILEEN GU)

Hiếu Trần

Eileen Gu—an Olympic champion freestyle skier, a fashion icon, and a global role model—recently impressed everyone around the world with her incredible performance at the women’s freestyle skiing halfpipe final at the Winter Olympics 2026, winning a gold medal. Behind her success in multiple fields is a powerful method to train the brain, which she has shared in the Olympics interview. When a reporter asked her to ‘take them into her brain’, she shared: “I spend a lot of time in my head, and it’s not a bad place to be. I journal a lot. I break down all of my thought processes. I think I apply many analytical lenses to my own thinking, and I kind of modify it.” The powerful practice she talked about is called metacognition.

So, what is metacognition?

This psychological term was given by American developmental psychologist John H. Flavell (1976). Basically, metacognition can be commonly understood as ‘thinking about our thinking,’ but it is much more complicated than that. In general, metacognition consists of the awareness of our thought processes, the understanding of patterns behind them, and self-regulation.

Turning back to Eileen Gu’s interview, she shared about the importance of our thoughts and their impact on our true selves in real life: “You can control how you think, and therefore you can control who you are... with neuroplasticity on my side, I can literally become exactly who I want to be. How cool is that? How empowering is that, right?” When possessing metacognition, we have the ability to notice, analyze, comprehend, and even control our thoughts and emotions before letting them happen to us. Think of it as becoming the director of our mind.

Then, she also shared: “... But it’s not really like, in an egotistical kind of way. It’s in, like a tinkering, like a scientist kind of way. I’m always like trying to modify. I’m trying to think: How can I be better? How can I approach my own brain the way that I approach my craft of free skiing, so that I can be better tomorrow than I was today?” Imagine your mind as a laboratory and yourself as the scientist within it. With metacognition, instead of immediately becoming absorbed in conducting experiments, just as we naturally get carried away by our thoughts and emotions, you step back and observe first. The pause allows you to watch your thoughts unfold. From this distance, you begin to inquire—not as a critic asking, “Why did I get this wrong?” but as a scientist asking, “What mistakes did I make in solving this problem?” and “How can I improve my approach?” You then retain thoughts that align with your goals, refine them when necessary, and discard those that are unhelpful or irrelevant.

The relationship between metacognition and the academic success of students

Students who have metacognitive skills are able to be aware of how they learn, reflect on their performance, understand what caused their successes or failures, and make changes to their own learning behaviors to match their academic goals. Hence, it makes them study more efficiently and more effectively, and so they are able to make more progress. For example, students with metacognitive skills might recognize that they have trouble applying formulas in physics, then reflect on how they approach problems and the strategies used to solve them before. Therefore, they can assess whether they are working or not. If not, they will adjust or adopt new methods that better align with their thinking.



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One influential piece of research, conducted by Kazuhiro Ohtani and Tetsuya Hisasaka (2018), examines how metacognition, intelligence, and academic performance are related. Across studies, metacognition was found to be a significant predictor of academic success, even after controlling for intelligence. Notably, the relationship between metacognition and achievement is much stronger when metacognition is measured with more “in-the-moment” methods (such as think-aloud protocols or log file analysis) than with retrospective questionnaires.

How do you initialize and practice metacognition?

For practicing metacognitive skills, a three-step process can be adapted from Gibbs’ reflective cycle by focusing on describing the experience, analyzing one’s thinking and responses, and planning improvements for future learning.

Step 1: Observation and description

This stage is the first component of metacognition, which requires attention and awareness of both the external events and internal reactions. During every situation, ask yourself questions such as, “What was I thinking during the learning process?” or “What was the context (task, environment, challenge)?” or “What strategies did I use?” or “How did my brain approach new concepts?” By describing the situation objectively and acknowledging emotions, learners gain a clearer picture of how their thinking unfolded during the task.

Step 2: Evaluation and analysis

This stage emphasizes the deep understanding of our thought processes. To examine the learning process critically and identify what worked, what failed, and why. Some key questions to answer, including “Why did I use that strategy?” or “What parts of my approach were effective and not effective?” or “Why did the strategy succeed or fail?” or “What concepts or assumptions were incorrect?” This stage develops metacognitive monitoring and diagnosis. Learners move from simply noticing problems to understanding the causes behind them, often linking their experience to prior knowledge or learning strategies.

Step 3: Monitoring and planning

In this step, honest reflection is transformed into action for future improvement. To do this, you can answer the following questions: “What key lesson did I learn from this experience?” or “What should I do differently next time?” or “What specific strategy will I adopt to improve?” This stage strengthens metacognitive regulation, allowing learners to deliberately adjust their study strategies and optimize future performance.

Return to Eileen Gu

Gu’s success does not only come from her consistent effort but also from her ability to constantly evaluate and refine how she learns. By transforming repetitive practice into deliberate practice, she is able to reflect on and modify her strategies. In this framework, reflection is not an afterthought; it is the engine of intentional improvement. In the end, the lesson for everyone is that stopping ‘just doing’ and ‘start evaluating’ how we do will transform us from passive learners to purposeful coaches of our own potential.



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DO CASH TRANSFERS HELP OR HURT THE POOR, THE ECONOMY AND SOCIETY?

Linh Huynh

Rise of AI, rise of poverty

The rise of artificial intelligence (AI) has brought owners of technological capital assets disproportionately vast wealth at the expense of others. As generative AI can produce output at much lower costs, the bargaining power and wages of lower-skilled workers are being eroded. In response to the rising income inequality caused by AI, cash transfers are proposed as a solution to empower underprivileged communities.

From Constraint to Choice

Monetary stress induces short-term decision-making, trapping low-income groups in poverty. For instance, when paychecks are received, they may buy an excess of non-essentials, such as packet drinks, to ease the sense of scarcity. Such behaviour perpetuates the poverty cycle and compounds the financial stress, depriving the poor of the cognitive ability to engage in work and long-term decisions. By offering a safety net, cash transfers reduce such a 'scarcity mindset', allowing individuals to invest in long-term education or entrepreneurship. Research findings from Kenya showed that cash transfer increased household revenue by 26% and a psychological well-being index by 0.23 standard deviations.

In addition, cash transfers can strengthen workers' bargaining power. A guaranteed income floor reduces the need to resort to any available jobs to earn a livelihood, particularly for those with low-demand skills and who are vulnerable to technological displacement (Liu, 2026). This support empowers them to refuse exploitative employment conditions out of survival and to enhance working conditions.

However, when cash transfers are unconditional, whether beneficiaries invest their additional income effectively is not guaranteed. As such, many cash transfer programmes require recipients to attend vocational training courses or send children to school, nudging them towards behaviour deemed beneficial. Still, there is empirical evidence suggesting that low-income groups need not be conditioned to spend wisely, including not purchasing alcohol and cigarettes, and raising their living standards. In contrast, conditional cash transfers may incur higher monitoring costs and risk excluding some individuals due to means-testing and strict requirements.

Table 4: Occupational Choice, Hours, Earnings, and Wage Rates

	Overall		Wage Employment		Self Employment (Non-Ag)		Self Employment (Ag)	
	Hours (1)	Income (2)	Hours (3)	Income (4)	Hours (5)	Income (6)	Hours (7)	Income (8)
Long Term Arm	61.92 [67.8]	503.40 [314.8]	-99.85** [46.45]	-275.53*** [105.3]	95.70* [54.74]	692.69** [284.59]	66.07 [53.18]	4.99 [59.81]
Short Term Arm	110.23 [77.59]	671.60* [365.13]	-68.73 [47.18]	323.03 [217.4]	90.72** [45.69]	215.67 [285.76]	88.24** [40.92]	94.10* [52.68]
Lumpsum Arm	79.42 [78.02]	1274.80** [571.56]	-27.30 [40.01]	272.42* [149.54]	81.79 [51.89]	875.18* [520.79]	24.94 [37.81]	41.59 [50.11]
R-squared	0.13	0.03	0.11	0.03	0.04	0.01	0.12	0.05
Control Mean	2752.04	2517.63	1031.87	1478.71	522.78	589.43	1197.39	491.62
Control Median	2208.00	1097.09	240.00	211.93	0.00	0.00	848.00	201.52
p-value: ST = LT	0.57	0.65	0.56	0.00***	0.92	0.10	0.71	0.17
p-value: LT > ST	0.71	0.67	0.72	1.00	0.46	0.05*	0.65	0.91
p-value: ST = LS	0.73	0.31	0.36	0.80	0.88	0.20	0.15	0.41
p-value: LS > ST	0.63	0.15	0.18	0.60	0.56	0.10	0.93	0.80
p-value: LS = LT	0.83	0.10	0.13	0.00***	0.83	0.66	0.39	0.54
p-value: LT > LS	0.58	0.95	0.93	1.00	0.42	0.67	0.20	0.73
p-value: LT = ST = LS = 0	0.48	0.09*	0.15	0.00***	0.14	0.10	0.14	0.27
Observations	8300	8211	8300	8291	8300	8480	8300	8396

Columns (1), (3), (5), and (7) show total hours worked overall in the last 12 months on self-employed and wage work, wage work and, self-employed agricultural and non-agricultural work respectively. Col (2) shows annualized non-transfer income in USD. Col (4) shows earnings from wage work over 12 months. Col (6) and Col (8) show annual non-agricultural and agricultural enterprise profits in USD. All regressions include strata fixed effects. Standard errors adjusted for spatial autocorrelation are reported in brackets, with statistical significance denoted as: * $p < .10$, ** $p < .05$, *** $p < .01$.

Thinking Long Term: Work and Growth

Some are concerned that cash transfers reduce incentives to work. Although cash transfer may slightly reduce labour supply in the short run as individuals temporarily leave work and pursue education, data from the GiveDirectly pilot programme in Kenya shows that cash transfers do not appear to trigger drops in labour supply. Instead, it primarily leads to shifts in job choices.

Figure 1. Impacts on occupational choices with relatively unchanged total working hours in the Universal Basic Income (UBI) pilot programme in Kenya. (Banerjee et al., 2023)

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Linh Huynh

By protecting workers from survival-driven jobs, cash transfers may mitigate structural unemployment due to skills mismatch. As workers invest in upskilling, they can transition to roles that complement, instead of compete with, AI and automation. In the long run, such labour reallocation will drive productivity gains and supply-side economic growth.

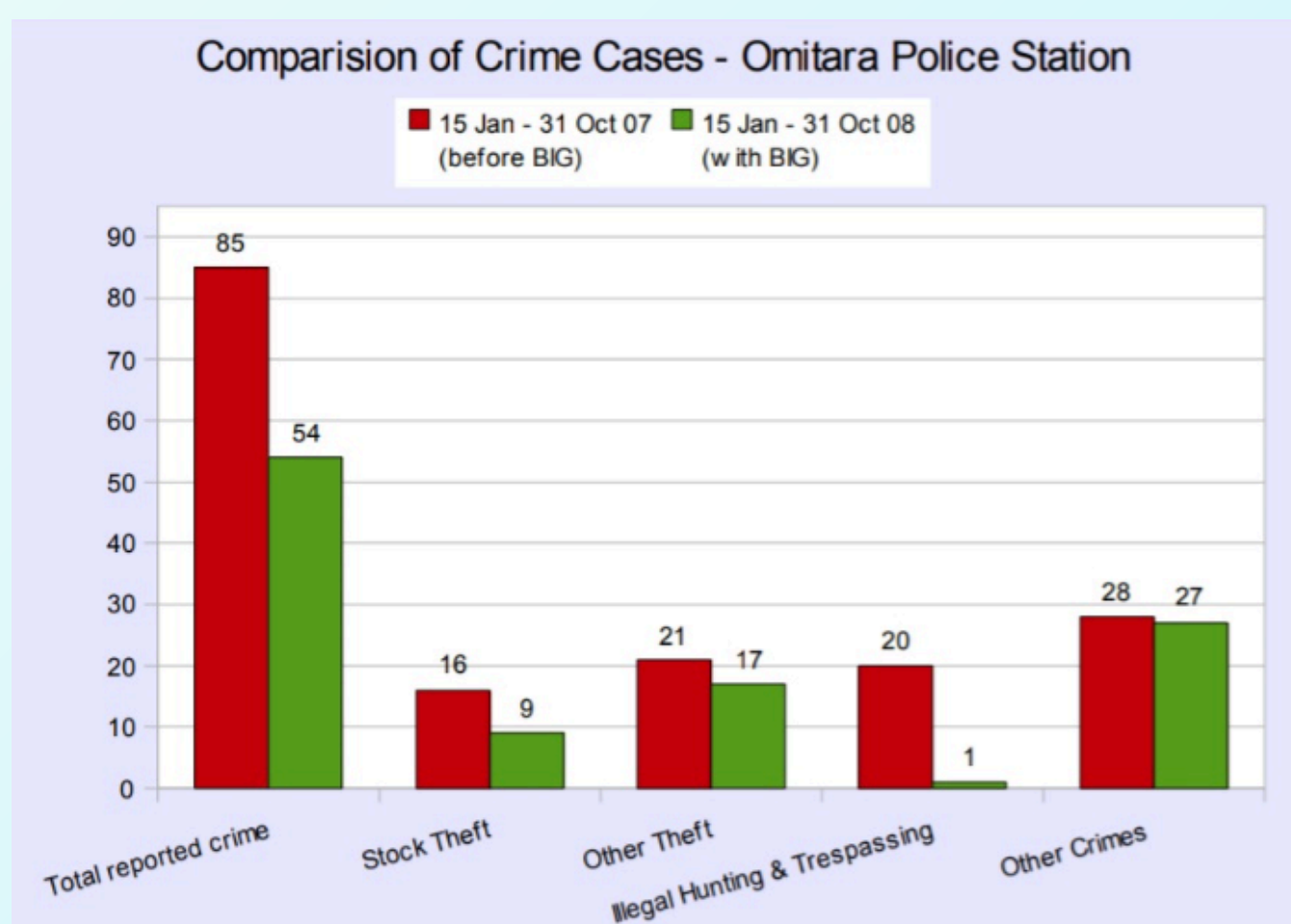
In highly unequal economies where income is concentrated among wealthy households with a lower marginal propensity to consume (MPC), aggregate demand is lowered. Economic growth is thus reduced despite a rise in productivity. By increasing poor households' disposable income, cash transfers can drive economic growth by boosting consumer spending. However, saving patterns also depend on cultural norms. In many collectivist societies, the savings rate is higher owing to cultural values. The lower spending rate in such contexts may consequently hinder the fiscal stimulus effects of cash transfer and demand-side economic growth.

Cohesion or Conflict? How Cash Transfers Shape Societies

Cash transfers may lead to social friction in some cultural contexts. In Asian cultures with a strong emphasis on self-reliance, public support for redistributive welfare is limited despite rising wealth disparity. Cash transfers thus risk undermining social harmony due to the perceived lack of fairness and deservingness.

However, cash transfer programmes recognise and remunerate socially valuable yet undervalued work in a market-based system, such as caregiving for children or elderly parents (Ward, 2021). Additionally, a full basic income that meets subsistence needs can reduce crime rates committed out of poverty. For example, a Universal Basic Income (UBI) pilot programme in Namibia, where around two-thirds of the population lived below the poverty line, reported a substantial drop in crime rate.

Figure 2. Reduced crime rate in Namibia UBI pilot programme (Basic Income Grant Pilot Project)



The Way Ahead

In conclusion, while cash transfers offer a solution to technological inequality and job displacement in the age of AI and automation, it is by no means 'one-size-fits-all'. Nuanced policy design in accordance with context-specific socioeconomic characteristics is thus the key to achieving long-term equity and economic growth without fracturing social cohesion in this digital age.

DO CASH TRANSFERS HELP OR HURT THE POOR, THE ECONOMY AND SOCIETY?

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SMALL BUT TERRIBLE! THE UN-PETTABLE STOATS OF THE 2026 WINTER OLYMPICS

Jehran Duran

Enjoying the Italian winter, two little troublemakers have been playing all around the northern cities—reaching global headlines and catching people’s hearts.

Their names are Tina and Milo, the official mascots of the 2026 Olympic and Paralympic Winter Games hosted in their namesake towns, Milan (Milo) and Cortina d’Ampezzo (Tina) in northern Italy. Tina and Milo are stoat siblings; recognized as symbols of the Italian Spirit: blending the ambience of the arts and culture, and the life of alpine landscapes. Their use was conceptualized by primary and secondary students who participated in an initiative arranged by the Italian Ministry of Education, which called for creative ideas from all around the country. From roughly 1,600 entries, two concepts were chosen via public poll: one was the stoats, credited to students from Calabria, and the second was the snowdrop flower-inspired ‘the Flo’, conceptualized by students from the Lombardy region.

Aside from its aesthetics, the use of stoats as representatives of the Winter Olympics also weighs a broader societal impact. For biologist Marco Granata from the University of Turin, stoats fittingly complement the Winter Olympics, as both inevitably face the adverse effects of climate change.

Nevertheless, beyond their symbolic attributes and charming appeal, it should be recognized that these creatures are not home-friendly—although their cuteness seems to deny it—they are animals that are completely ‘unpettable’.

Stoats, or *Mustela erminea*, are small mustelid mammals—belonging to the same family as weasels and otters. They grow to about 24 to 32 cm in body length, and weigh on average 140 to 450 g for males. They live an average lifespan of two to five years in the wild—longer if in captivity. They are obligate carnivores, preying on rabbits and small rodents.

Stoats are distinctively known for their black-tipped tails, which remain even during winters when their fur coats turn into snowy white. Their black-tipped tails serve an integral purpose; it often functions as protection from birds of prey, as a decoy to fool hungry predators into targeting their tails instead of their stoat bodies. Additionally, the tails act as vital counterweights for balance, stabilizing their rapid movements, especially during hunting

Given their features, they certainly fit the standards for references for sporting events such as the Olympics. Nonetheless, such attributes can’t mask the numerous ‘red flags’ at hand.

Perhaps one of the most compelling reasons for stoats’ ‘unpettability’ is the fact that they are often considered as pests and invasive animals in some areas of the world. In a 2016 invasive animal risk assessment conducted by the Queensland Government in Australia, it was stated that stoats were among the 100 of the world’s most invasive species. The assessment highlighted key national case studies: in New Zealand, stoats have gone so far as to trigger critical environmental issues in the country.



SMALL BUT TERRIBLE! THE UN-PETTABLE STOATS OF THE 2026 WINTER OLYMPICS

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Introduced to New Zealand by European colonists, stoats were 'employed' to curb the islands' surging rabbit populations by preying on them—a resolution that eventually backfired later on as stoats began to rapidly increase in numbers. Currently, New Zealand lists stoats as by far the most abundant introduced mustelids.

Studies link stoats to significant changes in local bird populations in New Zealand. From endemic kakas to kiwis, stoats have gone beyond chasing rodents, proceeding to target vulnerable species as a food source.

With their nature and ecological behavior—not to mention their infamous reputation as invasive pests—stoats are not highly recommended to keep as close pets. Stoats are inherently wild animals; their temperament is a key obstacle to their domestication, as they often resort to aggression through biting. Moreover, given their lifestyle, stoats require intense, costly care: their high metabolism rate pushes them to eat as much as 20% to 40% of their body weight.

Moreover, although stoats are highly active, they are still naturally solitary. This is attributed to their territorial behavior, where they mark territory with their urine to keep intruders away; this also explains the need for massive spaces if they were to be domesticated. This is a major downside for people who keep multiple pets and those conscious of their pet's surroundings—owners will have to put up with the odor excreted by stoats and their vulnerability to clashes with other pets. On top of all their incompatibilities, stoats—as part of the mustelid family—have been assumed to be susceptible to dangerous infectious diseases such as rabies and coronaviruses.

In essence, stoats are small, photogenically charming, and lively creatures in the openness of the wild. However, in the confines of captivity, terrible things are bound to happen! Ultimately, like how we enjoy the vibrating energy of the Winter Olympics in outdoor venues, stoats are better off in the wilderness, where they can be naturally wild and hot-tempered to the fullest.

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HOW DO BIG DATA AND AI CHANGE DECISION-MAKING PROCESSES IN PUBLIC ADMINISTRATION?

Lan Dao

Public administration is “the administration of governmental affairs, in which, we aim to produce public values that are normative consensus on rights, benefits, and prerogatives to which citizens should (and should not) be entitled; the obligations of citizens to society, the state, and one another; the principles on which governments should be based”. There, big data and AI promise more efficient, evidence-based decisions, but they also raise questions about equity, transparency, and human oversight.

In public administration, all decisions must tackle two issues: what information makers can use and what political values can be created. Decision-making is inherently subjective because it requires judgments about what's desirable, and decisions must build political support from both the general public and attentive public. Historically, decision-making relies on bureaucratic expertise through a strict hierarchical structure, a system of top-down authority to balance efficiency with democratic accountability. However, modern society, with problems such as climate change, cyber threats, or pandemics, demands public administration to coordinate responses, deliver equitable services, and foster evidence-based governance. In order to meet that requirement, the decision-making process must be faster with more inputs and cooperation with other parties to quickly produce outcomes, gain political and public support, and tackle transparency as well as equity.

Citizen participation involves individuals influencing agency rulemaking, helping the government break gridlock, avoid litigation costs, and achieve better policy and implementation decisions. Traditionally, it involves costly hearings or surveys that discourage the public sector from involving its citizens in the decision-making process. AI transforms this by scaling input analysis. AI is embedded in public services for citizen engagement, using big data to process feedback efficiently. For instance, AI chatbots handle queries on policies, educating citizens as benefits while avoiding gridlock. Globally, platforms use AI to summarize public inputs, making deliberation accessible. Hence, big data and AI have made the decision-making process less time-consuming and cost-effective, potentially combining more public inputs in forming the policy.



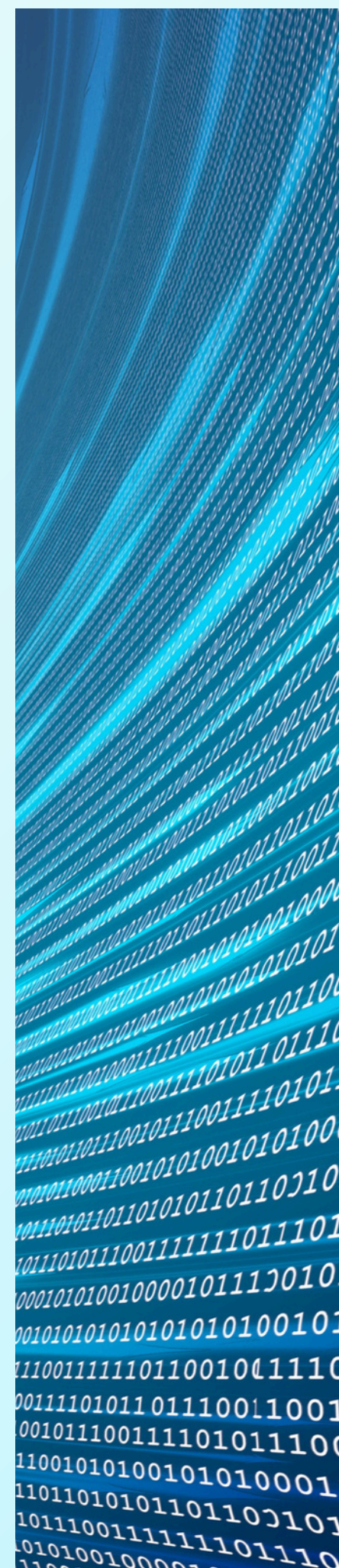
HOW DO BIG DATA AND AI CHANGE DECISION-MAKING PROCESSES IN PUBLIC ADMINISTRATION?

Lan Dao

Experimental evidence suggests that participants report moderate efficacy—the belief that an individual can, and does, have a meaningful voice within a system of government—but believe agencies are more responsive to business interests. This underscores imbalances in voice, with efficacy tied to information capacity—those providing technical arguments feel more influential. This is reasonable as an argument drawn from empirical evidence, or numerals, is considered more reliable than one that is based on personal feelings or experience and might not represent the public. The government assesses elements such as citizens' background and resources, the level of complexity of the situation, the availability of stakeholders, and perceptions of citizens towards the government to determine if it's an ideal condition to involve the public in the decision-making process. Indeed, legitimate concerns about residents' educational level or a lack of information and resources to effectively participate are valid, but can be solved by big data assisting the public in collecting information, and AI tools helping the citizens analyze the situation, structure, and make arguments to connect and showcase their needs to the government. With more people having the resources to participate in, the inputs would be more diverse with cases from different perspectives and analysis, enhancing the policy and better tackling political value equity. Public organizations can also gain more public support for the decisions by raising their citizens' efficacy as citizens get involved enough to believe that government institutions and authorities are responsive to the stated demands put before them. As the goal of public administration is to create value for the citizens' lives, the general citizens' opinions and demands should be valued, and in order to be valued, citizens also need to learn how to communicate and express their ideas effectively and reliably to the public sector. In this promising path, big data and AI have changed the traditionally closed decision-making process between public officers into a more interactive and transparent process, by providing resources and assisting the citizens in making justified arguments and potentially persuading their government, reinforcing the public policy's legitimacy when citizens have good reason to support or obey it.

With the rise of social media, many governments have created their blogs or accounts and conducted quick, if unscientific, online surveys. Nearly everyone finds the process valuable, and nearly everyone has a way to participate in some form or another. Big data and AI accelerate this by enabling digital platforms for engagement, such as AI-designed surveys on social media or forums. However, this risks oversimplifying nuances, as ineffective participation may arise if tech excludes non-digital users. With public organizations that use the bargaining model in their decision-making process, which treats decision-making as political negotiation among interdependent actors, emphasizing flexibility, transparency, and consensus through trial and error, the big data and AI influence may lead to biased feedback from a group of citizens who have more access to those technologies.

In conclusion, while big data and AI promise to enhance the efficiency and citizen participation in the decision-making process by reducing cost, saving time, and equipping citizens with more resources to participate with empirical inputs, they also risk oversimplifying nuances due to excluding non-digital groups. In collaborative governance, big data and AI strengthen the bonds between partners, fostering a more effective collaboration, but also note that over-reliance on algorithms could limit input and exacerbate exclusions in diverse governance networks.



HOW DO BIG DATA AND AI CHANGE DECISION-MAKING PROCESSES IN PUBLIC ADMINISTRATION?

Lan Dao

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DESIRES TO BREAK THE SHACKLES OF PREJUDICE AGAINST WOMEN IN INDIA

Thảo Trương Thanh

India has been recognized as an unfriendly country for women for a considerable amount of time. According to a survey by the Thomson Reuters Foundation in 2018, India ranked as the world's most dangerous country for women. Across the country, a significant number of women continue to suffer from severe challenges, ranging from domestic violence, male chauvinism, and sexual assault to rape and child marriage. These experiences often leave deep scars for victims, both externally and internally. Much of this suffering has persisted in silence. However, as the saying goes, "diamond cuts diamond." Since 2012, more people have drawn attention to the safety of women in India.

In 2012, a terrible crime was committed. The case was so dehumanizing that its brutality sparked outrage among Indians and people around the world. Numerous protests erupted, demanding justice for the victim. This moment helped advance the fight for safety for many other Indian women. In response, India's Criminal Laws have since changed, increasing punishments for perpetrators. There were also movies and songs that began to shed light on the difficulties that women and young girls in Indian society face.

According to the NCRB (National Crime Records Bureau) in 2022, there were 445,256 reported cases of crimes aimed at women, an increase of over 31% compared to 2014. On average, a crime against women was reported every 51 minutes that year. The rise in the rate of crime reports reflects a shift in mindset. Instead of choosing to be silent and endure the things they should not have to go through, they chose to speak out, becoming their own advocates.

Between 2022 and 2023, cybercrimes targeting women in India rose sharply, with 10,730 reported cases, a 24.4% increase from about 8,622 cases in 2021. Cybercriminals have increasingly exploited the technology of Deepfakes and the fear of reputational damage to extort money from victims. Although a large number of cybercriminals have been arrested, law enforcement still faces challenges mainly due to a shortage of cybersecurity specialists and sophisticated tactics used by cybercriminals.

The NCW (National Commission for Women) reported that there have been 7,700 people filing complaints in person in the first four months of 2025. Additionally, data from NARI in 2025 shows that 40% of women feel unsafe or "not so safe."

Today, women in India are not alone in their fight against prejudice. The government has been implementing measures to support women, such as the Women Helpline (181), which works 24/7 for any emergencies, and OSCs (One Stop Centres), established under the Nirbhaya Fund, which provide shelter and care for women traumatized by any type of violence.

Despite this, there remain many women who cannot raise their voices to demand a better life, even when they possess the courage and right to do so. Nevertheless, they still fight persistently for basic human rights: the right to life, the right to a fair trial, freedom from torture and other cruel and inhuman treatment, freedom of speech, freedom of religion, and the rights to health, education and an adequate standard of living, as outlined in the Universal Declaration of Human Rights (UDHR) of the United Nations.



DESIRES TO BREAK THE SHACKLES OF PREJUDICE AGAINST WOMEN IN INDIA

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WHY YOUR BRAIN SAVES THE DRAMA

Quang Minh Tran

Introduction

Most of us have experienced this: We find it hard to recall what we ate for lunch a few days ago at the school canteen. However, we can remember clearly the moment we tripped on the canteen's floor and got teased by friends and classmates. It seems that our brain has a built-in "Save" button for dramatic and stressful emotions. But why does this happen? Why don't we remember more positive and ordinary memories than the negative ones?

The amygdala: the memory highlighter of your brain

To understand how the drama sticks in memory, we first need to look at the amygdala. It's an almond-shaped cluster in the temporal lobe that plays a significant role in emotional memory formation. So, when you are caught in an intense experience, such as a heated argument or a very stressful moment, the amygdala processes the emotions and forms them into memories. It has a save button for each feeling and then turns them into long-term memories.

To turn these emotions into memories, the basolateral amygdala, a part of the amygdala, evaluates the emotional significance, which activates the rest of the amygdala. When the entire amygdala is activated, it triggers the release of stress hormones such as Adrenaline and Cortisol. These chemicals signal the hippocampus (the part of your brain responsible for long-term memory) to "tag" the emotional event, and the neurons activate to process the emotion and create the remembrances.

The evolutionary perspective

From an evolutionary perspective, the way the brain "saves the drama" executes a life-saving strategy known as emotional salience. In the past, our ancestors lived in dangerous environments. Remembering the horror of being attacked by wild animals, getting drowned, or being burned by fire is a survival skill to raise their awareness to survive the day. Forgetting these experiences could lead to deadly consequences. Ignoring one rustle in the bush back then could get you eaten. So, it is clear that these memories helped early humans avoid danger and make better decisions the next time they faced a dangerous situation. Although we don't encounter predators much in the modern world, our brains still treat the "drama" the same way our ancestors did.

However, this survival strategy may not always be helpful in the modern world. It is believed that the world has changed much faster than our brains can adapt and evolve. So, the same strategy that once saved us now tends to cause problems.

Firstly, our brains may treat minor stress, such as failing an exam or giving a public speech, as life-threatening events. The amygdala still releases stress hormones, although there is no life-threatening danger, it still activates the same survival strategy. This makes us feel stressed or anxious over small situations. Secondly, it can cause long-lasting fear or avoidance. Imagine if someone has been laughed at by their class for their presentation or suffered a heartbreaking moment. Although the brain is trying to save us, it can limit confidence, make people avoid activities, and even cause long-term mental pain.



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But why do we pay more attention to the negative memories rather than the positive and ordinary ones?

Actually, it is due to the psychological phenomenon called negativity bias. This phenomenon means our brains are wired to give more attention, emotion, and memory to dramatic and negative memories than good ones. Research shows that the amygdala uses about two-thirds of its neurons to look for positive threats. Our brain seems wired to focus more on negative things that might hurt us. That is why, when something scary, painful, or embarrassing happens, the amygdala quickly detects it as a threat and treats it as a warning sign. It then tells the brain to remember these negative experiences. In that way, we can prevent the same situation from happening again. On the other hand, the brain reacts differently to everyday positive and normal events. Eating breakfast, walking to school, or winning a competition, for example, are perceived neither as dangerous nor as urgent; the brain pays less attention to them and doesn't record them in as much detail. That is one reason we remember negative experiences longer and more clearly than positive and pleasant ones. In addition, they usually need to be held in awareness for a dozen or more seconds before being transferred from short-term memory buffers to long-term storage. This is why one negative comment hits harder than ten good ones; one embarrassing moment at the party could make you forget the fun.

In Conclusion

Your brain does not save dramatic memories to torture you; it saves them to protect you, just like it saved our ancestors in the past. The amygdala acts like a highlighter, marking dramatic experiences so the hippocampus can store them as long-term memories. But knowing that your brain mostly saves the drama doesn't mean to be stuck in negative memories or let it control your mood. Although we cannot stop the evolutionary system, we can change how we respond to it by actively noticing the good experiences more often. You are just being hijacked by an ancient alarm system that forgot how to turn off.

Thus, the next time you remember an embarrassing fall or a stressful day, remember: it is not just about drama. It is your brain trying to help you grow, adapt, and survive.

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FROM NEWSPAPERS TO NETFLIX: THE SUBSCRIPTION REVOLUTION

Sharlene Timothy

On the first of every month, you may be under the impression that nothing has changed, at least not visibly, but automated debits take place. At the turn of the clock, payments accumulate quietly, operating under the radar for most users - maybe it's your cloud storage plan, or your music app, or even your monthly fitness membership, perhaps it is because you've enrolled yourself in a new language course or that you've signed up for a productivity tool. No sign of debits, no arrival of bills perfectly wrapped in an envelope, nor any coin exchange; just a simple notification reading "Payment successful". This is the life inside the subscription economy - like a genie long left uncorked and now spiraling rather uncontrollably.

Across the globe, ownership is gradually being displaced, paving the way for a culture of access. We do not purchase music anymore - we turn to streaming apps; neither do we purchase films, we opt for entertainment platforms instead. Even software that was once sold in boxed CDs is now easily available if you pay a certain sum of money at regular monthly intervals. The World Economic Forum reports that businesses based on subscriptions have experienced massive growth over the last decade, reshaping the entertainment and transportation industries. What began with editorials has gradually become the backbone of modern consumption.

The subscription model flourishes because of convenience. Platforms like Netflix, Amazon Prime and Spotify have fundamentally altered media by lowering the psychological barrier to purchase. What now feels lighter and effortless is paying smaller monthly or bi-monthly fees for unlimited access instead of paying a hefty load of money all at once for a single album or film. Economists best describe this as a reduction of "transaction friction". Auto-debit payments enable uninterrupted streaming and continuous consumption.

But is this shift merely economic? Or cultural?

Deloitte's 2025 Digital Media Trends survey reveals that digital-naïve customers, such as Gen Z and Millennials, maintain the highest number of digital media subscriptions and rely on streaming platforms and social media for entertainment. The reason being affordability and flexibility simultaneously. Subscriptions enable cancellation, upgradation and personalisation. By contrast, ownership feels immobile.

Yet beneath this convenience lies a paradox. Cumulative costs of these inexpensive-in appearance individual subscriptions can be substantial. Financial analysts at the Organisation for Economic Co-operation and Development have warned about the "segmentation" of household spending; these small recurring digital payments are harder to monitor and regulate than traditional expenditures. With rare attention demands, unlike rent or electricity bills, subscription charges blend into the background like a chameleon quite effortlessly.



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Beyond economics, there is also a psychological element at play. Behavioural economists suggest that an automated monthly levy minimises the “pain of paying” - a term ushered into mainstream consumer behaviour research. The system works on this quiet detachment method where free trials lure us into submission and convert into paid plans unless cancelled; that way, when money leaves our bank accounts, we feel minimal resistance. Yearly rollovers need no active user approval these days. The European Union regulators pushed for simpler cancellation policies in 2022, mainly because consumers often found themselves trapped in automated billings they seldom remembered signing up for.

The model has expanded into sectors beyond entertainment. Cars, groceries, clothing and other utility products can now be temporarily accessed. The United Nations Conference on Trade and Development remarks that E-commerce services increasingly depend on reliable revenue streams to anchor growth in turbulent markets. Consumers and corporations demand subscription-based models because it provides predictability.

This raises another crucial question: What are the consequences when everything is paid for monthly?

For young adults, exposure to subscription life starts early. Students pay for cloud storage, software, academic content, journals, language apps and entertainment platforms - often before they achieve financial independency. This gradually blurs the line between necessary and vain desires. Can cloud storage be considered optional when university assignments require digital submission? Is streaming entertainment discretionary when it has replaced cable television?

Sociologists describe this as the “rise of access-based consumption.” Access feels much of the moment and hence, signals active participation in the digital world. But it also indicates dependence on continuous payments. The moment the subscription lapses, access disappears; playlists vanish, photos become inaccessible, productivity tools lock important documents - ownership, for all its constraints, offered permanence.

The subscription economy also captures a structural change in capitalism. Revenue has now gone from being transaction-based to relationship-based. Companies are now targeting subscribers who stick around for longer periods of time. With constant data analysis, platforms track usage patterns, recommend timely upgrades and reduce cancellation costs. The International Monetary Fund highlighted in wider conversations of digital transformation that subscription-driven revenue increases financial stability for firms while binding consumers to their services.



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Yet the system also underscores the risks of inequalities. In regions where the room in the monthly budget is limited, aggregate subscription costs can leave some users further behind. High-end educational tools, research databases, and productivity software are often confined behind monthly fees. Access to knowledge increasingly depends on the ability to pay. Subscription layers determine who can participate fully, even though the internet once promised democratization.

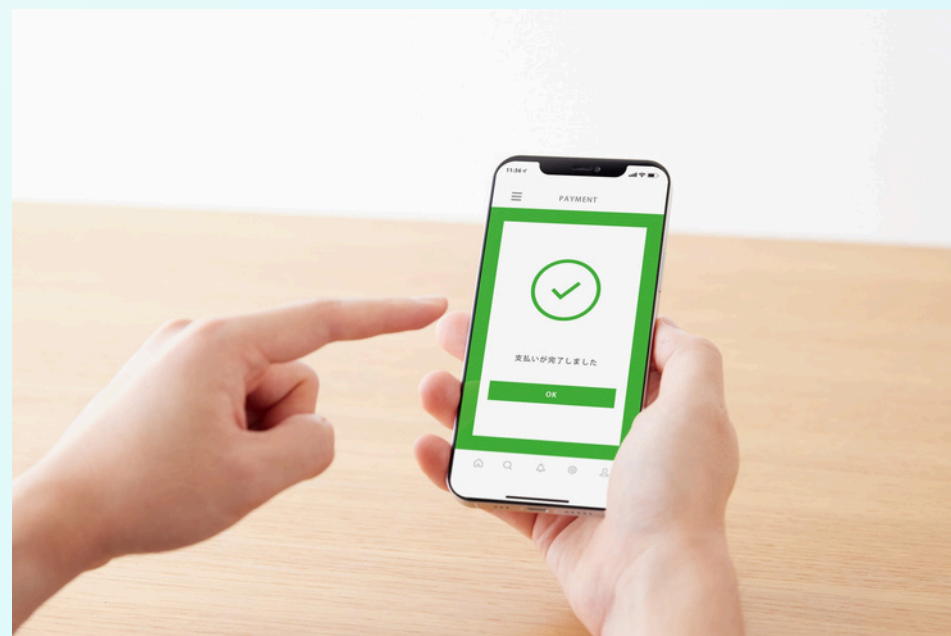
And still, for many, the benefits exceed the risks. Subscriptions eliminate clutter by reducing upfront costs. A single payment can unlock global libraries of music, films, books and whatnot. In rapidly urbanizing cities where compact living and high mobility are the norm, access seems like a practical option.

The world has drastically shifted, and how significantly! We are no longer consumers who buy things. We are members who retain access.

On the first of the forthcoming month, the payments will renew again. Chances are that they may go unnoticed, yet again. But in that quiet transaction lies a profound transformation - of markets and of modern life.

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CAN THERE BE TOO MUCH FREEDOM?

Ngan Le

In many modern societies, freedom is treated as sacred. The fewer restrictions, the better. But what if the relentless expansion of liberty quietly weakens the conditions that allow it to exist? Even without overt oppression, unbounded freedom can erode the foundations that make it meaningful. Excessive freedom, when detached from institutional and social frameworks, can paradoxically weaken equality and ultimately freedom itself.

Philosophers have long disagreed about what freedom really means. Is it simply the absence of interference? Or is it the ability to genuinely shape one's own life? On the one hand, often called negative liberty, a person is free insofar as no one interferes with their actions. On the other hand, positive liberty refers to the capacity to direct one's own life and pursue meaningful goals. But if freedom also relies heavily on social conditions, then an excess of unregulated non-interference may paradoxically erode the very environment that makes freedom valuable. Whether there can be "too much freedom," thus, depends on how these two conceptions relate to one another.

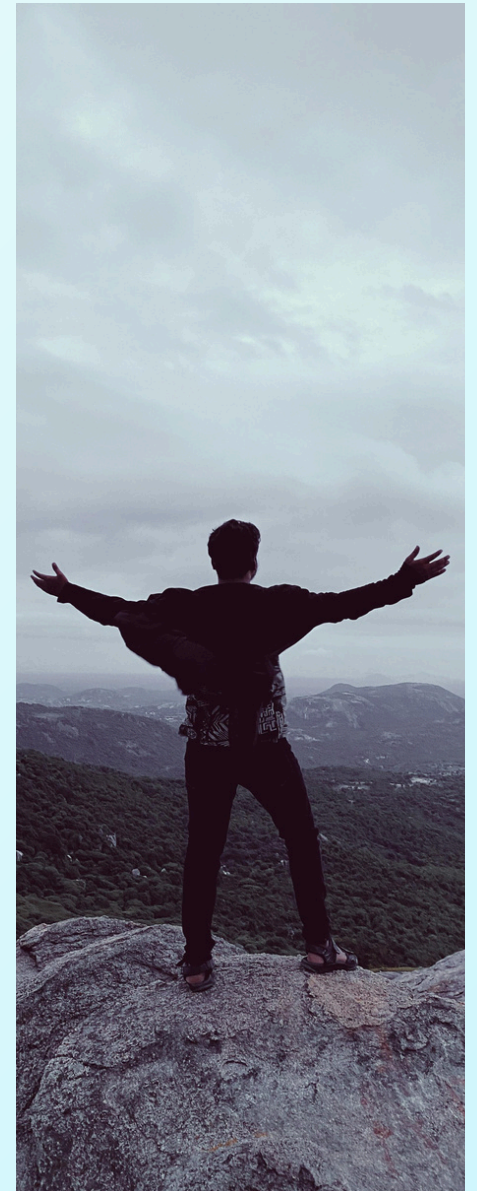
Even when no one directly violates another's liberty, unrestricted negative freedom can generate structural inequalities that undermine the overall value of meaningful freedom. For instance, when the state refrains entirely from regulating economic or social activity, those with greater resources are able to accumulate disproportionate power. In principle, all individuals remain free from interference. Yet in practice, extreme disparities of influence may leave many with limited capacity to shape their own lives. Individuals with fewer resources may not be coerced outright, but they may face forms of dependency that limit their real capacity to refuse and negotiate in fair terms. In this way, liberty becomes unevenly distributed: some enjoy expansive freedom, while others only experience its minimal form. The problem isn't direct violation, but the gradual concentration of power that narrows the practical autonomy of the less advantaged. Excessive non-interference can therefore erode the substantive conditions that make freedom meaningful.

At first glance, fewer restrictions seem to guarantee greater freedom. However, the complete absence of structure does not necessarily produce a flourishing community of autonomous individuals. In contrast, when liberty operates without shared norms, the social conditions that make freedom meaningful can eventually erode.

Imagine a market with no regulations at all. At first glance, this appears to maximize choice. Yet those who begin with greater wealth are able to consolidate their advantage, while others are left with little bargaining power. No one is directly coerced, but freedom becomes unevenly distributed. Formal liberty remains, yet meaningful autonomy diminishes.

In public discourse, unrestricted circulation of misinformation may not directly violate rights, but it corrodes trust. When citizens cannot distinguish fact from manipulation, collective self-government becomes fragile. The conditions required for responsible freedom begin to erode.

These examples suggest that structure isn't the enemy of liberty. Rather, certain constraints, such as institutions and shared laws, create the stability within which freedom can endure. Without them, unlimited non-interference may give rise to disorder that gradually diminishes everyone's liberty.



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Despite these concerns, defenders of robust negative liberty may argue that any limitation on freedom carries its own dangers. Critics of regulation warn that once the state claims authority to protect social order, it risks sliding into paternalism. Restrictions introduced in the name of public welfare can gradually erode civil liberties.

This concern can't be dismissed lightly. However, it conflates all limitations with suppression. Not every restriction constitutes an infringement of liberty in the same way. Laws against fraud and violence do not impose a particular conception of the good life; instead, they protect individuals from domination by others. Reasonable constraints aimed at preventing structural inequality may secure equal freedom rather than undermine it. Limiting harmful actions is not of the same equivalence to suppressing liberty itself. In fact, such limits can prevent the concentration of power that would otherwise restrict the freedom of the vulnerable. The real challenge is not to eliminate constraints, but to ensure they are directed toward preserving liberty for all.

The idea that there could be "too much freedom" doesn't imply that liberty is excessive. Freedom remains one of the most fundamental political values.

Nevertheless, liberty cannot be reduced to the simple absence of interference. Once understood purely in negative terms, freedom may appear to expand as constraints disappear. But without shared norms and legal institutions against domination, the same expansion can gradually weaken the conditions that make autonomy meaningful.

Unrestricted non-interference may allow inequalities of power to grow unchecked and distort public discourse. These distortions reshape the very structure within which individuals make choices. In such circumstances, individuals remain formally free, but their capacity to exercise genuine choice diminishes. Thus, freedom excluded from structure risks becoming fragile and unevenly distributed.

To recognise that there may be limits to liberty is to take freedom seriously, not to reject it. A stable framework of institutions and norms does not necessarily suppress autonomy; it can secure the fair conditions under which freedom can endure for all. In this sense, "too much freedom" doesn't mean liberty itself is excessive. It means liberty without the structure that sustains it cannot endure.

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BEYOND THE WOMB: THE MEANING OF MOTHERHOOD & ARTIFICIAL GESTATION

Bao Linh Ngo

Ectogenesis, meaning the development of the fetus outside of the mother's body, is one of the most fundamental technological innovations in modern reproductive science. The term "ectogenesis" is derived from the Greek roots "ektos," meaning "outside," and the term "genesis," which literally means "origin" or "creation." Scientists once only imagined and dreamed of this term, but it has gradually transitioned from a theoretical debate to an experimental reality. What began as a scientific thought experiment has now entered neonatal science, in which partial forms of ectogenesis already exist. Even though there has been significant technological progress, there still exist complex and unsettled ethical and social implications, particularly for motherhood and human bonding between the baby and its mother.

From a medical aspect, research into artificial womb technology currently focuses on partial ectogenesis rather than full external gestation. Partial ectogenesis refers to supporting extremely premature infants in an artificial uterine-like environment after early delivery. In a 2017 experiment, researchers at the Children's Hospital of Philadelphia successfully raised premature lambs in a fluid-filled artificial womb system for several weeks. The lamb continued to grow normally for weeks in its artificial womb, demonstrating functioning lungs, brain development, and normal organ growth inside a womb, including oxygen exchange through an artificial placenta and circulation of nutrient-rich fluid similar to amniotic fluid. This type of technology primarily aims to enhance the survival of prematurely born babies. Their organs, especially their lungs and brain, aren't fully developed yet. Moreover, this technology may ensure safety for mothers who may develop health issues during their pregnancies, like preeclampsia, gestational diabetes, or severe morning sickness, some of which could be fatal. These medical advances highlight the life-saving potential of the technology, but they represent only the beginning of a much larger conversation about its broader implications.

The broader debate begins when we consider the psychological experience of pregnancy. Pregnancy is not merely a biological process in which a fetus matures. For most couples, it is also an emotional preparation stage to step into parenthood. Over nine months, the idea of having a child slowly becomes a reality for both the mother and father. The process involves physical changes in the body, the feeling of the baby's movement, and the anticipation of birth, all of which contribute to an evolving sense of connection. Expectant parents often spend this time imagining their future child, preparing for its arrival, and adjusting emotionally to the lifelong responsibilities that will remain with them. Pregnancy, therefore, functions not only as a process of maturity but also as a significant psychological preparation space in which the relationship between parent and child begins to form.



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The experience of carrying a child also creates a sense of connection long before birth occurs. Many parents describe the first feeling of fetal movement as powerful when pregnancy begins to feel more real. These physical signals transform the fetus from just an abstract concept into a tangible and acknowledged reality. Over time, this acknowledgement often develops deeply into a growing sense of attachment. Therefore, pregnancy functions not only as an environment for development but also as a psychological space in which the relationship between parent and child begins to form. Scientific research suggests that pregnancy can even influence the way mothers' brains process having a child. Studies have also found that the changes in brain regions associated with empathy, emotional sensitivity, and social awareness occur during pregnancy. These neurological shifts occur to support caregiving behaviors and heightened attentiveness to infant needs. Hence, pregnancy could gradually prepare the mind for the role of parenthood. However, if gestation occurs outside the body, this psychological preparation might unfold in new but potentially detrimental ways, raising questions about how man-made environments could affect the early formation of parental identity.

Hormonal excretion also contributes to this transition. Pregnancy and childbirth can release intricate hormonal fluctuations that affect mood, emotional reactivity, and attachment. One of the most well-known hormones involved is oxytocin, often associated with bonding and nurturing behavior. Oxytocin levels usually increase during labor, which is linked to feelings of closeness between parent and infant. Pregnancy itself involves months of hormonal adjustment that help shape emotional preparation for caregiving. In the absence of this biological process, parents' emotional preparation for their child could potentially undergo distortion. The psychological implications extend to the child as well. Human identity is often shaped by stories about birth and origin. Inquisitive kids frequently ask how they were born, how their parents experienced pregnancy, and what their arrivals were like. Ectogenesis introduces a different kind of narrative, which is that early development takes place in a technological environment rather than just within a human body. But over time, societies may adapt to this new reality, just as earlier reproductive technologies such as IVF eventually became normalized. Nevertheless, artificial gestation would represent a much more profound transformation of the earliest stage of human life.

Even so, none of these questions suggests that strong bonds between parents and children would disappear without a traditional pregnancy. Human attachment develops through many forms of interaction: touch, communication, caregiving, and shared experience over time. The challenges of ectogenesis are not about the possibility of love or attachment, but rather about the familiar path where those relationships currently begin. Pregnancy has long served as the starting point of that relationship, offering a gradual transition from thought to responsibility.



BEYOND THE WOMB: THE MEANING OF MOTHERHOOD & ARTIFICIAL GESTATION

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For now, ectogenesis remains largely experimental, and its primary goal is to improve outcomes for premature babies rather than replace pregnancy altogether. Even so, the questions it raises extend far beyond medicine. As reproductive science continues to advance, society will need to think carefully about how these technologies interact with the emotional and psychological experiences that surround birth.

Understanding pregnancy not only as a biological process but also as a period of human connection will be essential in shaping how artificial gestation fits into the future of reproduction.

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THE BIRTH OF THE ATOMIC AGE

Sharvanth S

The 20th century was an era of great human progress. New discoveries, inventions, and ideas were put forward and turned into reality. Yet among all these inventions, the birth of the atomic age stands as one of the most impactful developments humanity has ever witnessed.

We now live in a world of atomic and hydrogen bombs.

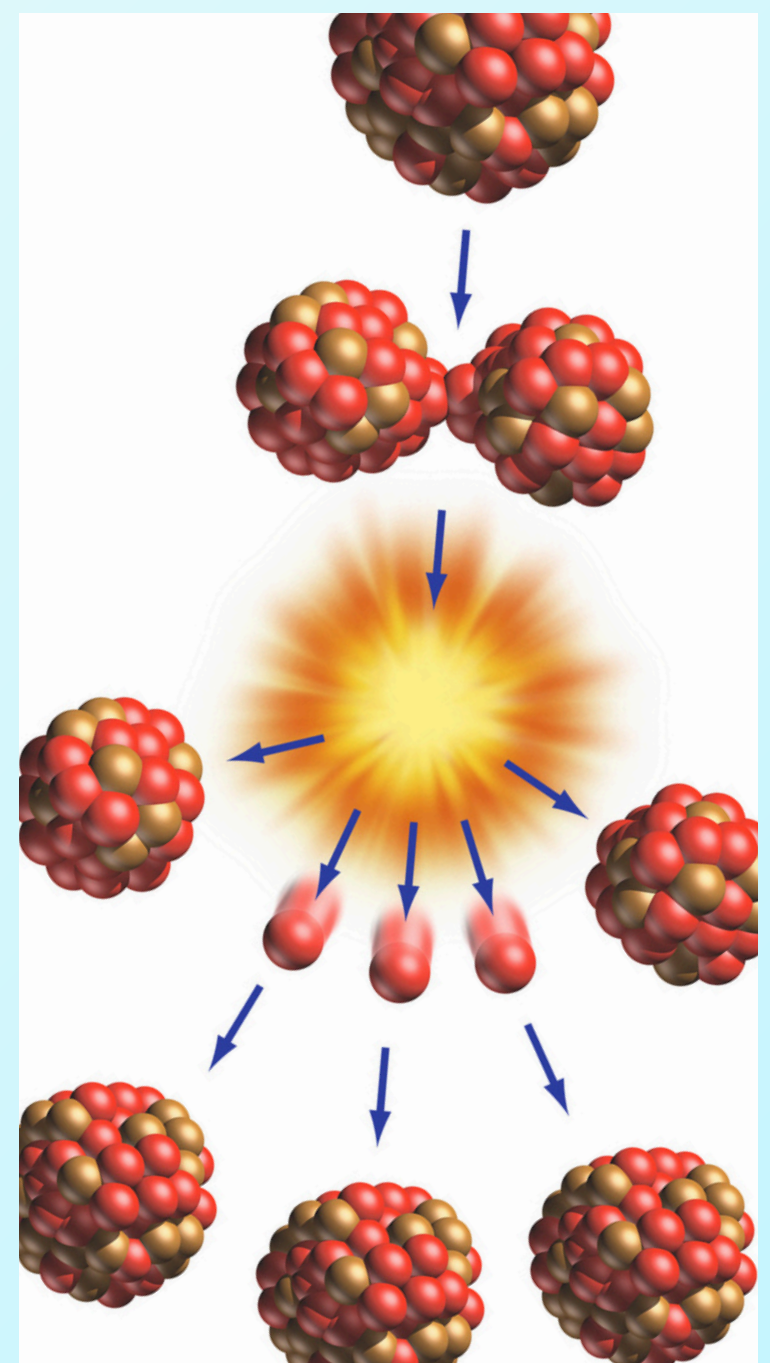
The creation of the atomic bomb was the moment humanity realized that its intelligence had become powerful enough to destroy itself. Such bombs are destructive on a massive scale, holding enough energy within them to vaporize an entire city. From the age of dynamite, it took humans only about 80 years to build a bomb with a blast nearly a million times stronger than a single piece of dynamite.

The development of the atomic bomb was connected to scientists who were trying to uncover the fascinating properties of matter's smallest element—the atom. Their research discovered that an immense amount of energy was locked within it. As scientists began to grasp this power, they began extensive research to uncover the secrets contained within the smallest units of matter.

The need to uncover the power of the atom was fueled by the growth of the Second World War. Nations were willing to do whatever it took to gain an advantage over their enemies, and a weapon of mass destruction seemed like the key to defeating them. That was when the idea of building a bomb powered by atomic energy came to light. Brilliant scientists were brought together, and enormous resources were invested, all for the development of the world's first atomic bomb.

After a few months of intensive research, work that would normally have taken years, the atomic bomb was created. Unlike dynamite, which relied on chemical reactions, the atomic bomb derived its power from nuclear fission, the splitting of atoms. Each split released enormous amounts of energy, and through a chain reaction, where every atom split continuously, it generated energy beyond human imagination—energy that was capable of killing thousands and thousands of people in an instant.

The use of the nuclear weapon came with devastating aftereffects. The impact it had on those affected shocked humanity to its core. For the first time, a single bomb had the capability to wipe out an entire city and transform lives in an instant. This marked the real start of the atomic age: the awareness that mankind had made a weapon not only capable of winning a war, but also capable of destroying civilization itself. A new era had begun—an era in which science and destruction were forever linked.



THE BIRTH OF THE ATOMIC AGE

Sharvanth S

In the decades following the Second World War, nuclear weapons became symbols of great power among several countries. Nations allocated more resources to building a nuclear bomb themselves, as developing a nuclear weapon became a symbol of global power. These weapons were built not necessarily to be used, but to deter others from using them against them. In this way, they became symbols of defense and power.

Necessity pushed human intelligence beyond its limits. The situation of the World Wars accelerated progress that might otherwise have taken decades. Humanity is capable of progress beyond imagination, but there must be an ethical line that must not be crossed. The same atomic energy that was used to build the nuclear bomb was also used to generate nuclear energy, giving electricity to houses and industries. Every innovation carries dual potential; it is up to humanity to draw a moral line and use its intelligence for the greater good.

Artificial Intelligence is a modern example of such a dual-use innovation. It has the potential to change the lives of many, but at the same time, it risks making humans more dependent. AI is still in its early stages. It is up to us, as individuals, to be cautious and define the ethical boundaries that guide its usage in our lives.

Ultimately, the beginning of the atomic age was not just about creating a bomb. It served as a warning to the world. It demonstrated humanity's incredible capacity for discovery, while also revealing the dangers of using such power incorrectly. The atom gave the world a new source of energy, but nuclear weapons gave the world a look at what happens when such power is misused.

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PARENTING MODELS: A CHOICE THAT DECIDES A CHILD'S PAST, PRESENT, AND FUTURE

Ngọc Bình An Nguyễn

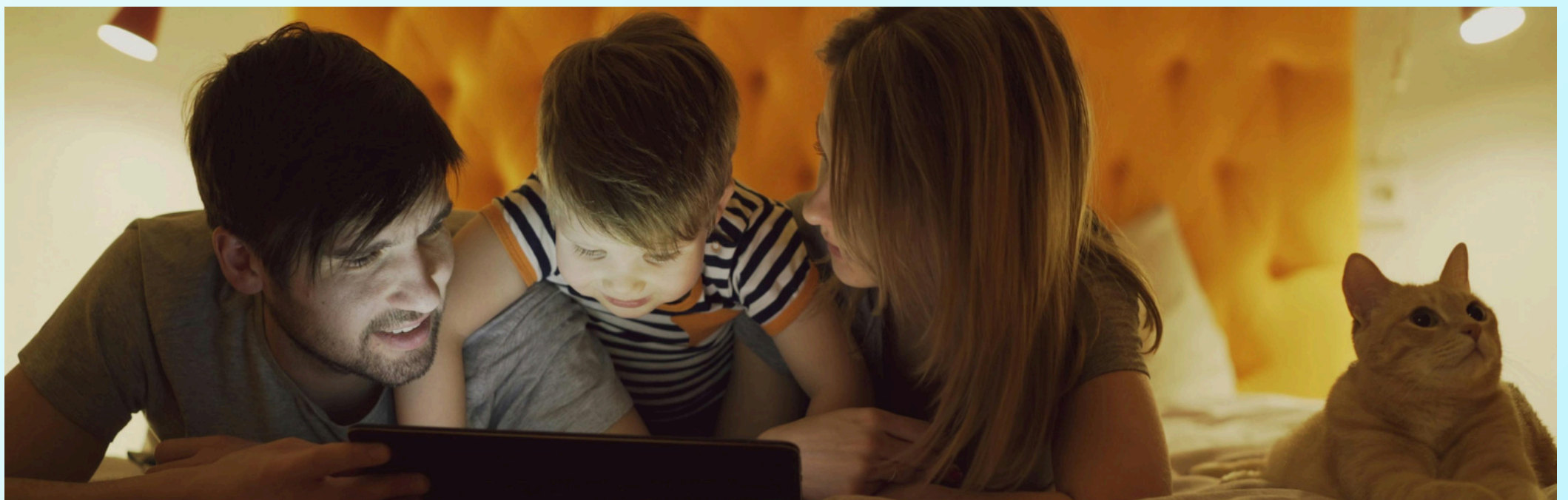
Being a parent is never easy, and it will never be. From having to stay up late researching baby food to dealing with screams at 3 a.m. As you watch your child grow slowly, so do you. You get old, your hair turns grey, and yet every day you wake up with the upsetting thought that your child is growing too fast. This is the period of time when parents have to teach their children in their own style.

Every single decision will later affect a child's life. This is where parenting models come in.

Child psychologists have researched many parenting styles that are most applied in today's generations, and they have found four different types of parenting models that can differentiate the future of a child. Authoritative parenting, authoritarian parenting, permissive parenting, and neglectful parenting. These are the main parenting styles that are most widely known and still being used to this day.

The first and most effective parenting model is called authoritative parenting. This parenting model is a balance between warmth and control. This is considered the best type of parenting because the adults set clear boundaries while still making sure their kids always feel loved. The rules and consequences are always there, yet the parents never use them as a weapon, but instead as a shield. Instead of letting their kids explore the world alone or trying to control everything, the parents always stay by the kid's side, always there, always listening, and always willing to help, just not getting overprotective. The children who grew up in an authoritative household usually develop high self-esteem, are confident about what they can bring to the table, and can manage emotions well. They don't usually struggle with addiction or any crimes, since their parents have set their expectations and given them a safe place to grow.

The second type of parenting model is authoritarian parenting. Although the word "authoritarian" sounds a lot like "authoritative", the difference between these two models is extremely significant. Authoritative is all about the perfect balance between control and warmth. On the other hand, authoritarian parents want to have full control over their child. These types of parents typically set an overload of rules for the children, and typically set extremely high expectations and strict punishments. Even though they want the best for their child, they are parent-driven; they don't offer warmth. They expect the child's respect, and have little consideration for the child's social-being and mental health. This type of parenting is mainly found in Asia, where parents expect their child to succeed with little emotional warmth between the parent and the child.



PARENTING MODELS: A CHOICE THAT DECIDES A CHILD'S PAST, PRESENT, AND FUTURE

Ngọc Bình An Nguyễn

Another well-known parenting model is permissive parenting. This type of parenting is extremely child-driven, and it prioritizes the child's feelings and social well-being over setting rules, boundaries, or punishments. These parents usually let the children choose what they want to do, and they can choose what they want and buy whatever they want. The parents hardly ever say no, and the children love their freedom. Even though the children are extremely happy and are extremely close to the parents, they may become "spoiled"; in other words, they are extremely expectant of other people to help them and let them do whatever they want, just like their parents had. Choosing this parenting model is like a double-edged knife: your children grow up in an environment where they feel like they're loved, and they are extremely social and hardly suffer from any mental health disorders. On the other hand, you risk having to watch them feel too comfortable with their surroundings and disrespect others' boundaries.

The final, most well-known kind of parenting model is neglectful parenting. As it sounds, neglectful parenting is when the parents barely pay attention to the children, and they constantly leave the children to fend for themselves. Although the parents have zero control over their children, and the children can choose what to do, the parents don't provide any love or warmth within the relationship. The children tend to grow up feeling like they are unimportant and unloved, since their parents don't take care of them. Watching other kids getting picked up and hugged by their mothers and being praised by their fathers, the neglected kids can easily feel unwanted and develop mental health issues. As child psychologists have researched, this parenting model can affect the children negatively, and the child usually fails to succeed in life without their parents' guidance.

At the end of the day, parenting models play an important role in both the child's future and the parent's life. The decision to protect and sacrifice yourself for your child is heavy; however, the decision to love your child is the most important as a parent. Parenting models take you so far, but actually loving your child and knowing when to punish and when to love them is what takes you to an actually loving and healthy child. Even if you have to take a leap of faith for your child, this is the decision that creates the path, creates the future, and guides your child to the door of success.

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COMPASSION FADE: A REALITY IN TODAY'S DIGITAL WORLD

Teu-Khanh Phuong

Mother Teresa once famously stated, "If I look at the mass, I will never act. If I look at the one, I will." This claim hinges on the notion of "compassion fade", a deeply-rooted psychological phenomenon that suggests humans' lack of empathy when facing an increased amount of suffering and tragedies. With significant changes in today's modern landscape, compassion collapse among individuals has been further amplified by the incessant development of the digital world. With people experiencing repeated exposure to those in need of aid on various networking sites, the causes and consequences of such limitations are insurmountable, affecting not just the news recipients themselves but society as a whole.

It is undeniable that compassion is a by-product of empathy and the intrinsic motivation to act under specific circumstances, making it a uniquely human characteristic. Not only does compassion create a sense of universal belonging among like-minded human beings, but it also unites society together, reflecting a world where kindness and collective responsibility are upheld. Yet, despite these immense benefits, when tragedy strikes, our compassion gradually diminishes as the number of injured and displaced victims mounts on daily newsfeed. While some argue that the concept of "compassion fade" in humanity goes against common sense and humanitarian interest, as observing more suffering is equivalent to heightened awareness and moral responsibility, the paradox lies in humans' inability to relate meaningfully to wide-scale crises.

The tendency to experience a decrease in empathy has been made ubiquitous by the way social movements and campaigns are directed towards people's understanding of tragedy and misery. Humans' inability to empathetically engage with a sight of increasing amounts of suffering is inherently caused by both objective and subjective reasons. In recent years, social media has provided a plethora of content to users, bombarding them with significant amounts of upsetting news, from the ongoing war in Ukraine and unresolved conflicts between Israel and Palestine to the severity of COVID-19, all of which has resulted in a staggering death toll. Such tragedies have incited individuals' limited capacity to cope and empathize with distress on a larger scale. One cause behind this phenomenon is a cognitive bias called "identifiable victim effect", which refers to people's willingness to offer assistance to identified victims rather than statistical victims mentioned in general news, suggesting that information about specific cases allows people to personally relate and empathize better. Evidently, studies conducted in 2014 by the University of Oregon discovered that charity campaigns that focus on showcasing images of multiple starving children lead to fewer donations than drawing attention to one, explicitly reflecting how detailed mental images evoke heightened empathy in individuals.

Moreover, a lack of motivation also contributes to individuals' indifference to vulnerabilities. Constant exposure to devastation creates a sense of helplessness when citizens believe their actions won't make a difference to change current situations, deterring them from doing good deeds. This absurdity was first observed by writer and historian Carla Joinson, who published an article on a unique form of burnout that nurses in the emergency department experienced, especially among caregivers. Specifically, one nurse traumatized after losing a favorite patient underwent feelings of "helplessness and anger", according to the Guardian, while others reported heightened "despair and frustration", almost prompting these caretakers to leave their profession. These insightful observations further suggest how such vulnerabilities can erode collective responsibility and personal resilience when individuals encounter hardships and significant losses.



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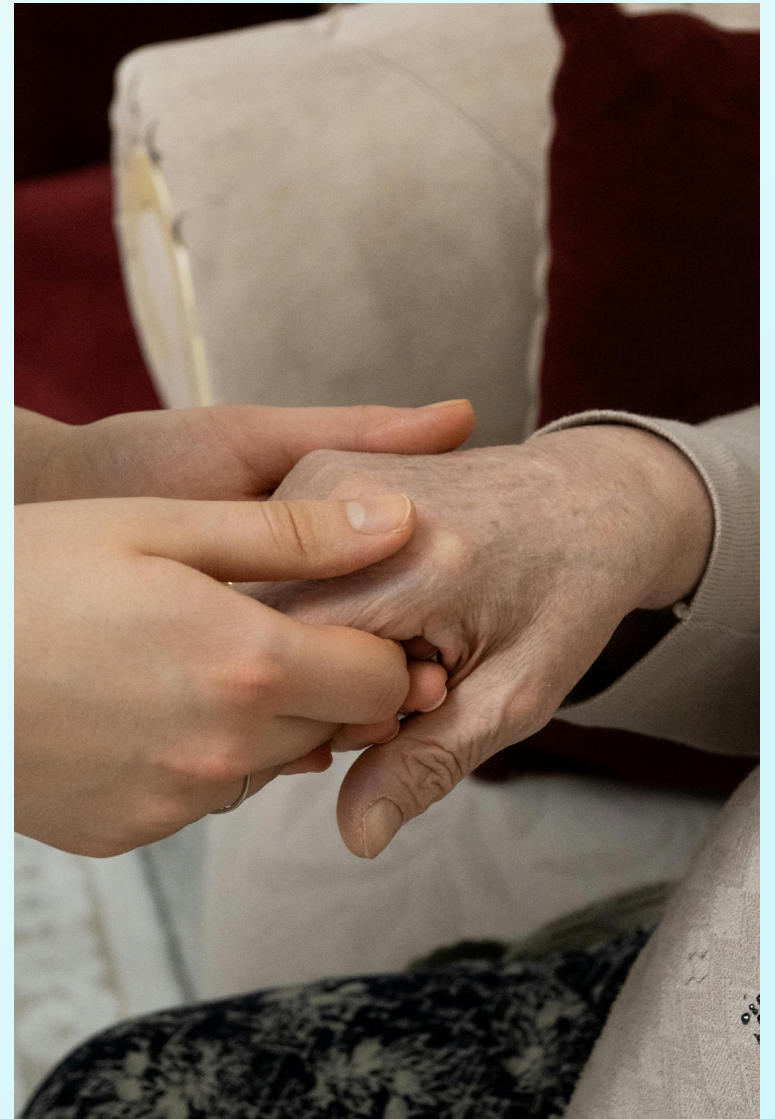
Teu-Khanh Phuong

Therefore, the consequences regarding decreased compassion in today's globalized society are obvious, impacting the interface of our world. At an individual level, emotional numbness and burnout emerge due to excessive viewing of large-scale crises. In the long run, people may perceive their support as less impactful among others, with feelings of emotional reward lessening as they detach themselves from empathy. At a societal level, when global crises fail to catch the attention of citizens, humanitarian responses become ineffective, as collective effort weakens and aid distribution from the public grows scarce. Compassion collapse gradually turns into a threat in addressing global issues, resulting in diminished cooperation and support from the public. The studies carried out by Oregon University are a perfect example of how international assistance dwindles as a result of bigger crowds in need, highlighting significant concerns about how impactful compassionate care can be to our society.

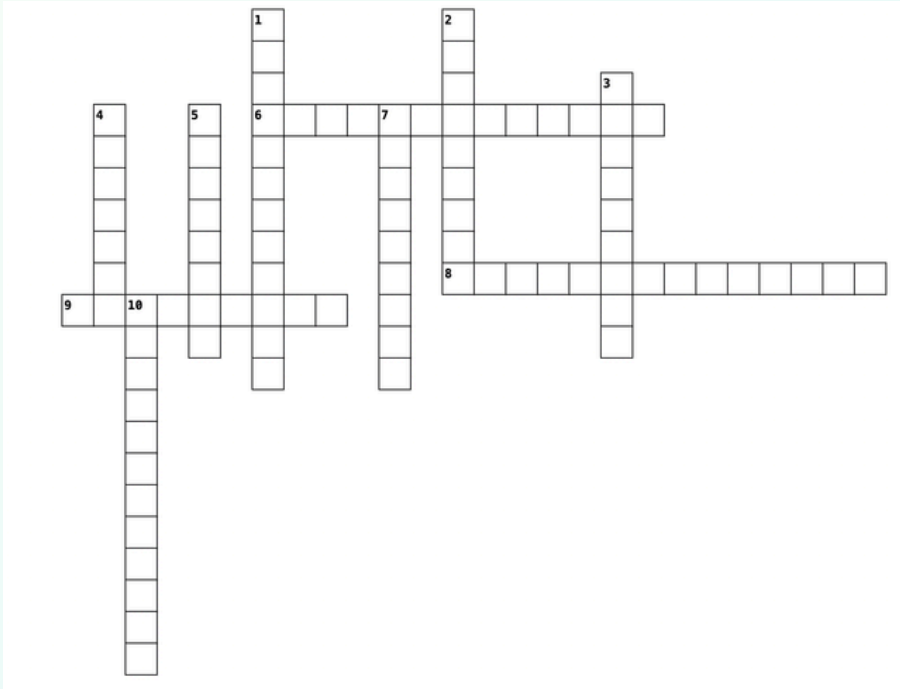
"Compassion fade" is not an innate characteristic but a gradually developed trait humans accept through social interaction and cognitive awareness. Thus, one of the most optimal solutions to diminishing "compassion fade" in society is through progressively changing how tragedies and human sufferings are presented online, which, of course, will not happen overnight. Therefore, people, particularly the younger generation, should be educated on the intrinsic meaning of compassion at an early age, eliminating any potential ignorant and biased thoughts toward human suffering.

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Crossword: Earth Day



Across

- 6. Clearing of forests for land use
- 8. Long-term environmental balance
- 9. Process of reusing waste materials

Down

- 1. Variety of life in ecosystems
- 2. Pollutants released into the air
- 3. Contamination of the environment
- 4. Long-term weather patterns of Earth
- 5. Public support for environmental causes
- 7. Energy source that replenishes naturally
- 10. Protection of natural resources

Word Search: Scientist



Word Bank:

- | | |
|----------|------------|
| Einstein | Darwin |
| Curie | Mendel |
| Turing | Newton |
| Hawking | Copernicus |
| Tesla | Galilei |

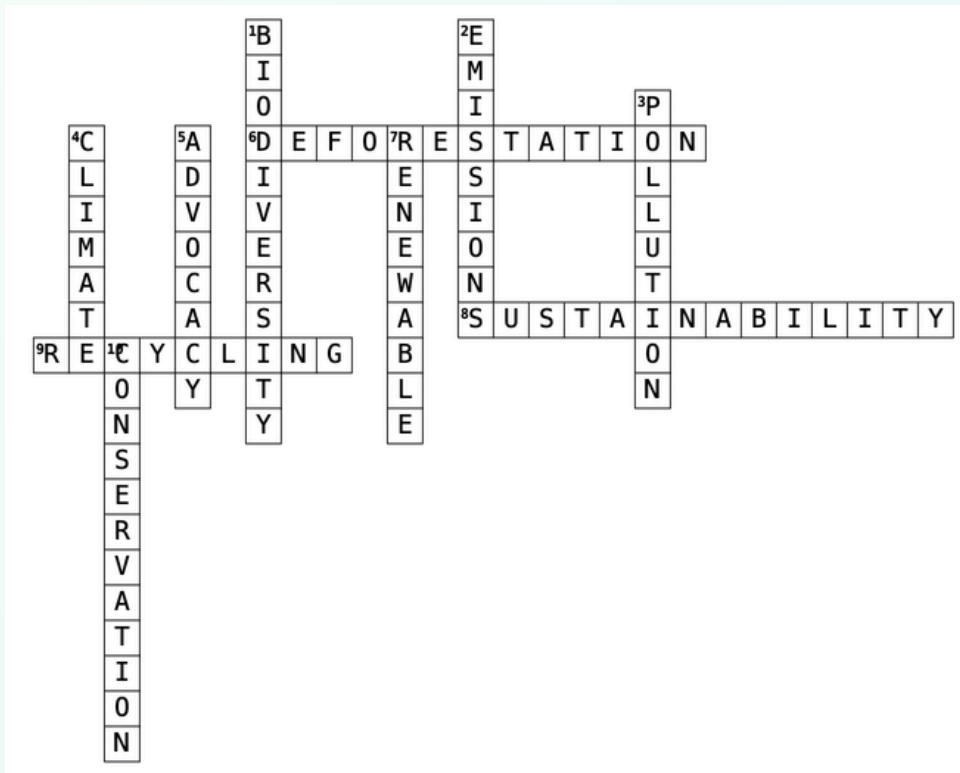
Crypto-Quote: The Trees

SGD ENQDRS HR ENQ LD Z
 SDLOKD, Z BZSGDCQZK NE
 SQDD BZMNOHDR ZMC
 CZMBHMF KHFGS - IZMD
 FNNCZKK

Instructions:

Figure out the quote from one of these articles by figuring out a simple code. In this code one letter will replace another, (it will be the same letter throughout the puzzle). Example: KLFRLF = SYNONYM. Solution is found through trial and error.

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Crypto-Quote: The Trees

THE FOREST IS FOR ME A
TEMPLE, A CATHEDRAL OF
TREE CANOPIES AND DANCING
LIGHT - JANE GOODALL

Instructions:

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