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Culture | Johnson

Euphemism and exaggeration are both dangers to language



But verbal extremism is now the bigger threat

George ORWELL's essay "Politics and the English Language", published in 1946, took aim at the bureaucrats, academics and hacks who obfuscated their misdeeds in vague, jargon-packed writing. Abstractions, euphemisms and clichés all served as "the defence of the indefensible". Orwell lamented how "Millions of peasants are robbed of their farms and sent trudging along the roads with no more than they can carry: this is called transfer of population or rectification of frontiers. People are imprisoned for years without trial, or shot in the back of the neck or sent to die of scurvy in Arctic lumber camps: this is called elimination of unreliable elements."

If Orwell were writing today, he would find plenty of euphemisms to complain about. On October 7th an open letter from a clutch of student groups at Harvard University vaguely described the "unfolding violence" in Israel without ascribing blame to Hamas. Abstract brutality "unfolding" shocks rather less than a clearer description of Hamas slaughtering 1,200 Israelis, nearly all civilians, including many children.

As a onetime contributor to the BBC, it is easy to imagine Orwell defying the broadcaster's refusal to use the word "terrorism". Orwell had no trouble doling out his medicine to both sides; he would have also had harsh words for those describing the "collateral damage" buried in Gazan rubble, another abstraction designed to prevent readers picturing dead children. Around 13,000 Palestinians have died since October 7th.

¹⁵ Orwell's famous essay had a long lead time: he was paid in December, and it appeared in print the next April. Today, however, billions of people can publish their thoughts instantaneously. The desire to grab attention seems to incentivise stylistic sin. The social-mediafication of writing has steered the tone from the offence of euphemism to its twin offence of exaggeration.

What used to be called chauvinism, then sexism, is now "misogyny", a word once reserved for actual hatred of women. Those who do not ascribe to left-wing views on race are accused not of bias, prejudice or even racism, but of "white supremacy", a phrase that just a decade ago was reserved for neo-Nazis.

Call it the "dysphemism treadmill". In its opposite, the "euphemism treadmill", people run from one polite banality to another. They referred to people as "idiotic" until that became pejorative; then they opted for "retarded", which became unsayable; and then they devised "special", which is now a taunt too. The dysphemism treadmill works the other way round: "prejudiced" seems too mild so is replaced with "racist", which then suffers the same fate and must be swapped out for "white supremacist".

As is true of many modern trends, the most extreme words have radiated from America, where "communist" and "fascist" have nothing to do with sickles or swastikas and are sometimes applied to anyone you disagree with. Social media, the "great awokening" on the left and the MAGAfication of the right have contributed to a verbal crescendo. (...)

The worst crime imaginable—"genocide"—is also being bandied about more often. The word is used correctly when describing the Arab militias in Sudan who are rounding up black African tribes, such as the Masalit, murdering men and boys, raping women and saying "the baby will be an Arab". But those using the term "genocide" to characterise Israeli attacks on civilians in Gaza are not hewing strictly to what the word's definition is, which is the intentional destruction of people for the mere fact of their ethnicity.

So here is a suggestion for writers. You cannot outshout the crowds. So distinguish yourselves by choosing accurate, vivid words between the evasions of euphemism and the temptations of exaggeration. Crimes against language, in the long run, make it harder to describe crimes against humanity.

(614 words)

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Science and technology | Crystal balls

A Google AI has discovered 2.2m materials unknown to science



Zillions of possible crystals exist. AI can help catalogue them

Crystals can do all sorts of things, some more useful than others. They can separate the gullible from their money in New Age healing shops. But they can also serve as the light-harvesting layer in a solar panel, catalyse industrial reactions to make things like ammonia and nitric acid, and form the silicon used in microchips. That diversity arises from the fact that "crystal" refers to a huge family of compounds, united only by having an atomic structure made of repeating units—the 3D equivalent of tessellating tiles.

Just how huge is highlighted by a paper published in Nature by Google DeepMind, an artificial-intelligence company. Scientists know of about 48,000 different crystals, each with a different chemical recipe. DeepMind has created a machine-learning tool called GNoME (Graph Networks for Materials Exploration) that can use existing libraries of chemical structures to predict new ones. It came up with 2.2m crystal structures, each new to science.

To check the machine's predictions, DeepMind collaborated on a second paper, also published in Nature, with researchers at the University of California, Berkeley. They chose 58 of the predicted compounds and were able to synthesise 41 of them in a little over two weeks. The team at DeepMind say more than 700 other crystals have been produced by other groups since they began preparing their paper.

- ¹⁵ To help any other laboratories keen to investigate the computer's bounty, the firm has made public a subset of what they think should be the 381,000 most stable structures. Among them are many thousands of crystals with structures potentially amenable to superconductivity, in which electrical currents flow with zero resistance, and several hundred potential conductors of lithium ions that could find a use in batteries. In both cases DeepMind's work has increased the total number of candidate materials known to researchers tens of times over.
- Aron Walsh, a materials scientist at Imperial College London who was not involved in the research, says DeepMind's work is impressive. But "this is the start of the exploration rather than the end," he says, noting that the machine has only scratched the surface of what might be possible. In a recent paper of his own he tried to calculate how many stable crystals incorporating four chemical elements (so-called quaternaries) might be potentially manufacturable. He wound up with a conservative estimate of 32trn. For its part, GNoME looked only at crystals that form under relatively low temperatures and pressures. And crystals are only one subset of
- ²⁵ only at crystals that form under relatively low temperatures and pressures. And crystals are only one subset of a universe of materials that includes everything from amorphous solids such as glass through to gases, gels and liquids.

Whether any of DeepMind's 2.2m new crystals will be useful remains to be seen. Even if they do not, the techniques used to make the predictions could be valuable. Besides suggesting new crystals, AI may also shed light on as-yet-unknown rules that govern how they form.

Ekin Dogus Cubuk at DeepMind highlights one such finding. Previously, he says, crystals made from six elements, called senaries, were thought to be vanishingly rare. But DeepMind's AI found around 3,200 in its sample of 381,000 stable compounds. A better understanding of how crystals form, and what sorts are possible, might also save scientists curious to test how the 2.2m new materials behave from the tedious task of synthesising each one of them by hand.

(550 words)

Opinion | Guest Essay

I Teach the Humanities, and I Still Don't Know What Their Value Is



Dr. Callard is an associate professor of philosophy at the University of Chicago and the author of "Aspiration: The Agency of Becoming."

If a group of math students fails to learn the material, that might be because the teacher is not trying hard enough or because she has been inappropriately tasked with, for example, teaching calculus to toddlers. Supposing, however, that neither of these things is true — the teacher is passionately invested in teaching, and she has many suitable students — yet her students all fail the final exam, eventually we would be forced to say that she might not know math so well.

I believe that we humanists are in the position of this math teacher. We have been issuing a steady stream of defenses of the humanities for many decades now, but the crisis of the humanities only grows. In the face of declining student interest and mounting political scrutiny, universities and colleges are increasingly putting humanities departments on the chopping block.

- ¹⁰ We humanists keep on trying to teach people what the value of the humanities is, and people keep failing to learn our lessons. This suggests to me that humanists do not know the value of the thing they are trying to defend. We can spout pieties that sound inspiring to those already convinced of our cause, but so too can an ignorant math teacher "teach" math to those who already know it.
- As a humanist someone who reads, teaches and researches primarily philosophy but also, on the side, novels and poems and plays and movies — I am prepared to come out and admit that I do not know what the value of the humanities is. I do not know whether the study of the humanities promotes democracy or improves your moral character or enriches your leisure time or improves your critical thinking skills or increases your empathy.

I once asked the best teacher I ever had why she no longer taught her favorite novel, and she said that she stopped teaching a book when she found she was no longer curious about it. The humanistic spirit is, fundamentally, an inquisitive one.

In contrast, defenses of the humanities are not — and cannot be — conducted in an inquisitive spirit, because a defensive spirit is inimical to an inquisitive one. Defensiveness is, it must be admitted, an understandable response when budgets are being cut and the chopping block is brought out and you need to explain why you shouldn't be on it.

- A defensive mind-set also encourages politicization. If the study of literature or philosophy helps to fight sexism and racism or to promote democracy and free speech and everyone agrees that sexism and racism are bad and democracy and free speech are good then you have your answer as to why we shouldn't cut funding for the study of literature or philosophy. Politicization is a way of arming the humanities for its political battles, but it comes at an intellectual cost. Why are sexism and racism so bad? Why is democracy so good? Politicization silences these and other questions, whereas the function of the humanities is to raise them.
 - I will admit that every time I hear of a classics department being cut, it hurts. I may not know why it is important to read Homer and Plato, but I do have a deep love for reading, teaching and pondering those texts. That love is what I have to share with others, as well as the surprise and delight of finding that people thousands of years dead can be one's partners in inquiry.
- Are the humanities valuable? What is their value? These are good questions, they are worth asking, and if humanists don't ask them, no one will. But remember: No one can genuinely ask a question to which she thinks she already has the answer.

(623 words) www.nytimes.com

Science and technology | The chicken of tomorrow

Will lab-grown meat ever make it onto supermarket shelves?



The meat of the future remains too expensive in the present

THE FIRST mouthful of "cultivated" meat is both remarkable and dull. In a homely kitchen at the California headquarters of Eat Just, a startup, a playing-card-sized slice of meat has been glazed and grilled. It is served with a sweet-potato puree, maitake mushrooms and some pickled peppers. The meal is remarkable because the meat was grown in a lab, rather than on an animal. It is mundane because the texture, taste, look and smell of the meat is almost identical to that of chicken. And that, of course, is the point.

On paper, cultivated meat looks attractive. The UN reckons meat and dairy production already accounts for 12% of humanity's greenhouse-gas emissions. Demand is soaring among the growing middle classes of Africa and Asia. Advocates of lab-grown meat argue that it could help meet that demand without the world busting its carbon budget.

- ¹⁰ In rich countries, by contrast, plenty of people say they want to reduce their consumption, either for ethical reasons or environmental ones. (Two-fifths of Americans claim to restrict their meat consumption on environmental grounds.) Lab-grown meat may, for some consumers, be less ethically worrisome than eating animals. And the early success of plant-based meat alternatives gave investors hope. Beyond Meat, one such firm, went public in 2019, and saw its value zoom to \$14bn.
- ¹⁵ Broadly speaking, there are two ways to make cultivated meat. Both start with cells taken from livestock or poultry animals. One option is to put the cells in a stainless-steel tank, called a "bioreactor", that is filled with a nutrient-rich liquid that is often, but not always, derived from cow embryos. The cells multiply, and after a month or so a meaty slurry can be harvested and turned into minced-meat products such as chicken nuggets. The alternative is to place the cells on a scaffold. That encourages them to grow into a certain shape, and is used to create more fibrous meat, such as steaks.

There are questions about how climate-friendly cultivated meat really is. A study published earlier this year (but not yet peer reviewed) by researchers at the University of California, Davis, found that, in some circumstances, cultivated meat could be more polluting than the conventional stuff. Industry advocates have retorted that the assumptions made around the type of growth-solution used are inaccurate. In particular, they say that the study assumes the use of resource-intensive pharmaceutical grade ingredients, which the industry is moving away

assumes the use of resource-intensive pharmaceutical grade ingredients, which the industry is moving away from.

But even fans of cultivated meat acknowledge that the technology will use a lot of energy. Another study published in January by researchers at CE Delft, a consultancy, and the GFI found that per kilogram of meat produced, tank-grown meat is likely to use much more energy than farm-grown protein. This is largely because the bioreactor needs a lot of power to control its temperature. As a result, cultivated meat will only cut the

the bioreactor needs a lot of power to control its temperature. As a result, cultivated meat will only cut the carbon footprint of the meat industry if renewable energy is used in the production process. And even then, according to the study, it will only do so for pork and beef.

Whether all this effort can make lab-grown meat attractive and cheap enough to appeal to consumers remains to be seen. In the meantime, many companies have decided to pursue a hybrid strategy, mixing (relatively) cheap plant protein with their cultivated animal cells. Some firms, such as Mission Barns, another California-based firm, add just a small amount of animal-fat cells to plant-based protein to improve the taste of, say, a sausage. For others, such as Eat Just, the proportion of cultivated meat will be much higher. "It took me a while to get comfortable with [moving to the hybrid approach]. Because it feels a bit like we're compromising," admits Josh Tetrick, Eat Just's boss.

(622 words) www.economist.com

Opinion

June 3, 2020 Tom Cotton

Tom Cotton: Send In the Troops



The nation must restore order. The military stands ready.

Editors' Note, June 5, 2020:

After publication, this essay met strong criticism from many readers (and many Times colleagues), prompting editors to review the piece and the editing process. Based on that review, we have concluded that the essay fell short of our standards and should not have been published.

- The basic arguments advanced by Senator Cotton however objectionable people may find them represent a newsworthy part of the current debate. But given the life-and-death importance of the topic, the senator's influential position and the gravity of the steps he advocates, the essay should have undergone the highest level of scrutiny. Instead, the editing process was rushed and flawed, and senior editors were not sufficiently involved. While Senator Cotton and his staff cooperated fully in our editing process, the Op-Ed should have been subject to further substantial revisions — as is frequently the case with such essays — or rejected.
- For example, the published piece presents as facts assertions about the role of "cadres of left-wing radicals like antifa"; in fact, those allegations have not been substantiated and have been widely questioned. Editors should have sought further corroboration of those assertions, or removed them from the piece. The assertion that police officers "bore the brunt" of the violence is an overstatement that should have been challenged. The essay also includes a reference to a "constitutional duty" that was intended as a paraphrase; it should not have been rendered as a quotation.
- ¹⁵ Beyond those factual questions, the tone of the essay in places is needlessly harsh and falls short of the thoughtful approach that advances useful debate. Editors should have offered suggestions to address those problems. The headline — which was written by The Times, not Senator Cotton — was incendiary and should not have been used.

Finally, we failed to offer appropriate additional context — either in the text or the presentation — that could have helped readers place Senator Cotton's views within a larger framework of debate.

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This week, rioters have plunged many American cities into anarchy, recalling the widespread violence of the 1960s.

New York City suffered the worst of the riots Monday night, as Mayor Bill de Blasio stood by while Midtown Manhattan descended into lawlessness. Bands of looters roved the streets, smashing and emptying hundreds of businesses. Some even drove exotic cars; the riots were carnivals for the thrill-seeking rich as well as other

of businesses. Some even drove exotic cars; criminal elements.

Outnumbered police officers, encumbered by feckless politicians, bore the brunt of the violence. In New York State, rioters ran over officers with cars on at least three occasions. In Las Vegas, an officer is in "grave" condition after being shot in the head by a rioter. In St. Louis, four police officers were shot as they attempted to disperse

³⁰ a mob throwing bricks and dumping gasoline; in a separate incident, a 77-year-old retired police captain was shot to death as he tried to stop looters from ransacking a pawnshop. This is "somebody's granddaddy," a bystander screamed at the scene.

Some elites have excused this orgy of violence in the spirit of radical chic, calling it an understandable response to the wrongful death of George Floyd. Those excuses are built on a revolting moral equivalence of rioters and

³⁵ looters to peaceful, law-abiding protesters. A majority who seek to protest peacefully shouldn't be confused with bands of miscreants. But the rioting has nothing to do with George Floyd, whose bereaved relatives have condemned violence. On the contrary, nihilist criminals are simply out for loot and the thrill of destruction,

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with cadres of left-wing radicals like antifa infiltrating protest marches to exploit Floyd's death for their own anarchic purposes.

These rioters, if not subdued, not only will destroy the livelihoods of law-abiding citizens but will also take more innocent lives. Many poor communities that still bear scars from past upheavals will be set back still further.

One thing above all else will restore order to our streets: an overwhelming show of force to disperse, detain and ultimately deter lawbreakers. But local law enforcement in some cities desperately needs backup, while delusional politicians in other cities refuse to do what's necessary to uphold the rule of law.

The pace of looting and disorder may fluctuate from night to night, but it's past time to support local law enforcement with federal authority. Some governors have mobilized the National Guard, yet others refuse, and in some cases the rioters still outnumber the police and Guard combined. In these circumstances, the Insurrection Act authorizes the president to employ the military "or any other means" in "cases of insurrection, or obstruction to the laws."

This venerable law, nearly as old as our republic itself, doesn't amount to "martial law" or the end of democracy, as some excitable critics, ignorant of both the law and our history, have comically suggested. In fact, the federal government has a constitutional duty to the states to "protect each of them from domestic violence." Throughout our history, presidents have exercised this authority on dozens of occasions to protect law-abiding citizens from disorder. Nor does it violate the Posse Comitatus Act, which constrains the military's role in law enforcement

but expressly excepts statutes such as the Insurrection Act.

For instance, during the 1950s and 1960s, Presidents Dwight Eisenhower, John Kennedy and Lyndon Johnson called out the military to disperse mobs that prevented school desegregation or threatened innocent lives and property. This happened in my own state. Gov. Orval Faubus, a racist Democrat, mobilized our National Guard

in 1957 to obstruct desegregation at Little Rock Central High School. President Eisenhower federalized the Guard and called in the 101st Airborne in response. The failure to do so, he said, "would be tantamount to acquiescence in anarchy."

More recently, President George H.W. Bush ordered the Army's Seventh Infantry and 1,500 Marines to protect Los Angeles during race riots in 1992. He acknowledged his disgust at Rodney King's treatment — "what I saw made me sick" — but he knew deadly rioting would only multiply the victims, of all races and from all walks of life.

Not surprisingly, public opinion is on the side of law enforcement and law and order, not insurrectionists. According to a recent poll, 58 percent of registered voters, including nearly half of Democrats and 37 percent of African-Americans, would support cities' calling in the military to "address protests and demonstrations" that are in "response to the death of George Floyd." That opinion may not appear often in chic salons, but

widespread support for it is fact nonetheless.

The American people aren't blind to injustices in our society, but they know that the most basic responsibility of government is to maintain public order and safety. In normal times, local law enforcement can uphold public order. But in rare moments, like ours today, more is needed, even if many politicians prefer to wring their hands while the country burns. Tom Cotton (@sentomcotton) is a Republican senator from Arkansas

> (1160 words) www.nytimes.com

Leaders | Blue-collar bonanza

A new age of the worker will overturn conventional thinking



Around the rich world, wage gaps are shrinking

Few ideas are more unshakable than the notion that the rich keep getting richer while ordinary folks fall ever further behind. The belief that capitalism is rigged to benefit the wealthy and punish the workers has shaped how millions view the world, whom they vote for and whom they shake their fists at. It has been a spur to political projects on both left and right, from the interventionism of Joe Biden to the populism of Donald Trump. But is it true?

Even as the suspicion of free markets has hardened, evidence for the argument that inequality is rising in the rich world has become flimsier. Wage gaps are shrinking. Since 2016 real weekly earnings for those at the bottom of America's pay distribution have grown faster than those at the top. Since the covid-19 pandemic this wage compression has gone into overdrive; according to one estimate, it has been enough to reverse an extraordinary 40% of the pre-tax wage inequality that emerged during the previous 40 years. A blue-collar

extraordinary 40% of the pre-tax wage inequality that emerged during the previous 40 years. A blue-collar bonanza is under way.

To understand what is going on, it helps to consider that the blue-collar bonanza is not just an artefact of the statistics: it makes intuitive sense, too. Three forces that shape labour markets—demand, demography and digitisation—have each shifted in ways that benefit workers.

- ¹⁵ Take demand. After quiescent inflation in the mid-2010s, America's Federal Reserve resolved to run the economy hot in the hope that doing so would bring more people into work. Then, after covid-19 struck, governments across the rich world untied the purse-strings. This year the pandemic is a memory, but America has continued to run deficits of a size usually seen in depressions or wartime. As a consequence, demand for labour has stayed high even as central banks have raised interest rates.
- That higher demand has met with constrained supply, owing to shifts in demography. In 2015 a long-running global demographic dividend came to an end as China's working-age population peaked. In the rich world the prime working-age population is growing at its slowest pace on record, and will probably start falling by the end of the decade. That adds to the tightness in labour markets. The unemployment rate across the rich world, at less than 5%, is at historical lows and the working-age employment rate in more than half of OECD Countries is running close to an all-time high. As populations shrink, the workforce gaps are likely to become so wide
- that it is hard to imagine politicians letting in enough immigrants to fill them.

Shifts in digitisation, meanwhile, have changed who stands to benefit most in today's labour market. At the end of the 20th century the information revolution vastly increased the demand for college graduates with brains and computing skills.

- ³⁰ By the mid-2010s, however, the revolution had matured and the college wage premium began to shrink. In 2015 the average rich-world worker with a bachelor's degree or more was paid two-thirds more than the average high-school leaver; four years later, the gap had narrowed to a half. According to one estimate, the college premium for white graduates born in America in the 1980s has been lower than that enjoyed by those born in any of the preceding five decades.
- ³⁵ Generative artificial intelligence looks likely to reinforce this equalising trend. Early research suggests that AI bots provide a bigger productivity boost for lower performers, helping the laggards catch up with the vanguard. And until robotics matures, AI may add to the value of the sorts of tasks that only humans can do, such as manual labour, or providing emotional support.

(598 words) www.economist.com

The Problems Only Start With Plagiarism

Mr. Seife is a professor at New York University and the author of seven books, including, most recently, "Hawking Hawking: The Selling of a Scientific Celebrity."

Plagiarism is perhaps the mildest academic sin, as well as the easiest to detect. There are innumerable cases of more serious forms of misconduct — such as the falsification and fabrication of data — that have stained the reputations of universities all over the world. If academia really wants to tackle the problem, it's got to rethink the way it judges and rewards research — and tell good from bad.

- In Claudine Gay's case, the plagiarism and I think it qualifies as plagiarism seems a venial sin rather than a mortal one. Yes, her doctoral dissertation and several of her academic papers appear to duplicate the language of other scholars in a way that fails to give sufficient credit. But that in itself isn't irredeemable; when a couple of punctuation marks or a footnote can be all that separates vice from virtue, there's a lot of room for interpretation and for honest error. However, plagiarism is a signifier of potentially much more damning sloppiness: Even when, as here, it isn't an egregious case of trying to claim credit for someone else's ideas, it
- can be a sign that the work has more fundamental problems. It's a signal to advisers and peers to give that work extra scrutiny, scrutiny that is sadly lacking.

This is a huge issue because those same advisers and peers are the ones who determine the value — or lack of it — of research, largely through their role in publishing it. The coin of the realm in academia is typically the peer-reviewed paper; an academic gets credit for the research she performs when she publishes the results in a scholarly journal. For the most part, these journals will do a quick assessment of a paper's worthiness and then send the manuscript out to a small number of subject-matter experts (often three) to gauge the quality and importance of the work. But peer reviewers have little incentive to do a thorough job. While universities richly reward a professor's own research output, they care almost nothing about their professors' role in checking

- others' work. Nor are academics typically paid by the journals (which make money from publishing researchers' work), and given the imperfect anonymity of the process, a thorough, critical review can even damage the researcher's relationship with other scientists. As a result, countless professors, when asked to perform a peer review for a journal, fob the work off onto their hapless grad students, so it's often not the seasoned academic judging the quality of research but the greenest in the field. And given the proliferation of academic journals and the increase in the number of academic papers being published the academic review process is getting
- more threadbare by the year.

A truly thorough review of Dr. Gay's papers by peers should have caught the plagiarism; spot-checking every single citation in a paper takes time, but it's a great way of catching not just plagiarism but also errors in interpretation. And that's the easy stuff. Falsification or fabrication of data is even harder to catch, but it can

- ³⁰ often be detected given enough time and effort: Another college president, Stanford's Marc Tessier-Lavigne, resigned after it was revealed that his lab published reports with manipulated data. (A review of the allegations said there was no evidence that Dr. Tessier-Lavigne knowingly falsified data, but that his work "fell below customary standards of scientific rigor and process.") The problems were evident in the papers published in journals — and should have raised flags earlier.
- And when those flags are raised, it's incumbent upon academic institutions and journals to pay more attention than they now do.

(610 words) www.nytimes.com

Opinion

The True Harm of True Crime

Ms. Nichol is a writer and activist whose sister was murdered 30 years ago.

In the 1990s you would have been hard-pressed to find someone who didn't know the name of my sister Polly Klaas. I was 6 years old when a stranger abducted 12-year-old Polly from our bedroom on the evening of Oct. 1, 1993. Her face quickly became a fixture on nightly news, her name featured prominently in headlines alongside fearmongering about crime rates.

⁵ Though the media frenzy should have ended there, it only intensified, fueling a political climate primed for reactionary reprisal. Polly's kidnapping from our middle-class, white, suburban community triggered a national outcry for punishment and retribution.

In the next few years, true crime began to morph into the media obsession it is today.

One might argue that this genre honors victims and those who solved or sought to solve the cases. However, the exploitation of victims' stories often carries a steep cost for their families as their tragedies are commodified and their privacy repeatedly violated for mass consumption.

On top of those harms, the stories that don't fit with true crime's cultural emphasis on white female victimhood too often go untold.

Before my sister's murder, a version of what has become known as the three-strikes law was proposed in California. The measure called for a sentence of 25 years to life for almost any crime, no matter how minor, if the defendant had two prior convictions for crimes the law designated as serious or violent. The measure was initially seen as so unjustifiably harsh that it was swiftly rejected.

Since the law was enacted, over half the people sentenced under it were imprisoned for nonviolent crimes, and the law is applied disproportionately to people of color and people with mental illnesses and physical

disabilities. Though the law was modified — it now requires the third offense be a serious or violent felony the law continues to glaringly amplify the institutional discrimination that targets communities of color and other marginalized groups.

Sensationalist stories in the media about high-profile crimes not only erode the dignity of victims but also can inflate public perception of national crime rates, which have been in decline for decades. Misguided policies

like three-strikes laws aren't merely unfortunate side effects of inflammatory discourse; they are the direct result of moral outrage curated by hyperbolic headlines and the pervasiveness of true crime's grisly method of storytelling.

True crime's narratives often concern themselves more with exacting vengeance than understanding what survivors need in order to heal and recover from unthinkable harm. They can animate our appetite for revenge and conflate justice with punishment when victims need and deserve so much more support than vengeance or

and conflate justice with punishment when victims need and deserve so much more support than vengeance or punishment can offer. And yet a majority of survivors do not receive any victim compensation or referrals from the justice system to support services that are essential to trauma recovery.

Additionally, true crime stories frequently center on white female victims who were harmed by strangers. This overshadows the reality that Black Americans are more likely to be victims of homicide and that in cases in

³⁵ which a perpetrator is identified, a vast majority of homicides are committed by people known to the victims. The exploitation and erasure that slant true crime's bias toward sensational violence undermine our ability to address the systemic root causes of harm while estranging us from our empathy toward marginalized victims most affected by crime.

Packaging trauma as entertainment ignores the diverse needs of victims. To truly dismantle cycles of harm, it is imperative to amplify survivors' stories on their own terms and earnestly embrace the safety solutions they are pioneering in their communities.

> (595 words) www.nytimes.com

Leaders | Just sign the cheque

Jan 10th 2024

"No-strings giving" is transforming philanthropy



The rich can donate their money quickly and wisely

It is certainly difficult to make money. But should money be difficult to give away? In the Gilded Age, industrialists such as Andrew Carnegie and John D. Rockefeller worried about waste and misuse; Carnegie wrote in 1889 that \$950 of every \$1,000 that went to charity was "unwisely spent". Around the turn of the millennium a new cohort of businessmen-philanthropists such as Bill Gates, the founder of Microsoft, looked to data and rules as a year to stan years.

⁵ data and rules as a way to stop waste. Donors ran lengthy application processes, provided funds that were ring-fenced for specific uses and enforced painstaking reporting requirements. In 2006 The Economist called it "philanthrocapitalism".

Two decades on, however, it has become clear that all this paperwork puts the brakes on giving. The 400 richest Americans have given away just 6% of their combined fortunes, according to Forbes. At the last count in 2022,

almost \$1.2trn was sitting in American private foundations and \$230bn in donor-advised funds, a sort of savings account for philanthropists. Plenty of money is being earmarked for do-goodery. But it is not getting to worthy causes fast enough.

Fortunately, a new generation of donors is once again shaking up the world of big philanthropy, as we explore in our Special report this week. A series of crises, from the covid-19 pandemic to the wars in Ukraine and the Middle East, has spurred some donors to get money to the needy quickly.

Leading the charge is MacKenzie Scott, who came into a tidy fortune in 2019 after her divorce from Jeff Bezos, the founder of Amazon. She has outsourced the grunt work of philanthropy to advisers, simplified the process of giving and is dishing out billions of dollars a year with few conditions. This "no-strings giving" is upending megadonors' long-held assumptions. It offers lessons for those struggling to get money out of the door.

²⁰ One is the recognition that philanthropists do not have to do everything themselves. Megadonors no longer need to endure the hassle of setting up a foundation and hiring staff. An upside of a decades-long trend for businesslike philanthropy is that legions of consultants have emerged to help donors draw up a strategy and conduct due diligence on potential recipients. Donors can team up and share the work, too.

Another lesson from the no-strings crowd is that philanthropists can trust recipients to put money to good use
 once the proper due diligence is in place. That means analysing a nonprofit organisation's annual reports and interviewing its leaders and other funders. Once the grant has been made, however, donors who ask for regular reports containing specific data presented in a certain format risk slowing projects down. Ms Scott asks some grant-winners to send her a short update every year that includes whatever information they have to hand. Any nonprofit worth funding wants to be sure its work is having the intended effect; it will almost certainly have
 enough internal data and evaluation to satisfy donors.

- Last, megadonors do not have to make all the decisions. Many big-shot philanthropists spend a lot of time and money crafting projects and strategising about how exactly money should be used. Unrestricted donations, by contrast, allow non-profit groups to judge where funds are most needed. That makes sense. The people working on the front lines are likely to have the better ideas on how to solve a problem.
- ³⁵ No-strings giving may not be for everyone: there will always be donors who want to roll up their sleeves and get involved. But the new generation of donors shows that money can be spent both quickly and wisely. Philanthropy can be as simple as signing on the dotted line.

(606 words)

Science and technology | Sharing the skies

Jan 10th 2024

Wind turbines are friendlier to birds than oil-and-gas drilling



Contrary to what opponents of wind farms fear

BIRDERS GET nervous when they see landscapes covered in wind turbines. When the wind gets going, their blades can spin at well over 200km per hour. It is easy to imagine careless birds getting chopped to bits. Campaigners often point to the possibility when opposing the building of new wind farms.

No one doubts that wind turbines do indeed kill at least some birds. But a new analysis of American data, published in Environmental Science & Technology, suggests the numbers are negligible, and have little impact on bird populations.

Wind power has expanded dramatically in America over the past 20 years, from 2.6 gigawatts of installed capacity on land in 2000 to 122 gigawatts in 2020. Many studies have analysed the effects in specific locations or on specific bird species. But few have looked at the effects on wildlife at the population level. Enter Erik Katovich, an economist at the University of Geneva. Dr Katovich made use of the Christmas Bird Count, a citizen-science project run by the National Audubon Society, an American non-profit outfit. Volunteers count birds they spot over Christmas, and the society compiles the numbers. Its records stretch back over a century.

Dr Katovich assumed, reasonably, that if wind turbines harmed bird populations, then the numbers seen in the Christmas Bird Count would drop in places where new turbines had been built. He combined bird population and species maps with the locations and construction dates of all wind turbines in the United States, with the exceptions of Alaska and Hawaii, between 2000 and 2020. He found that building turbines had no discernible effect on bird populations. That reassuring finding held even when he looked specifically at large birds like hawks, vultures and eagles that many people believe are particularly vulnerable to being struck.

But Dr Katovich did not confine his analysis to wind power alone. He also examined oil-and-gas extraction. Like wind power, this has boomed in America over the past couple of decades, with the rise of shale gas produced by hydraulic fracturing, or fracking, of rocks. Production rose from 37m cubic metres in 2007 to 740m cubic metres in 2020.

Comparing bird populations to the locations of new gas wells revealed an average 15% drop in bird numbers when new wells were drilled, probably due to a combination of noise, air pollution and the disturbance of rivers and ponds that many birds rely upon. When drilling happened in places designated by the National Audubon Society as "important bird areas", bird numbers instead dropped by 25%. Such places are typically migration hubs, feeding grounds or breeding locations.

Wind power, in other words, not only produces far less planet-heating carbon dioxide and methane than do fossil fuels. It appears to be significantly less damaging to wildlife, too. Yet that is not the impression you would get from reading the news. Dr Katovich found 173 stories in major American news outlets reporting the supposed negative effects that wind turbines had on birds in 2020, compared with only 46 stories discussing the effects of oil-and-gas wells. Wind turbines might look dramatic. But their effect on birds is not.

(519 words) www.economist.com

Opinion

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Jan. 14, 2024 David French

This Is the Actual Danger Posed by D.E.I.

Opinion Columnist

There are few national conversations more frustrating than the fight over D.E.I. Short for "diversity, equity, and inclusion," the term — like the related progressive concepts of wokeness and critical race theory — used to have an agreed-upon meaning but has now been essentially redefined on the populist right. In that world, D.E.I. has become yet another catchall boogeyman, a stand-in not just for actual policies or practices designed to increase diversity, but also a scapegoat for unrelated crises.

For example, after a door plug blew off a Boeing 737 Max 9 jet this month, X's Elon Musk, among others, launched a series of tirades against D.E.I. The idea, if it can be called that, was that efforts to diversify airline work forces had contributed to the accident. The problem was that there was zero evidence that these efforts had anything to do with it. In fact, the airline industry is much safer than it was when it was a virtually all-white enterprise decades ago.

Outside the reactionary right, there is a cohort of Americans, on both right and left, who want to eradicate illegal discrimination and remedy the effects of centuries of American injustice yet also have grave concerns about the way in which some D.E.I. efforts are undermining American constitutional values, especially on college campuses.

¹⁵ For instance, when a Harvard scholar such as Steven Pinker speaks of "disempowering D.E.I." as a necessary reform in American higher education, he's not opposing diversity itself. Pinker is liberal, donates substantially to the Democratic Party and "loathes" Donald Trump. The objections he raises are shared by a substantial number of Americans across the political spectrum.

To put it simply, the problem with D.E.I. isn't with diversity, equity, or inclusion — all vital values. The danger posed by D.E.I. resides primarily not in these virtuous ends, but in the unconstitutional means chosen to advance them.

In the name of D.E.I., all too many institutions have violated their constitutional commitments to free speech, due process and equal protection of the law.

It is a moral necessity for colleges to be concerned about hateful discourse, including hateful language directed at members of historically marginalized groups. Moreover, colleges that receive federal funds have a legal obligation to protect students from harassment on the basis of race, sex, sexual orientation and other protected categories.

Yet that is no justification for hundreds of universities to pass and maintain draconian speech codes on campus, creating a system of unconstitutional censorship that has been struck down again and again and again in federal court. Nor is it a justification for discriminating against faculty members for their political views or for compelling them to speak in support of D.E.I.

Our nation has inflicted horrific injustices on vulnerable communities. And while the precise nature of the injustice has varied — whether it was slavery, Jim Crow, internment or the brutal conquest of Native American lands — there was always a consistent theme: the comprehensive denial of constitutional rights.

³⁵ But one does not correct the consequences of those terrible constitutional violations by inflicting a new set of violations on different American communities in a different American era.

There is a better way to achieve greater diversity, equity, inclusion and related goals. Universities can welcome students from all walks of life without unlawfully censoring speech. They can respond to campus sexual violence without violating students' rights to due process. They can diversify the student body without discriminating on the basis of race. Virtuous goals should not be accomplished by illiberal means.

(587 words)

www.nytimes.com

Leaders | Pics and it didn't happen

Jan 18th 2024

Al-generated content is raising the value of trust



Who did the posting will soon matter more than what was posted

t is now possible to generate fake but realistic content with little more than the click of a mouse. This can be fun: a TikTok account on which—among other things—an artificial Tom Cruise wearing a purple robe sings "Tiny Dancer" to (the real) Paris Hilton holding a toy dog has attracted 5.1m followers. It is also a profound change in societies that have long regarded images, video and audio as close to includ proof that something is

real. Phone scammers now need just ten seconds of audio to mimic the voices of loved ones in distress; rogue AI-generated Tom Hankses and Taylor Swifts endorse dodgy products online, and fake videos of politicians are proliferating.

The fundamental problem is an old one. From the printing press to the internet, new technologies have often made it easier to spread untruths or impersonate the trustworthy. Typically, humans have used shortcuts to sniff out foul play: one too many spelling mistakes suggests an email might be a phishing attack, for example. Most recently, AI-generated images of people have often been betrayed by their strangely rendered hands; fake video and audio can sometimes be out of sync. Implausible content now immediately raises suspicion among those

who know what AI is capable of doing.

The trouble is that the fakes are rapidly getting harder to spot. AI is improving all the time, as computing
power and training data become more abundant. Could AI-powered fake-detection software, built into web
browsers, identify computer-generated content? Sadly not. As we report this week, the arms race between
generation and detection favours the forger. Eventually AI models will probably be able to produce pixel-perfect
counterfeits—digital clones of what a genuine recording of an event would have looked like, had it happened.
Even the best detection system would have no crack to find and no ledge to grasp. Models run by regulated
companies can be forced to include a watermark, but that would not affect scammers wielding open-source

models, which fraudsters can tweak and run at home on their laptops.

Dystopian possibilities abound. It will be difficult, for example, to avoid a world in which any photograph of a person can be made pornographic by someone using an open-source model in their basement, then used for blackmail—a tactic the fbi has already warned about. Perhaps anyone will be able to produce a video of a president or prime minister announcing a nuclear first strike, momentarily setting the world on edge. Fraudsters

impersonating relatives will prosper.

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Yet societies will also adapt to the fakers. People will learn that images, audio or video of something do not prove that it happened, any more than a drawing of it does (the era of open-source intelligence, in which information can be reliably crowdsourced, may be short-lived). Online content will no longer verify itself,

³⁰ so who posted something will become as important as what was posted. Assuming trustworthy sources can continue to identify themselves securely—via urls, email addresses and social-media platforms—reputation and provenance will become more important than ever.

It may sound strange, but this was true for most of history. The era of trusted, mass-produced content was the exception. The fact that people may soon struggle to spot the invisible hand of AI does not mean the marketplace of ideas is doomed. In time, the fakes that thrive will mostly be the funny ones.

(558 words)

A 45-year-old biotech CEO may have reduced his biological age by at least 5 years through a rigorous medical program that can cost up to \$2 million a year, Bloomberg reported

Business Insider [adapted] By Lloyd Lee, Feb 1, 2023

Bryan Johnson is 45 years old but, according to a new report, his test results show he has the heart of a 37-year-old and the lungs of a young adult.

Johnson is a biotech entrepreneur who hopes to game nature's course of aging and have the organs and health of an 18-year-old by going through an intense data-driven experimental program he's called Project Blueprint. According to a recent Bloomberg profile of the CEO, Johnson could spend up to \$2 million on his body this year and there are early glimpses that show he may be on track to unlocking the secret to age reversal.

Test results from doctors suggest that Johnson has the heart of a 37-year-old, the skin of a 28-year-old, and the lung capacity of an 18-year-old, Bloomberg's Ashlee Vance reported. The program is led by Oliver Zolman, a 29-year-old physician who calls himself the "rejuvenation doctor," and is supported by a team of more than 30 health experts, according to the report. While it's still in its experimental stage and is constantly being tweaked, the health program consists of an intense daily regimen of carefully curated supplements, meals, exercise, and a slew of bodily tests.

Johnson's 5 a.m.-mornings for example start with two dozen medicines and supplements for all kinds of purported health benefits: lycopene; turmeric, zinc, metformin to prevent bowel polyps, and a small dose of lithium for brain health, Johnson told Bloomberg. Although there is some evidence that lithium can treat mental illnesses such as bipolar disorder, there is scant evidence that it can rejuvenate cells or preserve memory. There is also the risk of lithium toxicity when taken in high dosages.

His meals, a mix of solid and soft foods, are vegan and restricted to 1,977 calories a day. He exercises daily, with three high-intensity workouts a week, and goes through blood tests, MRIs, and colonoscopies each month, Bloomberg reported. "What I do may sound extreme, but I'm trying to prove that self-harm and decay are not inevitable," Johnson told the outlet.

His efforts in 2021 have amounted to what Johnson claims to be a world record epigenetic age reversal of 5.1 years. Doctors say he has the gum inflammation of a 17-year-old, and a device that tracks Johnson's rate of nighttime erections is like that of a teenager's, Bloomberg reported. "Epigenetic age is like an experimental measure," Zolman told Insider. "It's kind of an easy way of doing all the direct measurements across all the organs."

Zolman said that each organ has various "markers" that can be looked at to determine how Johnson's organs compare to that of a 37 or 17-year-old. For example, a marker for gums can be gum recession which increases with age, he said, and you can compare Johnson's to the average 18-year-old. Zolman qualified that this is not evidence to say that Johnson reduced his age in every organ by five years. He added that there needs to be more long-term data that shows consistent "reduction" of the markers.

Johnson hopes to encourage others to follow his data- and medical-driven program by turning his relentless pursuit of youthfulness into a competition. Recently, he started a website called Rejuvenation Olympics, which displays an "epigenetic leaderboard," ranking the 1,750 people in the world who are fighting against Father Time. Johnson currently stands in first place.

The Economist explains

Oct 3rd 2022

Who is Clarence Thomas?

America's longest serving justice is pulling the Supreme Court to the right

WHEN AMERICA'S Supreme Court overruled Roe v Wade in June, one jurist voting to scrap fifty years of abortion rights saw an opportunity to go further. For Justice Clarence Thomas, shredding the 1973 ruling was just the beginning. He wrote that Supreme Court decisions protecting the rights to contraception and to sexual intimacy and marriage equality for gays and lesbians rested on the same faulty logic. Since they, like Roe, are "demonstrably erroneous", the court had a "duty" to strike them down, he argued. None of the other five conservatives signed his opinion. But America's most conservative and longest-serving justice is influential. He has transformed lonely views into majority opinions. Who is he and where do his idiosyncratic views come from?

Mr Thomas was born poor in a small town in Georgia in 1948. After his father abandoned his family, he was raised by his grandfather. He spent his last two years of high school and the beginning of college at a seminary. Mr Thomas then jettisoned his plan to join the priesthood and pivoted to leftist black nationalism. He attended the College of the Holy Cross in Massachusetts (where he helped found a black student union to "expose and eradicate social inequities and injustices") and then Yale Law School, where his views lurched to the right as he reflected on his admission under a racial-preference programme. Mr Thomas later found his muse in Thomas Sowell, a Marxist-cum-conservative economist who taught that blacks should be self-sufficient rather

than depend on the false promise of white benevolence.

After law school Mr Thomas joined the Missouri attorney-general's office under John Danforth, a Republican. He later moved to Washington to serve as an aide to Mr Danforth, who had been elected to the Senate. Mr Thomas became a judge in 1990 when George H.W. Bush appointed him to the Court of Appeals for the District of Columbia Circuit and 16 mention later to the seat that Thursdard Marshall the first African American on the

²⁰ of Columbia Circuit and, 16 months later, to the seat that Thurgood Marshall, the first African-American on the Supreme Court and a civil-rights icon, would soon vacate. Bush introduced his nominee as the "best-qualified" person for the job, a claim that even Mr Thomas saw as "extravagant".

Famously reticent during oral arguments for most of his 31 years on the court, Justice Thomas began to speak up in virtual hearings during the covid-19 pandemic. His jurisprudence has never been shy. He did not recuse

- himself from cases involving challenges to the result of the general election in 2020 even though his wife, Ginni Thomas, had put pressure on Donald Trump's chief of staff and more than two dozen Arizona legislators to overturn Joe Biden's victory. (Mrs Thomas was recently interviewed by the House January 6th committee about these activities.) His votes in favour of the death penalty and gun rights and against abortion and affirmative action are often accompanied by strident written commentary. Justice Thomas claims the mantle of
- ³⁰ "originalism"—the view that the constitution is best understood in light of its public meaning when drafted and ratified—but the historical analysis in his opinions get mixed marks from scholars. According to Saul Cornell of Fordham University, his opinion in June striking down New York's limits on concealed-carry permits for guns was "one of the most intellectually dishonest and poorly argued decisions in American judicial history".

And yet, that opinion in Bruen v New York State Rifle & Pistol Association commanded the signature of each of his five fellow conservatives. After years of complaining, often alone, that the right to keep and bear arms was being treated as a "constitutional orphan", Justice Thomas had persuaded his colleagues to expand the freedoms justified by the Second Amendment in radical fashion: with a new test that shoots down any gun-control law that lacks an analogue in his curated version of American history. Paving the way for sharp right turns is not unfamiliar territory for him. In 2009, he was the only member of the court to say that the heart of the Voting Rights Act of 1965—which shielded minorities from discrimination at the polls—was unconstitutional. Four

years later, he joined a 5-4 majority to gut that very provision.

(686 words)

United States | Breaking news

Jan 25th 2024 | NEW YORK



<The rise of the TikTok news anchor ++>

A hoard of Pocket Cronkites will read the papers and tell you, like, what they say

"BREAKING NEWS: it looks like there is some weird stuff going on in America." Welcome to the news on TikTok. Before we dwell on how and when it is appropriate to start a sentence with "breaking news", let's cross now to our correspondent with a story about a "Potential Diabetes Cure!" (3.4m views). Next, "News Daddy" (a boy called Dylan) will read out details of a hotel explosion in Texas to some of his 10.3m followers, thankfully from the safety of his home studio in Britain; "Nah 2024 needs to chill... i need some sleep," the description

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Each of these videos comes from a cohort of amateur anchors who take the business of delivering the news extremely seriously. They are the presenters, researchers and producers rolled into one. Their uploads on everything from product recalls to the war in Gaza caricature traditional news reports, aggregate them—and compete with them. News Daddy's follower count exceeds that of the flagship TikTok accounts of the New York Times, the Washington Post and the Daily Mail combined. The handful of influencers your correspondent met have over half a billion likes on all of their videos between them.

And that's what matters, because in 2020, 9% of Americans aged between 18 and 29 told a Pew poll that they regularly got their news on the platform; by 2023 that number had risen to 32%. Capturing this generation's attention is a delicate balance: "It has to be short, it has to be fast," says Jessica Burbank, a creator and freelance journalist who has grown a loyal Gen Z audience through "translating" the biggest stories of the week to them by "taking away all of the nonsense".

Free from the constraints of editorial processes and executive boards, news creators believe their appeal lies in a quality that mainstream outlets lack: authenticity. "Most traditional news is devoid of emotion," reckons Josh Helfgott, who has earned the attention of millions of followers making clips about LGBT news stories. "I believe that what catches my audience's attention is when they see my passion behind the story." Publishers around the world are all too aware of this shift; over half of those recently surveyed by the Reuters Institute for the Study of Journalism said that they plan to devote more effort into putting stories on TikTok this year.

- ²⁵ Before everyone starts workshopping ways to deliver the news in a chill and relatable lilt, take a moment for some optimism. As Gallup reports the lowest amount of trust in American mass media since 2016, it seems that creators have merely figured out how to tune people back in to news stories that outlets have been reporting on the whole time, just in ways that feel more relevant and real to young internet users. That can be a good thing. So long as you choose not to think too much about comments that read, "I get my news from him, and the fish".
- ³⁰ With a busy election year ahead, TikTok newscasters will have much to work with. Expect to see many more of them co-opting the headlines to increase their followings, be the first to post about it, entertain people, ask why no one is talking about a thing, go viral—and spread the news.

(568 words) www.economist.com

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Leaders | Pics and it didn't happen

Jan 18th 2024

Al-generated content is raising the value of trust



Who did the posting will soon matter more than what was posted

It is now possible to generate fake but realistic content with little more than the click of a mouse. This can be fun: a TikTok account on which—among other things—an artificial Tom Cruise wearing a purple robe sings "Tiny Dancer" to (the real) Paris Hilton holding a toy dog has attracted 5.1m followers. It is also a profound change in societies that have long regarded images, video and audio as close to ironclad proof that something is

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(558 words)

Jan 25th 2024 | NEW YORK

United States | Breaking news

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(568 words) www.economist.com

Opinion

This Is Why Google Paid Billions for Apple to Change a Single Setting

A few years ago it became known that Alexa, Amazon's voice device, recorded and sent private conversations to third parties, that Amazon staff members listened to recordings and that the company kept an extensive archive of recordings by default.

Both companies responded to these startling violations of privacy by suggesting that the burden to keep this information from going public was on users, who could, they said, opt out of devices' default settings to ensure privacy. This is often the standard industry response.

Even if you're aware of these problems, how easy is it to protect your privacy?

The bigger problem is not the sometimes ridiculous difficulty of opting out, it's that consumers often aren't even aware of what their settings allow, or what it all means. If they were truly informed and actively choosing among the available options, the default setting would matter little, and be of little to no value.

But companies expect users to accept what they're given, not know their options or not have the constant vigilance required to keep track of the available options, however limited they may be. Since the power in the industry is concentrated among few gatekeepers, and the technology is opaque and its consequences hard to foresee, default settings are some of the most important ways for companies to keep collecting and using data as they want.

So, how much are default settings worth?

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In April 2021, Apple changed the default settings on iPhones and other devices so that users could not be tracked automatically via a unique identifier assigned to their Apple device. For many companies, and even for entire industries whose business models are based on tracking people online, it was a cataclysmic event. No longer would people have to opt out of such tracking by going into their settings and changing the permissions.

Now the apps had to ask for and receive explicit permission before they could have access to that identifier. In 2021, Snap, Facebook, Twitter and YouTube were estimated to have lost about \$10 billion in total because of

In 2021, Snap, Facebook, Twitter and YouTube were estimated to have lost about \$10 billion in total because of the change. In early 2022, Meta, Facebook's parent company, said it alone stood to lose \$10 billion. Industries like mobile gaming, in which revenue largely depends on tracking users, also suffered.

²⁵ Another valuation of default settings became clear in the current Google antitrust trial. During the trial, Google revealed that it paid \$26.3 billion in 2021 to be the default search engine on various platforms, with a substantial portion of the money going to Apple.

Regulators can require companies to have defaults that favor privacy and autonomy, and make it easy to remain in control of them. There are already good efforts underway. California allows people to make a single opt-out or dolate request to get all data brokers to dolate all their information, rather than having to appeal to them one

or delete request to get all data brokers to delete all their information, rather than having to appeal to them one by one. Colorado also recently passed similar universal one-stop opt-out mechanisms. Other states have made similar privacy protection moves.

I was happy to see Apple switch the defaults for tracking in 2021, but I'm not happy that it was because of a decision by one powerful company. We didn't elect Apple's chief executive, Tim Cook, to be the sovereign of our digital world. He could change his mind.

It's time that our own elected officials got smarter — and prioritized the public interest rather than cozy arrangements with the tech industry — to exercise that power. If the federal government can't or won't, states can follow California and Colorado's lead.

If it were all as simple as people changing their settings, Google wouldn't be forking over a sum larger than the G.D.P. of entire countries to have Apple users start with one setting rather than another. The default way the technology industry does business needs to change now.

(633 words) www.nytimes.com

Leaders | A charter for change

The evidence in favour of charter schools in America has strengthened

Meanwhile, both parties have run away from them

Improving schools is hard. Evidence of success or failure can take a decade to collect. What works in one place may flop in another. This explains why school reformers are excited about an authoritative study from Stanford University which shows that charter schools really do help children learn. That should settle an argument over how to arrange America's schools that has been raging for 30 years.

- ⁵ The theory underpinning charters is that schools should be freed from the bureaucracy of the public-schools system and be able to hire and fire teachers based on merit. If they have these freedoms and are held accountable, then the benefits will show up in better results. That idea attracted Republican support, but it was controversial on the left. Although technocratic-minded Democrats, such as Bill Clinton and Barack Obama, supported charters, teachers' unions opposed them, arguing that they drew resources away from other public schools.
- ¹⁰ When charters succeeded, the unions said, it was only because they attracted the brightest pupils or the most motivated parents.

Although fine-grained studies were encouraging, the broad evidence for charters was disappointing. In 2009 the group at Stanford published an influential study showing that their pupils did slightly worse in maths and reading than students in conventional public schools. In 2013 the study was updated and the team found that charter pupils did better in reading and worse in maths. Partly as a result, the unions won the argument on

- the left. When he was running for office in 2020, Joe Biden described himself as "not a charter-school fan". Meanwhile, the right has turned away from charters and fixated instead on "wokeness" and on giving parents vouchers so that they have more choice over where their children go to school.
- Despite all this, charter networks have quietly expanded and experimented. Although some have failed (deservedly), more have thrived. The latest study, from Stanford's Centre for Research on Education Outcomes, compared 1.9m charter-school students with a control sample in 2014-19. They found that in maths the average charter student advanced by an extra six days each year compared with one at a traditional public school, and by 16 days in reading. Over time, that adds up to a big difference.
- What is more, these averages obscure important findings. Charters do much better in cities and with Hispanic and African-American students. Charters in cities advanced their pupils by almost a whole month each year in reading and maths compared with the control group. Black and Hispanic students did better on those measures "by large margins" compared with their peers at traditional public schools. These are the very children the Democratic Party says it especially wants to help.

And the researchers rejected the notion that this was achieved by creaming off motivated pupils or parents. If anything, charter schools take in students who are doing worse than their classmates in public schools.

The Stanford study also points to something larger. Since the Supreme Court overturned affirmative action in college admissions and firms began backing away from diversity, equity and inclusion programmes, Democrats have become unsure about how to deal with the racial disparities they focused on in 2020. They thought the way to fix black-white achievement gaps was to attack standardised tests and gifted and talented programmes. That was unpopular, and left the underlying problem unsolved.

America would do more to cut racial disparities by pursuing race-blind policies that focus on those who most need help. That sounds like a paradox, but it is not. Just as tax credits for poor families narrow racial disparities in income, so charter schools in cities do the same for reading and maths. Republicans should rekindle their enthusiasm for charters. Mr Biden should tell his education secretary that he is now a fan of charter schools. And he should set about helping them flourish.

(637 words)

Opinion

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Feb. 3, 2024 Jessiva Grove

Are These Recipes Good, or Is the TikTok Chef Just Good-Looking?



I follow a lot of cooking accounts on TikTok and Instagram, which means that I get served ever more cooking content, and over the past few years, I've noticed a stylistic change.

Lately, more and more of the cooking video creators appear as their full selves, and most of them are blandly attractive. Sometimes, they don't seem to even be cooking in the traditional sense — I've watched a lot of videos where they're just assembling sandwiches with high-end ingredients like speck and burrata. I don't know about you, but I don't need a chef to tell me that a ham and cheese sandwich tastes good.

It's reached the point where I can't tell: Are these recipes good, or are the people leading me through them just good-looking in a way that's rewarded by social media algorithms?

I'm aware that "culture" today is incredibly siloed, and that what I get served in my bubble is quite different from what other people are being served in their bubbles. But it made me wonder whether the "beauty premium" — something that economists have observed over many years — is greater now that individuals with all different levels of expertise can get a career boost from having a robust social media presence. "The internet," writes Vox's Rebecca Jennings, "has made it so that no matter who you are or what you do — from nine-to-five middle managers to astronauts to house cleaners — you cannot escape the tyranny of the personal brand."

In an article for IZA World of Labor titled "Does It Pay to Be Beautiful?" Eva Sierminska and Karan Singhal explain that "empirical results support the fact that 'better-looking' people receive a wage premium, while those with 'below-average' looks incur a wage penalty." In their overview of the research on the beauty premium, they explain that men actually face a greater plainness penalty than women do. They also find that being attractive is especially important in jobs dealing with customers, because customers prefer to deal with attractive salespeople and waiters, and that as a result, more attractive people gravitate toward those kinds of jobs.

In a sense, when anyone puts a video on social media, anyone who consumes it is a customer. But on top of individual human preferences for beauty, there is also an algorithm's invisible sorting. I called Kyle Chayka, the author of the new book "Filterworld: How Algorithms Flattened Culture," to ask if he sees more content creators putting their faces and bodies onscreen, and if attractiveness was even more at a premium than it was just a few years ago.

Chayka said he'd noticed the same thing I had with the cooking creators, and explained how and why that might be happening. "On one level, algorithmic recommendations are sets of variables and equations that are programmed by the engineers at the tech companies. So they are actively deciding what factors dictate how something gets promoted or not. And there were leaked reports from inside TikTok that at times the company just had mandates — we need less 'ugly' people in the feed."

At the same time, Chayka thinks it's just human nature to enjoy looking at attractive people (and I agree, it's likely built into us). "So it's kind of hard to say whether hot people get promoted more because it's some mathematical variable, or what they get promoted for, because more people pay attention to them naturally."

That said, he does think there's more pressure lately for people with all sorts of expertise (or no expertise) to ³⁵ put themselves in their content. So let's say you're an expert in Excel spreadsheet hacks. Where once you might just put the spreadsheet on the screen, now you're putting your mug on there, too. "I've definitely spoken to many younger people on TikTok and they say that there's more pressure to put your face on the internet to make a TikTok," Chayka said.

> (654 words) www.nytimes.com

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Edited, formatted and potentially abridged by Adrien Méli (2024)
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Feb 7th 2024

NASA's PACE satellite will tackle the largest uncertainty in climate science



It will monitor tiny particles in Earth's atmosphere and oceans

Small things can have big effects. Take the plant plankton that populate the Earth's oceans. When zooplankton eat them, the phytoplankton release a chemical called dimethyl sulphide (DMS). Chemical reactions in the atmosphere turn DMS into sulphur-containing particles that offer a surface for water vapour to condense on. Do that enough times and the result is a cloud. Clouds, in turn, affect both the local weather and, by reflecting sunlight into space, the world's climate.

Other tiny things have similarly extensive effects. Sulphur from ships' funnels also makes particles that seed clouds, producing strings of puffy white "shiptracks" that can be seen in satellite pictures. Soot from burning fossil fuels, meanwhile, has the opposite effect. It is made of dark particles that absorb solar energy, warming the air around them and discouraging cloud formation. If sulphur particles make it high enough in the atmosphere (thanks to a volcanic eruption, perhaps) they can form a haze that blocks some sunlight from reaching Earth's

surface.

But although scientists know in general terms how these processes work, quantifying them is much harder. Uncertainties about the behaviour of "aerosols", as various small particles in the air are collectively known, are one of the main sources of scientific uncertainty in climate models. They are therefore a big reason for the error bars that surround projections of how hot Earth will become for a given increase in the amount of carbon

error bars that surround projections of how hot Earth will become for a given increase in the amoun dioxide in its atmosphere.

Climate scientists hope that NASA's new satellite, PACE (for "Plankton, Aerosol, Cloud, ocean Ecosystem"), which was launched into Earth orbit on February 8th, will reduce those uncertainties around aerosols. PACE's cameras will sweep the planet every one to two days to create a continually updated census of the very small things that are suspended in the oceans (plankton) and the air (aerosols).

PACE's main camera is sensitive to the spectrum of light between the ultraviolet and the near infrared. For the oceans, that means PACE will be able to distinguish different types of phytoplankton. "That is powerful because diatoms fuel fisheries [and] cyanobacteria can be harmful," says PACE's chief scientist. Two other instruments mounted on PACE will offer information about the size and shape of aerosols, making it possible for the first time to distinguish soot from sea spray and particles produced by burning fossil fuels.

That could be "transformative" for climate models, says a climate scientist who also works at NASA. Modellers have had to compensate for the limited nature of the existing aerosol data with informed guesswork. As a result, different climate models vary considerably in their estimates of how powerfully aerosols affect the climate.

- Such uncertainties affect questions about how air pollution influences climate change. Laws in Europe and
 North America have cut the amount of air pollution from fossil fuels since the 1980s. This is a boon for human health. But it has also lifted a smoggy veil that was masking some of the warming caused by greenhouse-gas emissions. Cleaning up air pollution could be one of the most important influences on the climate in the coming decades. Better data will allow better modelling.
- Similarly, climatologists are divided on the effect of rules adopted by the United Nations, which capped the
 amount of sulphur in ship fuel starting in January 2020. Some believe the reduction in sulphur in ship exhausts
 may have contributed to the exceptionally hot temperatures recorded around the world in 2023. Others think
 the effect was minimal. There are plenty more questions climatologists would like answered. After decades of
 uncertainty, answers may be on the way.

(592 words) www.economist.com

Science and technology | Silicon dreamin'

AI models make stuff up. How can hallucinations be controlled?



It is hard to do so without also limiting models' power

It is an increasingly familiar experience. A request for help to a large language model (LLM) such as OpenAI's ChatGPT is promptly met by a response that is confident, coherent and just plain wrong. In an AI model, such tendencies are usually described as hallucinations.

Hallucinations make it hard to rely on AI systems in the real world. Mistakes in news-generating algorithms can spread misinformation. Image generators can produce art that infringes on copyright, even when told not to. Customer-service chatbots can promise refunds they shouldn't. And hallucinations in AI systems that are used for diagnosis or prescription can kill.

The trouble is that the same abilities that allow models to hallucinate are also what make them so useful. For one, LLMs are a form of "generative" AI, which, taken literally, means they make things up to solve new problems. They do this by producing probability distributions for chunks of characters, or tokens, laying out how likely it is for each possible token in its vocabulary to come next. The mathematics dictate that each token must have a non-zero chance of being chosen, giving the model flexibility to learn new patterns, as well as the capacity to generate statements that are incorrect. The fundamental problem is that language models are probabilistic, while truth is not.

This tension manifests itself in a number of ways. One is that LLMs are not built to have perfect recall in the way a search engine or encyclopedia might. Instead, because the size of a model is much smaller than the size of its training data, it learns by compressing. The model becomes a blurry picture of its training data, retaining key features but at much lower resolution. Some facts resist blurring—"Paris", for example, may always be the highest-probability token following the words "The capital of France is". But many more facts that are less statistically obvious may be smudged away.

Further distortions are possible when a pretrained LLM is "fine-tuned". This is a later stage of training in which the model's weights, which encode statistical relationships between the words and phrases in the training data, are updated for a specific task. Hallucinations can increase if the LLM is fine-tuned, for example, on transcripts of conversations, because the model might make things up to try to be interesting, just as a chatty human might.

²⁵ Tinkering with a model's weights can reduce hallucinations. One method involves creating a deliberately flawed model trained on data that contradict the prompt or contain information it lacks. Researchers can then subtract the weights of the flawed model, which are in part responsible for its output, from those of the original to create a model which hallucinates less.

It is also possible to change a model's "temperature". Lower temperatures make a model more conservative, encouraging it to sample the most likely word. Higher temperatures make it more creative, by increasing the randomness of this selection. If the goal is to reduce hallucinations, the temperature should be set to zero. Another trick is to limit the choice to the top-ranked tokens alone. This reduces the likelihood of poor responses, while also allowing for some randomness and, therefore, variety.

Clever prompting can also reduce hallucinations. Researchers at Google DeepMind found that telling an LLM to "take a deep breath and work on this problem step-by-step" reduced hallucinations and improved problem solving, especially of maths problems. One theory for why this works is that AI models learn patterns. By breaking a problem down into smaller ones, it is more likely that the model will be able to recognise and apply the right one. But, says Edoardo Ponti at the University of Edinburgh, such prompt engineering amounts to treating a symptom, rather than curing the disease.

(621 words) www.economist.com

Leaders | A losing battle

Feb 29th 2024



Fentanyl cannot be defeated without new tactics

Suppression works even less well than with other narcotics

IT IS OVER 50 years since Richard Nixon initiated America's war on drugs, yet victory seems further away than ever. In the 12 months to September 2023 more than 105,000 Americans died from overdoses—almost double the number killed in combat in Vietnam, Afghanistan and Iraq. No matter how zealously the government patrols the border and how ferociously it pursues traffickers, the problem only seems to get worse.

- The deterioration in the past decade is largely owing to fentanyl, a synthetic opioid that is 50 times more potent 5 than heroin and is involved in about 70% of drug-related deaths in America. It started as a substitute for opioids supplied under prescription, but its continuing spread is the logical outcome of the war on drugs. Peddling narcotics is so lucrative that traffickers have an incentive to innovate, the better to evade controls. Fentanyl and its analogues are a near-perfect product: so cheap to make that even sold for 50 cents a pill, it is still hugely
- profitable; so powerful and addictive that a captive market is almost guaranteed; so easy to make, with such a variety of common chemicals, that it can be produced more or less anywhere; so concentrated that it is easy to hide and smuggle.

No wonder America is struggling to control fentanyl. A crackdown on the Sinaloa gang in Mexico, said by American authorities to be the biggest source of it, has simply caused production to atomise. Attempts to stop

- Chinese exports of ingredients are hampered by ever-evolving recipes for the drug and ever-adapting supply chains, with India, for instance, becoming the latest source of chemical precursors. A focus by America's border patrol on crossings near San Diego, which was once the main conduit into America, has caused smuggling to shift eastwards, into Arizona.
- Predictably, many politicians think the best response is extreme tactics that are themselves also the logical culmination of the war on drugs. Senior Republicans have called for an invasion of Mexico, to eradicate the gangs (although Republicans in Congress have turned down Joe Biden's request for more funds to patrol the border). Donald Trump is said to have contemplated missile strikes on traffickers' hideouts when he was president.
- To its credit, Mr Biden's administration is already taking a broader approach. For the first time, the federal government is spending more to deter use and treat addicts than it is on trying to disrupt the flow of drugs. It has patched up relations with China well enough to resume efforts to curb the trade in precursors across the Pacific. Mindful of how mutable supply chains are, it is trying to build a global coalition to keep better track of chemicals.
- These are welcome steps, but they should go further. If it is impossible to stop fentanyl getting to consumers, more must be done to help them cope with it. American authorities should distribute simple tests to let users check whether their drugs have, as is often the case, been mixed with cheap, addictive fentanyl; they should increase access to treatment schemes involving substitutes such as methadone; they should ensure that the antidote for overdoses is widely available; they should revamp drug education, which is woeful. And they should decriminalise less lethal drugs, such as cocaine, so as to free time and scarce funds to focus on the one
- that is killing Americans in droves. 35

Politicians of all stripes dislike such ideas, since they appear to condone taking drugs. America's are unlikely to try anything so radical. But fentanyl is already a problem in Canada and is spreading in Mexico, too. Even more potent synthetic opioids called nitazenes have arrived in Britain. If the world is to cope it will, like the traffickers, have to innovate.

> (620 *words*) www.economist.com

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need fixing too?

United States | Answers that raise questions

Is Google's Gemini chatbot woke by accident, or by design?



The tech giant's new artificial-intelligence model invents black Vikings and Asian popes AI imagery generated by Google's Gemini shows an asian female pope and a black male pope.

IT ALL STARTED with black Vikings and Asian Nazis. Users of Google Gemini, the tech giant's artificialintelligence model, recently noticed that asking it to create images of Vikings, German soldiers from 1943 or America's Founding Fathers produced surprising results: hardly any of the people depicted were white. Gemini had been programmed to show a range of ethnicities. Other image-generation tools have been criticised because

⁵ they tend to show white men when asked for images of entrepreneurs or doctors. Google wanted Gemini to avoid this trap; instead, it fell into another one, depicting George Washington as black and the pope as an Asian woman.

Some observers likened Gemini's ahistorical diversity to "Hamilton" or "Bridgerton". It seemed that Google had merely made a well-meaning mistake. But it was a gift to the tech industry's right-wing critics. On February 22nd Google said it would halt the generation of images of people while it rejigged Gemini. But by then attention had moved on to the chatbot's text responses, which turned out to be just as surprising.

Gemini happily provided arguments in favour of affirmative action in higher education, but refused to provide arguments against. It declined to write a job ad for a fossil-fuel lobby group, because fossil fuels are bad and lobby groups prioritise "the interests of corporations over public well-being". Asked if Hamas is a terrorist organisation, it replied that the conflict in Gaza is "complex"; asked if Elon Musk's tweeting of memes had

¹⁵ organisation, it replied that the conflict in Gaza is "complex"; asked if Elon Musk's tweeting of memes had done more harm than Hitler, it said it was "difficult to say". You do not have to be Ben Shapiro to discern a progressive bias.

Inadequate testing may be partly to blame. Google lags behind OpenAI, maker of the better-known ChatGPT. As it races to catch up, Google may have cut corners. Other chatbots have had controversial launches. Releasing chatbots and letting users uncover odd behaviours, which can be swiftly patched, lets firms move faster, provided they are prepared to weather the potential risks and bad publicity, observes Ethan Mollick, a professor at Wharton Business School.

But Gemini has clearly been deliberately calibrated, or "fine-tuned", to produce these responses; they are not "hallucinations", where a model makes things up. This raises questions about Google's culture. Is the firm so financially secure, with vast profits from internet advertising, that it feels free to try its hand at social engineering? Do some employees think it has not just an opportunity, but an obligation, to use its reach and power to promote a particular agenda? That risks deterring users and provoking a political and regulatory backlash. All eyes are now on Google's boss, Sundar Pichai. He says Gemini is being fixed. But does Google

(446 words) www.economist.com

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Britain | Higher education and race

Some British universities have become remarkably racially diverse



Good grades, high expectations and reluctance to travel explain why

Black and Asian undergraduates were rare in the mid-1980s, when researchers working on an official report on race and education turned up to interview them. The students told sorry stories of off-putting teachers and careers advisers. An Afro-Caribbean student remembered expressing a desire to train as a lawyer, only to be advised to take a job in Woolworths, a now-defunct retail chain. Another student was advised to work in agriculture because his father came from rural Pakistan.

They could hardly have imagined what Britain's universities would look like today. Far more people from all backgrounds go. But non-whites have rushed in faster, going from 23% to 35% of all Britons accepted as undergraduates over the past 12 years. Some universities, especially former technical colleges and polytechnics in big cities, have grown exceptionally diverse. Last year just 16% of the undergraduates admitted to Aston University in Birmingham were white.

One reason is simply that Britain has grown more ethnically diverse, cities like Birmingham much more so. The 2021 census showed that 32% of 17-year-olds in the city were white. Another reason is that black and Asian pupils do far better in exams than they did in the 1980s. In last year's gcse exams (normally taken at 16) larger proportions of Asian, black and mixed-race pupils in England got at least a grade five in English and maths than of white pupils. Teenagers from some ethnic groups, such as Bangladeshis and black Africans, have pulled well ahead of the national average despite high poverty rates.

Black and Asian Britons are unusually likely to go to university, even after accounting for their better grades. This is not because universities favour them, although some lower entry thresholds for people who grew up in poverty. It is mostly because non-white youngsters strive to go, perhaps anticipating that they will face discrimination in the job market. Among the poorest, academically least successful teenagers, ethnic differences in university-going are vast. The Institute of Fiscal Studies, a think-tank, calculates that 5% of white Britons who score in the bottom quartile at gcse and are entitled to free school meals because of their parents' poverty end up at university. Among black Africans in the same position, 40% do.

Non-white students, especially ethnic Bangladeshis and Pakistanis, tend to study close to home. Michael Donnelly of the University of Bath puts this down to a combination of parental conservatism, money worries and not-unjustified fears of standing out in more homogeneous parts of the country. The stickiness helps to explain the great diversity of institutions like Aston University. It also explains why a good university in a diverse city like Leicester has come to look quite different from a similarly good university on the edge of a mostly white city such as Brighton.

Some black and Asian Britons are unhappy at university. They are less likely than white students to graduate with first-class or upper-second-class degrees, and are less likely to feel that their courses are worth it. Black students are more likely to drop out. For most, higher education is a good bet all the same. Research by the Sutton Trust, a charity, shows that technically oriented institutions like Aston University are extremely good at pushing young people from poor backgrounds into the middle class. Aston does more for social mobility than Cambridge or Oxford do, because those universities admit so few students from poor backgrounds.

The British government rarely utters a positive word about universities, which it views as dens of wokeness. Last year Rishi Sunak, the prime minister, complained that they often sold a "false dream" and encouraged young people to do apprenticeships instead. Sensibly, black and Asian Britons seem to be ignoring him. The younger Mr Sunak would not have listened, either. He has a ba from Oxford and an mba from Stanford.

(635 words)

Britain | Forty years on



British museums remember the 1984 miners' strike

Their exhibits suggest the country is tired of division

The Danum Gallery, Library and Museum in Doncaster feels the need to explain something to visitors to one of its exhibitions. "A trade union", a screen in the gallery informs them, "is an organisation of members who are employees in a particular industry or service". The gallery goes on to explain what coal is, and provides a lump of the stuff for illustration. It seems odd, until you realise how few Britons are now members of unions and how very little coal is mined or burnt in the country. Forty years is a long time.

In March 1984 most British coal miners struck in protest against pit closures. It was the beginning of a bitter dispute that lasted for a year and ended in defeat for the miners. At least ten museums and galleries have put on exhibitions to mark the anniversary, some larger than others. Four are in Yorkshire, where miners were particularly militant and clashes with the police were violent. The exhibitions are strikingly ambivalent—so much so that they hint at a profound change in Britain.

An easy way to commemorate the strike is to depict it as a clash between plucky, principled miners and the mighty British state, led by Margaret Thatcher. In November, the museum asked people whose stories have rarely been heard to get in touch. It particularly wanted to hear from miners who kept working, known to strikers as "scabs".

¹⁵ The museum's exhibition, "The Longest Year", not only airs their memories but also includes the thoughts of mine managers and a London Metropolitan Police officer, one of many non-locals who were drafted in. He or she says that not all officers behaved violently (though some assuredly did) and complains that: "we are always shown as Maggie Thatcher's boot boys."

Even the children of striking miners speak of their confusion and regret. One, who was 15 during the strike, remembers feeling ashamed by the poverty into which the household sank. Another remembers a father who stayed on strike but understood why others could not. "Looking back, the strike achieved absolutely nothing," argues another. "All it did was hurt families." The National Union of Mineworkers is not remembered fondly by everyone who walked out.

The other exhibits in Yorkshire are less obviously revisionist. But they too allow doubts to creep in. The Clifton Park Museum in Rotherham displays a striking miner's diary, open to a page in which he remembers a boring day on the picket line ("just stood there shouting 'scab'"). It includes a photo of police officers queuing for ice-cream, suggesting they did not spend all their time behind riot shields.

The exhibits also nod to the stifling environment for women in pit towns, which the strike helped to dislodge. "We've had to challenge all the ideas and arguments that say 'our place is in the home'," wrote a group of

³⁰ Yorkshire women after the strike. "Well—we are not going back!" The Danum Gallery, which has objects from former miners and local people, displays a pair of smart women's shoes from the 1980s. It points out that the decline of heavy industry and the rise of office work suited many.

Time has softened the scar tissue that built up during the strike. As the Clifton Park exhibit notes, all the mines around Rotherham have gone. "In their place, there are shopping centres, housing developments, country parks and woodlands."

The museums' determination to tell multiple stories of the strike, and to reflect the hesitancy and confusion of those involved, suggests something else may have happened. Perhaps Britain is growing tired of the politics of division and cultural clash, which arose in the 1980s and has intensified during the past decade. The exhibitions tell the story of the miners' strike. They are also about Brexit Britain.

(630 words) www.economist.com

Leaders | Angry young men

Making sense of the gulf between young men and women



It's complicated. But better schooling for boys might help

Men and women have different experiences, so you would expect them to have different worldviews. Nonetheless, the growing gulf between young men and women in developed countries is striking. Polling data from 20 such countries shows that, whereas two decades ago there was little difference between the share of men and women aged 18-29 who described themselves as liberal rather than conservative, the gap has grown to 25 percentage points. Young men also seem more anti-feminist than older men, bucking the trend for each generation to be more liberal than its predecessor. Polls from 27 European countries found that men under 30 were more likely than those over 65 to agree that "advancing women's and girls' rights has gone too far because it threatens men's and boys' opportunities". Similar results can be found in Britain, South Korea and China. Young women were likely to believe the opposite.

¹⁰ Unpicking what is going on is not simple. A good place to start is to note that young women are soaring ahead of their male peers academically. In the European Union fully 46% of them earn degrees, versus 35% of young men, a gap that has doubled since 2002. One consequence is that young women are more likely than men to spend their early adulthood in a cocoon of campus liberalism. Meanwhile, boys outnumber girls at the bottom end of the scholastic scale. Across rich countries, 28% of them fail to learn to read to a basic level. That is true of only 18% of girls.

Another big change is that, to varying degrees across the developed world, immense progress has been made in reducing the barriers to women having successful careers. College-educated men are still thriving, too—often as one half of a double-high-income heterosexual couple. Many men welcome these advances and argue for more. However, those among their less-educated brothers who are struggling in the workplace and the dating market

- ²⁰ are more likely to be resentful, and to blame women for their loss of relative status. And young women, by and large, are glad of past progress but are keenly aware that real threats and unfairness remain, from male violence to the difficulty of juggling careers and children. In short, most young women and worryingly large numbers of young men complain that society is biased against their own sex.
- Young women tend to vote for parties of the liberal left. Angry young men, sometimes dismissed as toxically masculine by those parties, are being shrewdly wooed by politicians from the right and the far right. In South Korea their support helped an overtly anti-feminist president win power. In America polls are muddy but some pollsters think young men are souring on the Democrats. In Europe, where many countries offer a kaleidoscope of political choices, young male votes have helped fuel the rise of reactionary outfits such as the AfD in Germany, Confederation in Poland and Chega, which surged at Portugal's election on March 10th.
- There is no easy solution to any of this. But clearly, more should be done to help boys lagging behind at school to do better. Some policies that might work without harming their female classmates include hiring more male teachers (who are exceptionally scarce at primary schools in rich countries), and allowing boys to start school a year later than girls, to reflect the fact that they mature later. Better vocational training could encourage young men to consider jobs they have traditionally shunned, from nursing to administration. Schooling boys better would not only help boys. Increasing the supply of educated and (one hopes) less angry men would be good
- for the women who must share the same world.

(609 words)

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Leaders | Course correction

Mar 7th 2024

How to fix the Ivy League



Its supremacy is being undermined by bad leadership

America's grandest universities have had a humbling few months. Administrators—many of whom had embraced social-justice activism and often promulgated their views on current affairs—went strangely mute after Hamas's attack on October 7th, in which about 1,200 Israelis were killed. Loud opposition to oppression of all kinds turned timid when one of the oldest prejudices, antisemitism, reared its ugly head on elite campuses.

⁵ Donors revolted. The president of the University of Pennsylvania resigned in December after widely derided testimony before Congress, in which she struggled to say whether students who call for the genocide of Jews ought to be punished. The similarly hapless president of Harvard, who in addition faced accusations of plagiarism, was forced to do the same.

On their own, these embarrassments are not an existential threat to the standing of America's most vaunted universities. Their ability to anoint America's aspiring elites remains intact—as do their eye-wateringly large financial endowments. But the fiascos of recent months have exposed serious failings at the country's top universities.

This matters because these institutions are engines of America's intellectual and economic prowess. They have helped make the country a magnet for global talent and they are critical to its lead in scientific innovation. But their credibility, built up over hundreds of years, is now being eroded.

Many Americans have noticed that they are hypocritically unmeritocratic in their admissions, censorious towards conservatives and flat-footed in dealing with antisemitism. On the first point, the Supreme Court has ordered universities to stop considering race when deciding whom to admit. But many continue to favour the offspring of alumni. These "legacy" preferences are deeply regressive and make a mockery of high-minded commitments to diversity, equity and inclusion (DEI), which—to a greater extent than any other American institutions—elite universities have espoused.

The DEI enforcers at such colleges not only seek to regulate student speech; many also require applicants for academic jobs to write diversity statements signalling adherence to progressive ideas, thus weeding out diversity of thought. And this supposedly oppression-eradicating bureaucracy has failed dismally to deal with

antisemitism as it erupts on elite campuses. On February 26th a mob of protesters at the University of California, Berkeley, forcibly cancelled a speech by a visiting Israeli lawyer and intimidated Jewish students attending the event.

Ignoring these problems raises two serious risks. The first is domestic. Although they are mostly private institutions, top universities depend on billions of dollars of public funding, in the form of research grants and loan assistance. The steady leftward drift of their administrations has imperilled this. Republican lawmakers are

³⁰ loan assistance. The steady leftward drift of their administrations has imperilled this. Republican lawmakers are not just threatening the preferential tax rates on university endowments. They also aim to fight illiberalism with illiberalism by banning the teaching of certain ideas.

The second threat is to the global standing of America's elite institutions. Internecine conflict over social-justice ideology saps the appeal of American universities, not just to Americans but to potential students from other countries too.

There is some fledgling resistance within the academy, which wise administrators should not ignore. A newly formed group of professors called Faculty for Yale argue that their university must return to its original mission and "insist on the primacy of teaching, learning and research as distinct from advocacy and activism". A few years ago, such a statement would have been utterly uncontroversial; that this is now considered brave dissent is dismaying.

Earning back public trust is possible. Elite universities need to make admissions fairer by eliminating ancestral privilege and reintroducing the consideration of standardised test scores, which are less easily gamed by the

children of the wealthy. They need to embrace academic freedom at all times—not just when it suits them—and stop policing the views of students and faculty. Compulsory diversity statements should be scrapped. The rapidly expanding administrative apparatus that has enabled all this dysfunction should be scaled down. So, too, should many universities' overstuffed corporate boards. They should employ fewer cheerleaders for the university president and more tough, independent voices.

If America's great universities wish to remain pre-eminent for centuries more, they must correct course now. Credibility often diminishes slowly—and then all at once.

(680 words)

Science and technology | AI got rhythm

Mar 21st 2024



A new generation of music-making algorithms is here

Their most useful application may lie in helping human composers

IN THE dystopia of George Orwell's novel "1984", Big Brother numbs the masses with the help of a "versificator", a machine designed to automatically generate the lyrics to popular tunes, thereby ridding society of human creativity. Today, numerous artificial-intelligence (AI) models churn out, some free of charge, the music itself. Unsurprisingly, many fear a world flooded with generic and emotionally barren tunes, with human musicians edged out in the process. Yet there are brighter signs, too, that AI may well drive a boom in musical creativity.

AI music-making is nothing new. The first, so-called "rules-based", models date to the 1950s. These were built by painstakingly translating principles of music theory into algorithmic instructions and probability tables to determine note and chord progressions. The outputs were musically sound but creatively limited. Ed Newton-Rex, an industry veteran who designed one such model for Jukedeck, a London firm he founded in 2012, describes that approach as good for the day but irrelevant now.

The clearest demonstration that times have changed came in August 2023. That is when Meta, a social-media giant, released the source code for AudioCraft, a suite of large "generative" music models built using machine learning. AI outfits worldwide promptly set about using Meta's software to train new music generators, many with additional code folded in. One AudioCraft model, MusicGen, analysed patterns in some 400,000 recordings with a collective duration of almost 28 months to come up with 3.3bn "parameters", or variables, that enables

the algorithm to generate patterns of sounds in response to prompts. The space this creates for genuinely new AI compositions is unprecedented.

Such models are also getting easier to use. In September Stability AI, a firm based in London at which Mr Newton-Rex worked until recently, released a model, Stable Audio, trained on some 800,000 tracks. Users guide it by entering text and audio clips. This makes it easy to upload, say, a guitar solo and have it recomposed in jazzy piano, perhaps with a vinyl playback feel. Audio prompts are a big deal for two reasons, says Oliver Bown of Australia's University of New South Wales. First, even skilled musicians struggle to put music into words. Second, because most musical training data are only cursorily tagged, even a large model may not understand a request for, say, a four-bar bridge in ragtime progression (the style familiar from Scott Joplin's "The Entertainer").

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The potential, clearly, is vast. But many in the industry remain sceptical. One widespread sentiment is that AI will never produce true music. That's because, as a musician friend recently told Yossef Adi, an engineer at Meta's AI lab in Tel Aviv, "no one broke its heart". That may be true, but some AI firms reckon that they have found a way to retain and reproduce the "unique musical fingerprint" of their musician users, as LifeScore, a

company founded near London, puts it. LifeScore's AI limits itself to recomposing the elements of a user's original recordings in ways that maintain the music's feel, rather than turning them into something radically new.

In time, bigger training sets of better music will largely overcome such shortcomings, developers reckon. A Stability AI spokesperson says that while Stable Audio's top duration for coherently structured music—"intro,

development and outro"—is now about 90 seconds, upgrades will produce longer pieces with "full musicality". But judging music AI by its ability to crank out polished tracks mostly misses the point. The technology's greatest promise, for now at least, lies elsewhere.

> (577 *words*) www.economist.com

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Culture | Back Story

Mar 19th 2024



Kate Winslet explores how to be a good autocrat

"The Regime" is a silly show with a deadly serious point

The capricious leader of an unnamed country in central Europe, Elena Vernham is carried around her palace in a mobile oxygen chamber. She chats with her father's embalmed corpse. In Kate Winslet's star turn, amours and annexations are chronicled in "The Regime", a satirical drama out now in America and in Britain soon. It is a silly TV show that makes serious points about autocracy.

- ⁵ Elena and her country are sly composites of real people and places. There are echoes of communist Romania under the doomed Ceausescus and of the failed Soviet coup of 1991. Elena's ceremonial braided hairstyle evokes Yulia Tymoshenko, a Ukrainian firebrand. But the main influence is Vladimir Putin's Russia. The action begins with the arrival in the palace of a rough-hewn corporal, Herbert Zubak (Matthias Schoenaerts).
- Because of his role in a massacre, which nobody lets him forget, his nickname is "the Butcher". This is the show's first insight: Herbert is promoted not in spite of his disgrace but because of it. Elena, like other autocrats, knows compromised people are pliable. Systems like hers rely on mutual blackmail, whereby every courtier has dirt on all the others; an honest person is useless. If blood is shed, many hands are dipped in it, as when Russian bigwigs appear with Mr Putin in his televised warmongering.
- Next, consider that portable oxygen chamber. Elena's hypochondria—she has a horror of spores—spoofs germophobe leaders who are fanatical about their own welfare yet neglect their citizens'. But her quirks are also exertions of power. If she says noxious spores pervade her palace, they do. Everyone applauds her atrocious singing, just as Mr Putin's lickspittles let him win at ice hockey.

The goal is not to make anyone believe in such fantasies and lies: it is to force underlings to swallow them, so underlining the autocrat's power. You are not meant to believe the Kremlin's denial that it killed Alexei Navalny in Russia's gulag. If you did, the murder's intimidating message would be blunted. The aim is to add intellectual insult to lethal injury.

Elena speaks to her subjects in televised addresses, calling them "my loves". As autocrats do, she claims to have a mystical connection to the people, wielding them in arguments like a mace. In truth, she despises them as grubby bumpkins and loathes meeting them. She frets over their loyalty, as rulers tend to when normal debate is stifled.

"They love to see America punched in the mouth," an apparatchik says of his compatriots. As in many smallish countries, Elena oscillates between courting and resenting American involvement. She tries to play Washington off against Beijing and launches half-baked bids for autarky. Yet even as she denounces America she enjoys its pop culture, watching "Friends" over dinner, rather as Bashar Assad clung to his iTunes account as Syria imploded.

Apart from bashing the West, in a fix Elena deploys two go-to autocratic tactics. She trumpets a crackdown on corruption and seizes a slice of adjacent territory in what is not, repeat not, an invasion. The ensuing sanctions mean a disgruntled insider can no longer visit his pied-à-terre in Miami. As circumstances deteriorate, the cronies must calculate when to run, a dilemma familiar to henchmen from Cairo to Caracas.

³⁵ "Could it just be theatre?" that insider wonders when an oligarch is publicly humiliated. In regimes like this, however, theatre is the basic mode of statecraft. It isn't only that "the visuals" matter more than the substance of events. The autocrat substitutes ritual and spectacle for political competition (as in Russia's farcical election). Politics is a pastiche of democracy, a satirical pantomime in which all are dragooned into the joke. An autocracy, in other words, is often a silly show with a tragically serious point.

(622 words)

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Leaders | Course correction

How to fix the lvy League

Its supremacy is being undermined by bad leadership

America's grandest universities have had a humbling few months. Administrators—many of whom had embraced social-justice activism and often promulgated their views on current affairs—went strangely mute after Hamas's attack on October 7th, in which about 1,200 Israelis were killed. Loud opposition to oppression of all kinds turned timid when one of the oldest prejudices, antisemitism, reared its ugly head on elite campuses. Donors revolted. The president of the University of Pennsylvania resigned in December after widely derided

testimony before Congress, in which she struggled to say whether students who call for the genocide of Jews ought to be punished. The similarly hapless president of Harvard, who in addition faced accusations of plagiarism, was forced to do the same.

On their own, these embarrassments are not an existential threat to the standing of America's most vaunted universities. Their ability to anoint America's aspiring elites remains intact—as do their eye-wateringly large financial endowments. But the fiascos of recent months have exposed serious failings at the country's top universities.

This matters because these institutions are engines of America's intellectual and economic prowess. They have helped make the country a magnet for global talent and they are critical to its lead in scientific innovation. But their credibility, built up over hundreds of years, is now being eroded.

Many Americans have noticed that they are hypocritically unmeritocratic in their admissions, censorious towards conservatives and flat-footed in dealing with antisemitism. On the first point, the Supreme Court has ordered universities to stop considering race when deciding whom to admit. But many continue to favour the offspring of alumni. These "legacy" preferences are deeply regressive and make a mockery of high-minded commitments to diversity equity and inclusion (DEI), which to a greater extent than any other American institutions—elite

²⁰ to diversity, equity and inclusion (DEI), which—to a greater extent than any other American institutions—elite universities have espoused.

The DEI enforcers at such colleges not only seek to regulate student speech; many also require applicants for academic jobs to write diversity statements signalling adherence to progressive ideas, thus weeding out diversity of thought. And this supposedly oppression-eradicating bureaucracy has failed dismally to deal with antisemitism as it erupts on elite campuses.

Ignoring these problems raises two serious risks. The first is domestic. Although they are mostly private institutions, top universities depend on billions of dollars of public funding, in the form of research grants and loan assistance. The steady leftward drift of their administrations has imperilled this. Republican lawmakers are not just threatening the preferential tax rates on university endowments. They also aim to fight illiberalism with

³⁰ illiberalism by banning the teaching of certain ideas.

The second threat is to the global standing of America's elite institutions. Internecine conflict over social-justice ideology saps the appeal of American universities, not just to Americans but to potential students from other countries too.

There is some fledgling resistance within the academy, which wise administrators should not ignore. A newly formed group of professors called Faculty for Yale argue that their university must return to its original mission and "insist on the primacy of teaching, learning and research as distinct from advocacy and activism". A few years ago, such a statement would have been utterly uncontroversial; that this is now considered brave dissent is dismaying.

Earning back public trust is possible. Elite universities need to make admissions fairer by eliminating ancestral privilege and reintroducing the consideration of standardised test scores, which are less easily gamed by the children of the wealthy. They need to embrace academic freedom at all times—not just when it suits them—and stop policing the views of students and faculty. Compulsory diversity statements should be scrapped.

If America's great universities wish to remain pre-eminent for centuries more, they must correct course now. Credibility often diminishes slowly—and then all at once.

(614 words) www.economist.com

Edited, formatted and potentially abridged by Adrien Méli (2024)

How worried should people be about Generation Z?

Two new books fit into a familiar pattern of the old fretting about the young

The Anxious Generation. By Jonathan Haidt. *Penguin Press; 400 pages; \$30. Allen Lane; £25*

Bad Therapy. By Abigail Shrier. Sentinel; 320 pages; \$30. Swift Press; £20

In 1935 Harper's magazine published a sorrowful article about young Americans. The authors argued that a generation was "rotting before our eyes". Apathy and disenchantment were taking hold, together with criminality. Even high-school students were packing guns and were "out for what they can get". Leighton and Hellman blamed mass unemployment for this tragedy. Some of their contemporaries pointed at marijuana.

Around 50 years after that article—and 40 years after the supposedly rotten generation had saved the world from fascism—older people again complained that the young were going awry. In a book, "The Disappearance of Childhood" (1982), Neil Postman, an educational theorist, argued that teenagers were adopting adult vices such as heavy drinking and crime, and having far too much sex. The chief culprit, he explained, was television.

Two more books have now been published about the troubles and flaws of young people. They say almost nothing about unemployment, marijuana or TV; indeed, they do not agree with each other about why the young are in such a mess. The causes change, the measurements change. What does not change is the absolute certainty with which older adults hold forth on the problems of youth.

- ¹⁵ "The Anxious Generation" describes a cohort suffering from unprecedented levels of mental ill-health. One-fifth of American students were diagnosed with or treated for depression in 2019, up from one-tenth a decade earlier. Jonathan Haidt, a social psychologist at New York University, argues this is not just a sign of increased frankness. Suicides are rising too, more than doubling among American 10- to 14-year-old girls since 2010.
- Smartphones and social media are the chief villains. Instead of small, stable real-world communities, young people join virtual ones, where they experience "a daily tornado of memes, fads and ephemeral micro-dramas, played out among a rotating cast of millions of bit players". Smartphones are so alluring that they reduce interest in all other activities. Reversing Postman's complaint about teenagers in the 1980s, Mr Haidt says that modern ones are slow to date and to have sex.
- Mr Haidt rehearsed some of these arguments in an earlier book, "The Coddling of the American Mind", which explained why university students have become so sensitive. "The Anxious Generation" posits that the problems begin much earlier, with an over-protective style of child-raising. The book argues for banning phones during school hours, preventing pre-teens from accessing social media and letting children run wild more often. All the suggestions sound sensible. Some even sound fun.
- "Bad Therapy" agrees that young people are deeply troubled, but disagrees about the cause. To Abigail Shrier, the culprit is not technology but what she calls the "mental-health industry". Almost two-fifths of young Americans say they have received help from a mental-health professional, and it has done them great harm, she argues. They can "never ignore any pain, no matter how trivial". Therapists and counsellors have sapped them of agency. A boy who has been pronounced learning-disabled and neurodivergent "no longer has the option to stop being lazy".
- ³⁵ Ms Shrier, who has previously written about the perils of transgender treatment, also has sharp words for modern parents, although her criticism differs slightly from Mr Haidt's. Parents' desire to be loved by their children, and to see them always happy, leads them to stifle and coddle, she thinks. The result is a crop of "far more self-involved, undisciplined and unlikeable children" than any before. Because children grow up without clear rules, they are confused and aggressive. When their behaviour becomes troubling, the therapists are summoned.

(609 words)

Jan 25th 2024|Dakar, Nairobi and São Paulo

Could AI transform life in developing countries?

Optimists hope it will ease grave shortages of human capital

TWENTY-FIVE years ago your correspondent hired a cellphone in Congo. Each day, it cost what a typical local made in several months. The handset was as heavy as a half-brick and only somewhat more useful. Practically no one else in Congo had one, bar cabinet ministers and tycoons, so there were not many people to call. In those days, mobile phones had made no detectable difference to most people's lives in the world's poorest countries.

- ⁵ Today, many farmers in Congo have phones: the number of connections has grown 5,000-fold as the population has doubled. Mobile devices have transformed lives throughout the developing world, especially as more and more of them are hooked up to the internet (see chart 1). The 4bn people who live in low or lower-middle income countries have vastly more access to information, chat daily to far-off friends and use their phones like bank cards even when they don't have bank accounts.
- ¹⁰ Could artificial intelligence (ai) bring similarly dramatic changes? There are three main reasons for optimism. First, the technology is improving fast. Second, it has the potential to spread fast, too. As usually happens with new technologies, rich countries will benefit first. But if the high cost of training AI models falls, the expense of providing the technology to the poor could be minimal. They will not need a new device, just the smartphones that many of them already own.
- The third reason is that developing countries have gaping shortages of skilled workers: there are nowhere near enough teachers, doctors, engineers or managers. AI could ease this shortfall, not by replacing existing workers, but by helping them become more productive, argues Daniel Björkegren of Columbia University, which in turn could raise the general level of health and education. Although AI may also eliminate some jobs, the IMF predicts that labour markets in poorer countries will be less disrupted than those in rich ones. Another tantalising possibility is that AI could help provide fine-grained, up-to-date data about poor places, and so
- assist in all manner of development work.

Start with education. A typical sub-Saharan pupil spends six years in school but retains only three years' worth of learning, Wolfgang Lutz of the Wittgenstein Centre in Vienna estimated in 2015. A typical Japanese student spends 14 years in classes and absorbs 16 years' worth of education. Using a different methodology, the World Bank also finds that education is spectacularly worse in poor countries than in rich ones (see chart 2).

Tonee Ndungu, an entrepreneur in Kenya, thinks AI could help bridge this gap. He has developed two apps that he hopes to launch this year. One, called Somanasi ("Learn with me"), is for children. It allows pupils to ask a talking chatbot questions related to the Kenyan school curriculum. The Economist asked, "How do I work out a percentage from a fraction?" The chatbot offered a step-by-step worked example.

A chatbot can give undivided attention to each child, at any time of day, and never gets tired (so long as your phone is charged). It can also be adapted to local cultures. "I never saw an apple till I was 30," says Mr Ndungu. "So we say 'A is for animal.'" The service can be tailored to different learning styles, too. It might illustrate division by telling children to break a pencil in half and then again. Depending on how different pupils respond, the AI can figure out whether this approach works, and fine-tune the way it interacts with them. Some kids want more numbers; some like stories. The chatbot adapts.

It cannot yet mark homework. But Mr Ndungu's firm, Kytabu, offers an app for teachers, too, called Hodari ("Brave"). It lightens their workload by crafting step-by-step lesson plans. It helps track what pupils understand, by getting each one to answer questions on a smartphone. (One phone per classroom is enough, he says.)

As far as The Economist could tell from playing with them in a café with good Wi-Fi, the two apps work well. ⁴⁰ But the proof will come—and bugs will be fixed—when more people use them in classrooms and homes. They will be given away to begin with; Mr Ndungu hopes eventually to charge for add-ons. The more children are enrolled, the cheaper it will be to provide the service. If half a million were to join, Mr Ndungu predicts the cost per child would fall from \$3.50 a month (not including the phone) to about 15 cents.

Many entrepreneurs are pursuing similar projects, often using open-source models developed in rich countries, sometimes with help from charities like the Gates Foundation. The cost of getting AI to learn new languages appears low. It is already being used to write children's books in tongues previously too obscure for commercial publishers to bother with.

The need is glaring. Developing countries have too few teachers, many of whom have not mastered the curriculum. A study in 2015 (using data going back to 2007) found that four-fifths of grade six maths teachers

⁵⁰ in South Africa did not understand the concepts they were supposed to teach. Nearly 90% of ten-year-olds in sub-Saharan Africa cannot read a simple text.

Dr Björkegren points to recent studies suggesting that big gains are possible even with basic tech. One analysed an approach under which schools hire modestly qualified teachers and give them detailed "scripts" for lessons, delivered via tablet computers. Michael Kremer, a Nobel-prize-winning economist, and others studied 10,000

- ⁵⁵ pupils taught this way in Kenya, at schools run by Bridge International Academies, a chain of cheap private schools. They found that after two years on average Bridge students had mastered nearly an extra year's worth of the curriculum, compared with pupils enrolled in normal schools. Another study in India found that personalised computerised instruction was especially helpful for pupils who were far behind.
- Using AI in health care is riskier. If an educational chatbot misfires, a pupil might flunk a test; if a medical one hallucinates, a patient could die. Nonetheless, optimists see great potential. Some AI-powered medical kit is already widely used in rich countries and is starting to be adopted in poorer ones. Examples include handheld ultrasound devices that can interpret scans, and a system for spotting tuberculosis on chest X-rays. Accurate ai translation could also make it easier for patients and health-care workers in the global south to tap into the world's medical knowledge.
- ⁶⁵ Even imperfect AI tools may improve health-care systems in the developing world, whose failures cause more than 8m deaths a year, by one estimate. In a study of nine poor and middle-income countries by Todd Lewis of Harvard and others, 2,000 recently graduated primary health-care workers were observed dealing with visitors to clinics. They performed the correct, essential tasks required by clinical guidelines only about half the time.

For people in remote areas, even a substandard clinic may be too far away or too costly. Many rely on traditional medicine, much of which is useless or harmful. South African folk healers sometimes cut patients to rub in toxic powder suffused with mercury, for example. AI tools need not be infallible to be better than that.

A team at the University of São Paulo is training an AI to answer health-related questions. The aim is to give a tool to primary-health workers in Brazil, who sometimes have little training. They are using a database of clinical guidelines from Brazil's health ministry, rather than the whole internet, which is full of voodoo health

- ⁷⁵ tips. Before the ai can be widely deployed, it must be tested, tweaked and tested again. Currently, when you ask precise, technical questions, such as "Is Ivermectin effective in preventing covid-19?", its success rate is "so, so high", says Francisco Barbosa, one of the team. The trouble comes when you ask it something vague, as humans often do. If you say, "I've fallen in the street. How can I get to a pharmacy?", then the AI, which may not know where you are, might give terrible advice.
- The AI will have to improve and its users will have to learn how to get the best out of it, says Mr Barbosa. He is confident that this will happen: "It's a cliché [to say it], but it's changing everything." Equipping a new hospital costs millions of dollars. Training a new doctor takes years. If AI helps cheap primary-care workers treat more patients successfully, so that they do not need to go to a hospital, Brazil can keep its population healthier without spending more.
- ⁸⁵ Brazil has one doctor for every 467 people; Kenya has one for every 4,425. AI could help, says Daphne Ngunjiri of Access Afya, a Kenyan firm that runs mDaktari, a virtual health-care platform with 29,000 clients. For a small monthly fee, they can ask for advice when they feel unwell. For a test group of 380 users, mDaktari has added an AI-powered chatbot to the system. It records their queries, prompts them for more information and presents that information, along with a suggested response, to a clinician, often a nurse. The clinician reads it and, if
- ⁹⁰ the advice is sound, approves it and sends it back to the customer, perhaps referring her to a pharmacy or a clinic. Thus, a human is in the loop, to guard against errors, but the AI does the time-consuming gathering of information about symptoms, enabling the nurse to deal with more patients. If necessary, the nurse can call the patient. For embarrassing ailments such as sexually transmitted diseases, some patients prefer talking to a chatbot. It never judges them.
- ⁹⁵ Virginia, a client from a Nairobi slum whose family subsists on casual labour and backyard vegetables, says mDaktari is simple and helpful. One time she felt sick, consulted the app, and was steered to drugs that cleared up what turned out to be a urinary-tract infection. "I can even contact a [nurse] through my phone and get [an] answer," she says.

Several firms are testing AI-enhanced medical devices to see how well they work in poor areas. Philips, a Dutch firm, has a pilot programme in Kenya for a handheld ultrasound with an AI add-on that can interpret the images it spits out. This helps solve a common problem: lots of pregnant mothers and not enough people with the expertise to read scans.

Sadiki Jira is a midwife at a rural health facility in Kenya that serves nearly 30,000 people but has no doctor. He

recalls a pregnant patient a couple of years ago whose baby had died in the womb. She had not realised for several weeks and had only sought help when she started haemorrhaging. Mr Jira referred her to a hospital, but it was too late: she died.

Mr Jira now uses an AI-powered scanner. Any midwife can, with minimal training, swipe a Philips device over a pregnant woman's stomach. The AI reveals such vital information as the fetus's gestational age, whether it is in the breech position and whether there is adequate amniotic fluid. "It's easy to use," says Mr Jira.

- Philips is planning to offer the device and AI together for \$1 or \$2 a day in poor countries. The biggest obstacles to its rollout are regulatory, says Matthijs Groot Wassink of Philips. Will governments allow midwives to handle a process that previously required someone more qualified? What will happen in places like India, where regulations are especially tight for fear that people will use ultrasound to identify and abort baby girls?
- Poorer places collect poorer data. Forty-nine countries have gone more than 15 years since their most recent agricultural census; 13 have not conducted a population census in that period. Official numbers, when they exist, tend to flatter the government. For example, a study compared official estimates of how much maize was being grown on small farms in Ethiopia, Malawi and Nigeria with the results of painstaking (but rare) household surveys. The official numbers were much rosier.
- Satellite imagery and machine-learning could improve the quality and timeliness of data in developing countries,
 argue Marshall Burke of Stanford University and his co-authors in a recent paper in Science. Roughly 2.5bn people live in households that depend on tiny plots of land. Until recently the output of such farms was hard to measure: satellite pictures were not sharp enough and data drawn from them were too hard to interpret. But by setting AI to work on new high-resolution images of vegetation, Dr Burke and David Lobell, also of Stanford, were able to measure crop yields as accurately as surveys do, but faster and more cheaply. This could allow
 frequent, detailed analysis of farming practices. How much fertiliser is needed on this hillside? Which seeds work best in that valley? Such knowledge could transform rural livelihoods, the authors predict.

So could better weather forecasts. Atmo, an American firm, says its AI-powered weather forecasts are as much as 100 times more detailed and twice as accurate as a conventional meteorological bulletin, because the AI processes data so much faster. It is also cheap. "A dirty secret of meteorology... is that there are vast inequalities," says Alex Levy, Atmo's boss. Forecasts are less detailed or reliable in poor countries. "The places [with] the most extreme weather also have the worst forecasts, [so] they are most likely to be surprised and

- [with] the most extreme weather also have the worst forecasts are host detailed of reliable in poor countries. The places [with] the most extreme weather also have the worst forecasts, [so] they are most likely to be surprised and unable to prepare adequately." Atmo's service is being used in Uganda and may soon be deployed in the Philippines.
- Population counts in poor countries are rare, because they are costly, and prone to manipulation. In Nigeria
 the money each state gets from the central government is tied to its population. This gives states an incentive to fiddle. In 1991, on a census form with space for up to nine members per household, some states reported exactly nine members in every one. When the results of the census of 2006 were published, Bola Tinubu, the governor of Lagos, angrily claimed that its population was double the official tally. Nigeria has not held another census since. A new president—Mr Tinubu, as it happens—promises one in 2024.
- AI can generate more frequent, detailed estimates of how many people live where—and how well-off they are. Lights at night are often used as a proxy for economic buzz. Neal Jean of Stanford and others took day and night images of slums in Africa and trained a convolutional neural network (a form of machine learning) to predict from daytime images how much light there would be at night. In other words, AI learnt to recognise the kinds of buildings, infrastructure and other markers that tend to go with economic activity. It was able to predict 55-75% of the variation in assets between households.

Such information could help governments and charities assess better the effects of efforts to help the needy; it could also help companies understand markets. Researchers are avidly trying out such techniques, but governments have been slow to adopt them, laments Dr Burke. He attributes this in part to "the potential benefits to some policymakers of not having certain outcomes be measured".

- ¹⁵⁰ AI could also help people deal with the red tape that throttles productivity in so many poor countries. Registering a property takes 200 times longer in Haiti than in wealthy Qatar, according to the World Bank. Suppose an AI, which is immune to boredom, were able to fill in the forms accurately enough to spare humans the chore? In September India launched a chatbot that lets illiterate farmers pose oral queries about applications for financial aid. Some 500,000 tried it on the first day.
- AI poses risks to poor countries, too. They are generally less democratic than rich ones, so many governments will adopt AI surveillance tools, pioneered by China, to monitor and control their people. They are less stable,

so incendiary deepfakes may be more likely to warp politics or spark violence. Underfunded and inexpert regulators may struggle to impose proper guardrails against potential abuses.

And there are big obstacles to deploying AI in the developing world. Access to the internet will have to improve. Some countries will benefit faster than others. India has 790m mobile broadband users, plus a universal digital identity system and a super-cheap, real-time payments system, note Nandan Nilekani and Tanuj Bhojwani, two tech bosses, in Finance & Development. This, they argue, "puts it in a favourable position to be the world's most extensive user of AI by the end of this decade".

Enormous uncertainty remains about how powerful the technology will eventually prove. But the potential upside is big enough to warrant a tremor of excitement. In the best-case scenario, AI could help make whole populations healthier, better educated and better informed. In time, that could make them a lot less poor.

(2776 words)

Culture | A modern Orwellian tale

May 17th 2024





Lionel Shriver imagines cancel culture going to even greater extremes

Mania. By Lionel Shriver. Harper; 288 pages; \$30. Borough Press; £22

ARE YOU hateful enough to use the S-word? You know the one: stupid. It has been banned in schools, its use and synonyms (dumb, slow) considered "slurs" worthy of expulsion. Even its antonyms are grounds for book bans and boycotts: only a "cerebral supremacist" would have the gall to buy Elena Ferrante's novel "My Brilliant Friend". Instead, those wanting to be politically correct display copies of "The Calumny of IQ: Why Discrimination Against 'D— People' Is the Last Great Civil Rights Fight" on their coffee tables.

Welcome to the America of Lionel Shriver's "Mania". The novel opens with the narrator's son, Darwin, being sent home from school because he called a classmate's t-shirt "stupid". "I don't understand the rules anymore!" he complains to his mother. "Can anything be stupid, or is everything intelligent now?"

- ¹⁰ Transformed by ideological extremism (everyone is smart and anyone who feels differently is a bigot), America is both the novel's setting and subject. The New York Times has dropped the crossword puzzle, because its clues made people feel bad when they could not guess the word. Universities have open admissions; spelling bees and IQ tests are banned. Most students care less about learning than studying their instructors' behaviour for slip-ups. Professors must treat all students as equal and deem all answers correct.
- ¹⁵ Pearson Converse, the narrator, is a literature professor in Pennsylvania and is hauled before the "dean of cognitive equality" for teaching Fyodor Dostoevsky's novel "The Idiot". It was a cheeky act of resistance—and a futile one. She ends up having to apologise to keep her job.

As in George Orwell's "1984", spies are everywhere, but in "Mania" there are no telescreens. Instead children report their parents for forcing extra tutoring or pushing them to be ambitious. Every school has a "mentalparity champion", who can call in child-protective services at the slightest hint of intellectual "abuse". Pearson discovers this after her daughter, Lucy, who is wilfully resistant to learning to read but smart enough to game the system, turns her in. Orwell's Winston Smith was tortured into compliance by the Ministry of Love; Pearson has to complete a Cerebral Acceptance and Semantic Sensitivity course to avoid losing Lucy to foster care.

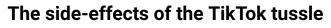
As a writer, Ms Shriver is merciless and funny; as a thinker she is contrarian. She has been described as a "pro-Brexit, anti-woke, #MeToo-sceptical Democrat" and does not shy away from fraught subjects. Her best-known novel, "We Need to Talk About Kevin" (2003), is told from the perspective of a mother whose son has gone on a mass-shooting rampage at his school.

Some may feel they have heard too much about "cancel culture" to seek out a work of fiction that tackles it so squarely. But the novel's themes—of society's quick pivots when it comes to socially acceptable beliefs, and how close friendships can be poisoned by the culture wars—feel like a welcome distraction, given their slightly (but not unbelievably) absurd elements. As Pearson observes, "I suppose none of this was funny, really; still, I couldn't help but laugh."

(516 words) www.economist.com

United States | No joke

May 30th 2024 New York





As the app's future hangs in the balance, the ramifications of the battle are becoming clearer

JOE BIDEN'S re-election campaign wants you to know that the president is funny. To prove it, examples of his hilarity are posted almost daily to his TikTok page. One video, peppered with fire emojis, shows him cracking jokes about Donald Trump. Viewers have their own gag: isn't he trying to ban this app?

The government says it is not banning TikTok but has given it an ultimatum: sell to a suitable non-Chinese owner by January or shut down. It deems TikTok, which is owned by ByteDance, a Chinese firm, to be controlled by a "foreign adversary" and to be a national-security threat. Politicians accuse China of using TikTok to steal Americans' data and spread propaganda.

TikTok denies these charges and is suing. So are its users. They argue that divestment is "simply not possible" (China could block it) and Congress is "singling out and banning TikTok", in violation of the First Amendment rights of its 170m American users. Imposing restrictions on speech in favour of national security is an "extraordinarily high bar", says Ashley Gorski of the American Civil Liberties Union, an advocacy group. It requires concrete evidence that TikTok poses an imminent, serious threat—something Ms Gorski and others argue the government has not provided. Lawmakers were briefed on TikTok's risks in private, but little has been made public.

¹⁵ The dispute will probably reach the Supreme Court. In the meantime, the ramifications of the tussle are becoming clearer. They go well beyond TikTok.

The law includes criteria for a president to add other companies. Any platform with more than 1m monthly active users in America and at least 20% owned by a foreigner based in one of the four "adversary" countries— China, Iran, North Korea and Russia—could be targeted. Raja Krishnamoorthi, a Democratic congressman and one of the bill's co-sponsors, says this brings social media up to date with foreign-ownership limits on other

one of the bill's co-sponsors, says this brings social media up to date with foreign-ownership limits on other media.

Some worry that the scope of the law is too broad. Video-games and other messaging services are potentially in the line of fire. The government could widen the definition of adversary countries, says Corbin Barthold, at TechFreedom, a think-tank. Many expect other countries to cite America's move against TikTok as justification for targeting foreign apps they disagree with, potentially further fragmenting the global internet. Shutting

TikTok in America would be "a gift to authoritarians around the world", warns Ramya Krishnan, at the Knight Institute, a free-speech centre at Columbia University.

TikTok's efforts to oppose the legislation may have subjected it to further regulatory scrutiny. It sent notifications to its users urging them to call Congress and "stop a TikTok shutdown". Mr Krishnamoorthi claims Capitol Hill was "flooded" with calls, many from children, some of whom allegedly did not know what a congressman

was. He is calling for an inquiry by the Federal Trade Commission, a trustbuster, into whether that broke child-privacy laws. "The power that a foreign adversary has with that app was underscored by their influence campaign," he says. TikTok denies these allegations and says the calls were from "voting-age people".

For now, Mr Biden's campaign can meme away on TikTok throughout the election season. Mr Trump—who tried to ban TikTok under an executive order in 2020 but has since reversed his position—is apparently mulling a campaign launch on the app, according to the Washington Post. The MAGA super PAC has already entered the ring. It would all be hilarious if the stakes weren't so high.

> (570 words) www.economist.com

Opinion | Diabetes

Why is Britain turning into the under-40s diabetes capital of the world?

Education about the risks of being overweight means nothing if people have no access to healthy food or places to exercise

Type 2 diabetes used to be a condition linked to ageing and getting older. It's the most common metabolic chronic condition in elderly people in the UK, and the likelihood of developing diabetes increases dramatically after the age of 45. People of south Asian heritage have a higher prevalence of type 2 diabetes. India is often referred to as the "diabetes capital of the world", accounting for 17% of the total number of diabetes patients worldwide.

- But in Britain, recent data has shown a major change in the profile of who is getting diabetes: it's now young people. The number of under-40s being diagnosed with type 2 diabetes has risen 39% in the past six years. This was especially the case for people from deprived areas and those from black and south Asian backgrounds.
- The reason for these increases is not a mystery to experts. They are tightly linked to being overweight, and especially to carrying adipose (fat) tissue around internal organs and the waist. As one diabetes specialist at the Royal Infirmary in Edinburgh told me, "It's very rare to see someone with normal BMI [body mass index – a crude metric of someone's weight classification] diagnosed with type 2 diabetes in their 30s, except for south Asians where genetic predisposition is so strong". She continued that type 2 diabetes in younger people is strongly linked to being overweight and obese (81% of children with type 2 diabetes are living with obesity), but occasionally there is an unexplained anomaly or genetic basis. Examining the links between BMI and diabetes, a study of more than a million people found that diabetes is more likely at a BMI of 30 or over if you're from a

white background, 28 if you're black, 24 if you're south Asian and 21 if you have Bangladeshi heritage.

As with many health issues, the real solutions to the increasing rates of diabetes in young people are more political than medical. Reducing rates of overweight and obesity, especially in children, is an ongoing challenge for most high-income countries, and an emerging challenge in low- and middle-income ones. While awareness of symptoms is important, as well as early screening to identify pre-diabetes, we know in public health that education has its limits. Just telling people the risks of being overweight hasn't made any impact at a population level, according to studies by the World Cancer Research Fund.

The key issue here is inequality; a true solution would include making healthier food and physical activity more accessible, affordable and available. The cost of living is rising in Britain, and that means the price of fruit and vegetables, and healthy meat and dairy products is going up, while leisure and sports centres are closing. It's not surprising that rates of overweight and obese people are increasing in almost all age groups in Britain, and that they are highest in the most deprived areas.

Again we see the false economies that the UK government makes when it creates policies about health. It should be investing in public health and prevention, including anti-obesity strategies – such as bans on multi-buy deals and TV advertising of junk food before 9pm, and and subsidies for nutritious foods – and healthier environments for individuals, especially those from deprived areas. One clear focus could be school meals, in which ultra-processed foods make up 72.6% and 77.8% of primary and secondary school lunches respectively (between school-provided lunches and packed lunches): the consequence is British children having the highest level of ultra-processed food intake in Europe. Yet the UK government has delayed tackling overweight and

³⁵ level of ultra-processed food intake in Europe. Yet the UK government has delayed tackling overweight and obesity, meaning that the NHS has to spend more on acute and chronic care for those developing diabetes and needing treatment and support. Unless this dynamic changes, Britain may be called in the future "the under-40s diabetes capital of the world".

> (639 words) www.theguardian.com

Opinion

5

Why Can't College Grads Find Jobs?

Here Are Some Theories — and Fixes.

Many new college graduates are having an awful time finding jobs, as I wrote in April and in early May. I've been trying to understand why, and I think I'm getting closer to more answers.

I asked Goldman's economics team why finding a job has gotten harder for new entrants and college grads (and presumably especially hard for new entrants who are college grads). In an email, the team wrote that "we have not looked into the specific drivers" but said there are several potential reasons. Among them:

For 2024 grads, studying remotely during Covid "may have affected their training, networking, and human and social capital accumulation."

There are still some worker shortages, but mainly for low-skilled jobs.

The labor market may simply be "moving into better balance," allowing employers to become more selective.

¹⁰ Some people with student loan debt who weren't working may have been forced back into the labor market by the need to resume payments on their loans, adding to competition for jobs.

I also spoke to a lot of people in and around the hiring business who helped me understand at ground level why the college-to-job transmission belt is working poorly. "We see a lot of caution and uncertainty" from employers, Karin Kimbrough, the chief economist of LinkedIn, told me. They're uncertain about the outlook for interest rates and consumer demand, she said, "making them very cautious" about hiring.

Even though the unemployment rate is low, fewer people are quitting, so fewer jobs are becoming available, according to Bureau of Labor Statistics data. LinkedIn's estimate of the national hiring rate was down 9.5 percent in April from a year earlier.

One point I heard over and over is that simply tossing your résumé and cover letter into a company's job portal has a low probability of success, especially now. It's so easy to submit applications that companies are being bombarded with thousands of them. Human beings can't possibly review all of them, so they're reviewed by computers, which simply search for keywords. They don't understand in any deep way either the applicant's qualities or the employer's needs.

"The better writer you are, the greater your chance of getting rejected, because you won't use keywords" the way the evaluation algorithm wants, Nick Corcodilos, a recruiter who runs the website Ask the Headhunter, told me. Personal contact is crucial, he said. Rather than spraying applications far and wide, he recommends focusing on a handful of companies, researching them in depth and contacting a wide range of people connected with them, even their suppliers and customers.

College work experience can make a difference too, according to Jane Swift, a former lieutenant governor and acting governor of Massachusetts who's now the president of Education at Work, a nonprofit that helps students get internships related to their chosen fields while they're still in school. Those college jobs, she wrote to me, "enhance prospects for a good first job and a career filled with purpose and passion."

Fixing the college-to-job transmission belt should be partly employers' responsibility, not just applicants'. That's especially true for applicants from groups whose potential tends to be underestimated, such as single mothers, Joan Lynch, the chief content and programming officer of WorkingNation, a media nonprofit that promotes ways to fix unemployment and underemployment, told me. "It takes opening their eyes and saying, 'Oh, this is a valuable employee,' " she said.

The bad news is that more and more evidence suggests that getting a good job right out of college is really tough. The good news is that a lot of people are aware of the problem and striving to do something about it.

(606 words)

www.nytimes.com

Science and technology | Second sight

Apr 24th 2024

Memorable images make time pass more slowly



The effect could give our brains longer to process information

TIME FAMOUSLY speeds up when you are having fun. But it slows down, it turns out, when one looks at something worth remembering. According to research published on April 22nd in Nature Human Behaviour, people's sense of how fast time passes can be influenced by the memorability of the images in front of them. Scientists propose this effect could be a way for the brain to sneak in more processing time before a snap decision needs to be made.

A team led by Martin Wiener, a cognitive neuroscientist at George Mason University in America, tested how visual stimuli alter people's experience of time. They showed several dozen participants images of different scenes—from empty box rooms to filled stadiums—for between 300 and 900 milliseconds. After each one the participants had to say if the time spent looking at the image was short or long. Their responses revealed that, when the images featured large scenes, such as a vacant warehouse, more time seemed to have passed. The

opposite happened when the images were of spaces cluttered with objects, such as an overfull garage.

That was strange. Previous research has found that the experience of stretched time increases with size; for instance, if people are flashed images of different numbers for equal lengths of time, they think the higher numbers are shown for longer. But the cluttered scenes seemed to contradict that trend. To see if something else

- ¹⁵ was at play, the researchers ran another experiment using pictures that differed in memorability. Humans better remember pictures focused on people, actions and centrally placed objects. Dr Wiener's team used images from a 60,000-image data set, where each image had been judged on its memorability (a man with flowers in his beard: memorable. Foliage: less so).
- The more memorable the image, the more it seemed to stretch time. It also worked in reverse: when participants were called back to the lab a day later, they were better at remembering the time-slowing pictures. To help explain the result, the team fed the memorability pictures to a neural network designed to spot objects in images at a pace that correlates with humans. Perhaps counter-intuitively, it was faster at processing more memorable pictures. The researchers believe that this effect in the artificial neural network may be analogous to what happens in human brains. If so, it could be the key to explaining why time sometimes seems to slow down.
- Exactly how processing speed leads to altered time perception is still unclear, but the researchers believe the connection lies in how the brain prioritises incoming information. They propose a new model in which the brain tries to do more processing when it encounters something important, relevant or memorable. It does so, they suggest, by making seconds seem to pass slower, possibly as a way to get more processing done before the body reacts. If a human came face-to-face with a predator, for example, a more sustained burst of thought might be useful, says Dr Wiener.
 - That is a new and compelling way to think about what time means for the brain, says Chris Paffen, an experimental psychologist at Utrecht University who was not involved with the work. It would make time "a primary aspect of how we deal with the world", rather than just a measure of how long something takes, he says. Though it remains little more than a hypothesis for now, its memorability is undisputed.

(568 words)

Leaders | From chatbots to robots

Three reasons why it's good news that robots are getting smarter



They are becoming more capable, easier to program and better at explaining themselves Sanctuary AI robot

THE ROBOTS are coming! In science fiction that is usually an ominous warning. In the real world, it is a prediction—and a welcome one. The field of robotics has made impressive progress in the past year, as researchers in universities and industry have applied advances in artificial intelligence (AI) to machines. The same technology that enables chatbots like ChatGPT to hold conversations, or systems like DALL-E to create realistic-looking images from text descriptions, can give robots of all kinds a dramatic brain upgrade.

As a result, robots are becoming more capable, easier to program and able to explain what they are doing. Investors are piling into robotics startups. OpenAI, the creator of ChatGPT, which gave up on robots a few years ago, has changed its mind and started hiring a new robotics team. When brought to bear upon the physical world, previously disembodied AI now appears to have enormous potential.

- ¹⁰ Robots can inspire fear. Human beings are trained from birth by Hollywood to be afraid of them—the latest incarnation of the ancient tale of the inventor who loses control of his creation. And even if robots are not literally the murderous machines of the "Terminator" films, they can kill off decent-paying jobs in factories and warehouses. Nevertheless, the latest advances in robotics will bring real and substantial benefits.
- One is that new "multimodal" AI models combine understanding of language and vision with data from robotic sensors and actuators. This makes it possible to deal with robots using ordinary words. You can ask a robot what it is able to see or tell it to "pick up the yellow fruit". Such models in effect grant robots a degree of common sense—in this case, knowing that a nearby banana is a kind of yellow fruit. And like a chatbot, a robot can be told to modify its behaviour simply by changing a text prompt, something that would previously have required elaborate reprogramming.
- Another benefit is that the new models enable robots to explain the reasoning behind their actions. That is useful when they behave in unexpected or unwelcome ways. So long as robots' brains are not inscrutable black boxes, programming and debugging them is fairly straightforward. The new models are also less likely to hallucinate—tech-speak for "make things up"—because their perception is grounded in observations of the world, and they aim to ensure that cognitive and physical reality match. That makes them safer and more reliable.

And one more benefit is that robots are getting better at learning quickly through imitation and at generalising from one skill to another. This opens the door for robots to move out of factories and warehouses. Several companies and research groups are using the latest AI models to build humanoid robots, on the basis that most of the world, unlike an assembly line, has been designed for people to move around in. Labour markets across the rich world are tight, and getting tighter as accisition are. As well as been designed for people to move around in.

the rich world are tight—and getting tighter as societies age. As well as boosting productivity while workforces shrink, more capable robots could cook and clean, and care for the aged and the needy.

Advanced economies will need more automation if they are to maintain their standards of living. South Korea, Japan and China are all in the top five countries with the most robots for each manufacturing worker. It is no coincidence that they are also ageing rapidly. Without robots to help out, more people may have to work longer and retire later. In the coming years, attitudes could well flip from fearing the arrival of robots to wishing that

³⁵ and retire later. In the coming years, attitudes could well flip from fearing the arrival of robots to wishing that they would get here sooner.

(594 *words*)

United States | Lexington

Jun 6th 2024

Grown up in the USA



Forty years on, Bruce Springsteen's defining album still has something to teach Americans

The physical and psychic wounds of war, the hollowing-out of factory towns, the fear gnawing at working-class white men that their glory days are past: "Born in the USA", the album that made Bruce Springsteen the global bard of the American project, came out 40 years ago this month, but it could as aptly describe the America of today, when polls suggest just about everyone feels like a rider on a downbound train.

- ⁵ What seems old-fashioned is the partisan ambiguity of Mr Springsteen's messages and, with it, the stubborn hope. The title track in particular is remembered for being misunderstood by Republicans, who celebrated the music as patriotic without understanding its anguish and wrath. From the vantage of today, that takeaway is itself simplifying. It neglects some considerations.
- First, Democratic politicians also bore responsibility for many of the failures whose consequences Mr Springsteen
 lamented, starting with the war in Vietnam. Second, though few would believe that Ronald Reagan, then the president, parsed the lyrics before citing Mr Springsteen as evidence of American greatness, such ignorance cannot explain the enduring reverence for Mr Springsteen by some conservatives, long after he made his partisan leaning clear. (Chris Christie, a former governor of New Jersey, has attended more than 150 of his concerts.) Most important, this political summary of the music obscures Mr Springsteen's own sophistication. The album
 was full of despair, but it was not despairing. It was heartsore about America but still patriotic.
- Mr Springsteen told a radio interviewer, Terry Gross, in 2005, that his music had "often been a football". Referring to the blaring refrain, "Born in the USA!", that led some to hear an anthem to America as it was, he said: "In my songs, the spiritual part, the hope part, is in the choruses." But "the details of what the song is moving to transcend are almost always contained in the verses." Mr Springsteen was doing something American partisans are losing the habit of—reckoning with ideas that were in tension with each other. And he believed in the power of rock music to draw people together, according to a new book about the album, "There Was
- "In the mid-eighties, a pop star could still position himself 'above' politics and exist as a common touchstone that people with opposing ideologies could enjoy," Mr Hyden writes. Those scare quotes suggest two questions
 relevant to today. Is it possible any more for a cultural figure to stand "above" politics? If so, would that even be the right thing to do?

Nothing You Could Do", by Steven Hyden, a rock critic.

- The answer to the first question, Mr Hyden argues, is no. Taylor Swift is a star whose magnitude exceeds Mr Springsteen's. She might better be compared to the artist who had the bestselling album of 1984—indeed, of all time—"Thriller". As Michael Jackson did, Ms Swift tends to dwell on the joyful and painful consequences of choices made within relationships more than on the consequences for those relationships of broader
- socioeconomic forces. However, after not endorsing a candidate for president in the 2016 election, Ms Swift faced severe criticism, and she later made her partisan preferences clear.

Whether it can be right or constructive for any cultural figure to attempt to stand "above" politics is a harder question. Everyone has the right to speak up, and those with great influence should be admired for feeling a
³⁵ burden of responsibility to help make the world a better place. A professional football player who puts his career at stake to protest against injustice by taking a knee during the national anthem is performing a patriotic act. By contrast, staying silent in the hope of reaching a broader audience can seem like a cynical one. "Republicans buy sneakers, too," Michael Jordan once noted, explaining his refusal to take the partisan plunge.

Mr Hyden cites the band Creedence Clearwater Revival as a precedent for Mr Springsteen. Progressives and conservatives alike could sing along to "Fortunate Son", and that was no accident. The band's members adopted a motto that did not exactly evoke the high-minded pursuit of an artistic vision: "Creedence is like burgers". Back in the mid-1990s, Mr Springsteen, who declined in 1984 to endorse either Reagan or his Democratic

challenger, Walter Mondale, joked about the financial benefits of having had his politics misunderstood. A joke such as that would fall very flat in the America of 2024. The Boss campaigned for Hillary Clinton in 2016 and Joe Biden in 2020, when "My Hometown" from "Born in the USA" provided the theme music for an ad.

(760 words)

United States | Hung up

American parents want their children to have phones in schools



But phones in the classroom are disruptive. What should schools do?

"It's like they don't trust us," says Eva King, a 14-year-old pupil at Alice Deal Middle School in Washington, DC. She is standing outside the school during dismissal with two others who nod their heads and laugh in agreement. Deal's administration has banned mobile phones during the entire school day.

Debates about teenagers' access to phones and their use in schools have heated up lately. Some state legislatures in America are passing laws to stop phones from being used in classrooms, without removing them from schools altogether. A popular book published in March, "The Anxious Generation", by Ionathan Haidt, has called fresh

altogether. A popular book published in March, "The Anxious Generation", by Jonathan Haidt, has called fresh attention to evidence that social media, mostly accessed through smartphones, may be to blame for a sharp rise in anxiety, depression and self-harm among young people today.

Some researchers are unconvinced that phones are causing mental illness. Although America and Britain have reported a rise in problems as social-media use has surged, not all rich countries have had similarly correlated increases. "Adolescence is influenced by multiple things," says Margarita Panayiotou, a researcher at the University of Manchester. "It would be unrealistic to expect that one thing—social media—is driving adolescent mental health."

- Most parents want their children to have phones available at school. In February the National Parents Union, an advocacy group, polled 1,506 public-school parents and found that a majority think that pupils should be allowed to use phones during free time. Larry McEwen, a parent at Deal and the school's basketball coach, agrees. He thinks pupils should have phones for emergencies. He and Eva King cited a lockdown last year at a nearby school because of a gun scare. That was when having phones came in handy.
- The devices are plainly disruptive. Pupils can receive more than 50 notifications during a school day, according to a study of 203 children by Common Sense Media, a non-profit group based in San Francisco. Teachers complain that pupils watch YouTube and use other apps in class. Phones can be instruments of bullying, and pupils have been secretly recorded while using the toilets or undressing in locker rooms. These days, the notorious schoolyard fight can be organised by phone. Hung up

It is also clear that mobile phones can undermine learning. Several studies have found that their use decreases concentration in school, and the phones do not only affect the user. "There's a second-hand-smoke effect," says Sabine Polak, a founder of the Phone-Free Schools Movement, another advocacy group. Even if a child does not have a phone, they are still affected by others using them. The devices are stressful for teachers, too. They must police their use, ensuring that pupils are not sneakily using phones under their desks or during long toilet-and-Netflix breaks.

- New state laws seek to enforce phone-free classrooms while also keeping pupils and parents connected. Florida's governor, Ron DeSantis, signed a law last year that bans the use of mobile phones by pupils in class, and a similar law in Indiana is due to go into effect in July. Other states are considering bills along the same lines. These moves are distinct from the more ubiquitous push for legislation aimed at protecting children from social media.
- The answer for parents in America is to agree to delay giving their children a smartphone and for schools to support them, argues Kim Whitman of the Phone-Free Schools Movement. For communication and keeping tabs on their children, parents could use simpler devices, such as flip phones, smart watches or tracking devices. Overall Ms Whitman wishes that parents who want instant communication with their children would relax. "We all survived for a very long time and functioned absolutely fine without having a phone and without being able to have instant access to our parents," she notes.

(624 words)

Leaders | Setting sales

If a bestseller list shuns authors it dislikes, it should say so



Bestseller lists are supposed to reflect sales, not political ideology

People love lists. The 1,000 richest people, the 100 places to see before you die, the ten most-wanted fugitives; lists promise to make the chaos of life more manageable. Benjamin Franklin was a superfan, using lists to explain everything from the 13 virtues necessary to be successful to eight reasons to choose an older woman as a lover.

- Since the first list of bestselling books was published in America in 1895, critiques have piled up like the stacks 5 beside a bibliophile's bed. In 1932 M. Lincoln Schuster, a co-founder of Simon & Schuster, a publisher, warned that: "The current procedure for compiling... the so-called 'bestseller' lists has led to many abuses." He argued that cumulative sales should count. Currently, only "fastsellers" qualify, leaving the most popular book of all time, the Bible, out of the rankings.
- More recently, people have been complaining of political bias. Critics, including Elon Musk, accuse the New York Times list, America's most influential, of discriminating against conservative authors. The Economist has examined 12 years' worth of data to see whether this is true. Our analysis suggests that it is.

We found that hardcover non-fiction books from conservative publishers are seven percentage points less likely to make it onto the New York Times bestseller list than you would expect from their sales as reported in Publishers Weekly, which uses a simple measure of purchases. Blockbusters by well-known conservatives, such as Bill O'Reilly, still manage to climb to the top of the Times's rankings. But the bias against second-tier right-wing books is substantial. Titles from conservative publishers that rank in the bottom ten of Publishers Weekly's top 25 hardcover list in a given week are 22 percentage points less likely to make it onto the Times's.

The New York Times says that politics does not play any part in its rankings. It compiles them from thousands of "selling locations" and tries to screen out "bulk purchases", which can be a sign of politicians or rich people 20 buying lots of their own books in order to claim "bestseller" status. But the Times collects the data and adjusts it behind a veil of secrecy. Reading the newspaper's 550-word explanation of its methodology is like trying to interpret the symbols in "The Da Vinci Code".

The New York Times should strike a better balance between integrity and transparency. It is right to try to stop anyone gaming the system by, say, buying the appearance of popularity. But as faith in media objectivity 25 wanes, transparency is the best way to ensure people's trust. If the Times is shunning authors because it does not like them, it should say so. When Alex Jones, a conspiracy theorist, wrote a book in 2022, Publishers Weekly ranked it as the number-two bestseller in its first week. The Times list omitted it entirely. If that was because the newspaper does not wish to lend publicity to a lying hate-monger, fair enough—but if so, it should make clear

that its list is based on its values.

Another option would be to use a third party that tracks book sales, as do many newspapers, including the Washington Post. This gives readers a clearer picture of the data's source and impartiality; data providers with no newsroom may suffer less from editorial bias.

Bestseller lists can be valuable. Knowing what other people are reading helps you understand what they are thinking, whether you agree with them or not. Subjective recommendations of good books are valuable, too. But it is important to know which is which. The New York Times should ask itself some hard questions—and start a to-do list.

(598 words)

United States | Back to school

Thousands of American pensioners are retiring on college campuses



For universities, the boomer business is one way of responding to the enrolment cliff

"Are we alone in the universe? That's the core question we're trying to answer here," Meenakshi Wadhwa, a planetary scientist with ties to NASA, tells her spellbound class. As she explains that to answer this "we need to go back to Mars to collect rocks", one student scribbles notes while another holds up an iPhone to take a snap of the slides. In many ways this lecture hall at Arizona State University (ASU) is like any other. A group of keen women sit attentively in the front row; the men are spread out in the back. But the hearing aids hint at how

unusual this class is. Mirabella, a 20-storey "university retirement community" on ASU's campus, is home to over 300 pensioners.

When it opened its doors in 2020, the senior-living facility was nearly fully subscribed, despite the pandemic. Most residents are having a ball. They get a university pass, which allows them to attend the same classes and cultural events as students, but with the distinct benefit of not having to take exams. Golf buggies can drive them around the sprawling campus, though many are still fit enough to mountain bike.

In their dorms, four restaurants serve better food than college grub and amenities include an art studio, a pool and gym, and a games room. Only the second floor feels institutional, with a memory-care centre and rooms for residents who need round-the-clock attention. Sometimes one half of a couple moves to this floor, says Lindsey Beagley, head of lifelong university engagement.

This is part of a wider trend. An estimated 85 colleges in America are affiliated with some form of senior living. The idea sprang from two college presidents who wanted to retire on campus in the 1980s. Today, universities from Central Florida to Iowa State to Stanford offer senior-living arrangements. Andrew Carle, at Georgetown University, estimates that as many as 20,000 older Americans live like this.

²⁰ With more than 10,000 baby-boomers in America turning 65 every day, and more set to hit that milestone this year than ever before, the opportunity for alternative forms of retirement is large. Compared with previous generations, boomers are wealthy, educated and picky. They want to remain active, stimulated and not locked away. These wishes can all be met on a university campus.

For universities, welcoming pensioners can make sense too. Many face an "enrolment cliff", caused partly by demographic shifts. Nationally, undergraduate enrolment dropped from over 18m in 2010 to below 16m in 2022. Mr Carle regularly consults with universities who wonder what to do with the extra space. The smartest ones, he says, provide a continuum of care—including for the very last stage of life. "The philanthropy is the icing on the cake," he says of the potential that residents will include universities in their wills.

Bill Gates—not that one, but an 80-year-old former newspaper editor—moved to Mirabella with his wife, who has a PhD in chemistry, two years ago. They have made friends with residents but also, to their surprise, with younger students. "Being among young people is really invigorating," says Mr Gates. At "pizza and a slice of future", a discussion group about AI with pizza served halfway through, one of the topics was whether a lifespan of 200 or 250 years would be desirable. "The 20-year-olds were enthusiastic," he reflects, but those in their 70s and 80s "had some reservations", he chuckles.

(565 words)

United States | Hung up

American parents want their children to have phones in schools



But phones in the classroom are disruptive. What should schools do?

"It's like they don't trust us," says Eva King, a 14-year-old pupil at Alice Deal Middle School in Washington, DC. She is standing outside the school during dismissal with two others who nod their heads and laugh in agreement. Deal's administration has banned mobile phones during the entire school day.

Debates about teenagers' access to phones and their use in schools have heated up lately. Some state legislatures in America are passing laws to stop phones from being used in classrooms, without removing them from schools altogether. A popular book published in March, "The Appious Ceneration" by Jonathan Haidt has called fresh

altogether. A popular book published in March, "The Anxious Generation", by Jonathan Haidt, has called fresh attention to evidence that social media, mostly accessed through smartphones, may be to blame for a sharp rise in anxiety, depression and self-harm among young people today.

Some researchers are unconvinced that phones are causing mental illness. Although America and Britain have reported a rise in problems as social-media use has surged, not all rich countries have had similarly correlated increases. "Adolescence is influenced by multiple things," says Margarita Panayiotou, a researcher at the University of Manchester. "It would be unrealistic to expect that one thing—social media—is driving adolescent mental health."

- Most parents want their children to have phones available at school. In February the National Parents Union, an advocacy group, polled 1,506 public-school parents and found that a majority think that pupils should be allowed to use phones during free time. Larry McEwen, a parent at Deal and the school's basketball coach, agrees. He thinks pupils should have phones for emergencies. He and Eva King cited a lockdown last year at a nearby school because of a gun scare. That was when having phones came in handy.
- The devices are plainly disruptive. Pupils can receive more than 50 notifications during a school day, according to a study of 203 children by Common Sense Media, a non-profit group based in San Francisco. Teachers complain that pupils watch YouTube and use other apps in class. Phones can be instruments of bullying, and pupils have been secretly recorded while using the toilets or undressing in locker rooms. These days, the notorious schoolyard fight can be organised by phone.

It is also clear that mobile phones can undermine learning. Several studies have found that their use decreases concentration in school, and the phones do not only affect the user. "There's a second-hand-smoke effect," says Sabine Polak, a founder of the Phone-Free Schools Movement, another advocacy group. Even if a child does not have a phone, they are still affected by others using them. The devices are stressful for teachers, too. They must police their use, ensuring that pupils are not sneakily using phones under their desks or during long toilet-and-Netflix breaks.

- New state laws seek to enforce phone-free classrooms while also keeping pupils and parents connected. Florida's governor, Ron DeSantis, signed a law last year that bans the use of mobile phones by pupils in class, and a similar law in Indiana is due to go into effect in July. Other states are considering bills along the same lines. These moves are distinct from the more ubiquitous push for legislation aimed at protecting children from social media.
- The answer for parents in America is to agree to delay giving their children a smartphone and for schools to support them, argues Kim Whitman of the Phone-Free Schools Movement. For communication and keeping tabs on their children, parents could use simpler devices, such as flip phones, smart watches or tracking devices. Overall Ms Whitman wishes that parents who want instant communication with their children would relax. "We all survived for a very long time and functioned absolutely fine without having a phone and without being

able to have instant access to our parents," she notes.

(622 words)

Leaders | Putting the lean into clean

Oct 12th 2023

How to deal with the global anti-climate backlash



Minimise the cost and hassle that green policies impose on households

The shift to electric cars is "a transition to hell" that will destroy "your beautiful way of life", says Donald Trump. He is far from the only politician to oppose greenery. Rishi Sunak, Britain's prime minister, has kicked plans to phase out petrol cars years into the future, saying: "It cannot be right... to impose such significant costs on working people." On October 8th voters in two big German states walloped the parties of the green-tinged ruling coalition. Even Sweden has cut fossil-fuel prices several times in the past year. A backlash against climate-friendly policies is under way in rich democracies.

It has many causes. Some voters deny that climate change is happening. Others accept that it is, but do not want to pay higher taxes or energy prices to tackle it. Many object to the hassle of installing new equipment. Some, especially the old, resist any kind of change. Others ask why they should make sacrifices when other countries, especially ones they dislike, are doing less.

Under this cauldron of grievances, populist politicians have heaped lighted coals. Many exaggerate the costs of going green, embellish the details (Britain's opposition had no plans for a meat tax, whatever Mr Sunak says) and seek to turn climate into a culture-war battleground: the metropolitan elite will grab your car and make you eat tofu! Such tactics have proved potent. Although awareness of climate change has increased, a political

- divide has opened. Voters on the left in Australia, Canada, Germany and Sweden are 23-44 percentage points more likely than those on the right to see it as a "major threat"; in America the gap is a stunning 63 points, according to Pew, a pollster. Such polarisation means bigger flip-flops when power changes hands: imagine France under the wind-farm-loathing Marine Le Pen. Everywhere, making climate policy less predictable makes it harder for investors to plan for the long term, as they must.
- ²⁰ What can be done? President Joe Biden's approach has been to throw hundreds of billions of dollars at everything from batteries to smart grids, and to call it a programme to create jobs and face down China. Even voters who do not care about greenery like jobs and fear China, goes the calculation, and a future Republican president would shrink from scrapping subsidies that are popular with recipients in red and blue states alike. All true, but this approach has big drawbacks.
- First, framing green energy as a matter of industrial policy and national security opens the door to protectionism, which raises the cost of green technology by shutting out some of the best suppliers. Second, a subsidy-based approach will be far more expensive than one that makes more use of carbon pricing, which encourages the reduction of emissions throughout the economy. The IMF estimates that in a typical rich country, trying to reach net zero using mostly subsidies would raise public debt by an unsustainable 45-50% of GDP by 2050. Using a well-designed mix of carbon taxes and other measures would raise debt by a more manageable 10-15% of GDP.

The downside of carbon taxes is that voters don't like the sound of them, since they are, as the name implies, taxes. Governments have typically succeeded in putting a price on carbon only by stealth: using emissions-trading schemes that few voters understand. Carbon prices now cover almost a quarter of global emissions, but that is not nearly enough.

To curb carbon fast enough without generating too much resistance, climate policies should be designed to inflict as little hassle and cost on households as is practical. To reduce hassle, governments should remember that voters' time is valuable and many green chores are dull. (...)

(611 words)

https://www.economist.com/leaders/2023/10/12/how-to-deal-with-the-global-anti-climate-backlash

United States | Indefensible, unpronounceable

Boston's "cradle of liberty" was paid for with slavery profits



But it still may not be right to rechristen a building named after a slave trader

TO MANY AMERICANS, Faneuil Hall is sacred ground. Built in 1742 as a market place and meeting hall, it became the centre of Boston's civic life. In the years leading to the American revolution, town-hall meetings became debates on the Sugar Tax of 1764, the Stamp Act of 1765 and taxing tea. It was where Bostonians like Samuel Adams voiced dissent against what they saw as oppressive British policies. Later it became a forum

where anti-slavery advocates held rallies and organised against fugitive-slave laws. Abolitionists such as William Lloyd Garrison and Frederick Douglass, who had escaped from slavery, gave impassioned speeches. Suffragists also used Faneuil Hall to rally support for political and social rights for women.

But the building known as the "cradle of liberty", like much of American history, is scarred by slavery. Its construction was funded by, and named after, Peter Faneuil, a wealthy merchant who owned slaves and profited from the slave trade, including partially financing ships that went to Africa. Last month Boston's city council passed a resolution asking the city to give Faneuil Hall a nobler name, such as "Liberty Hall", or perhaps rename it after Douglass or Crispus Attucks, a sailor of African and indigenous ancestry, who was killed by British soldiers in the Boston massacre. The resolution is toothless, because only the city's public-facilities commission can rename buildings owned by the city. But it is symbolically important.

- ¹⁵ Boston is the latest to contemplate changing a landmark name. Earlier this year America's military establishment began changing army-base names referring to Confederate officers: Fort Bragg became Fort Liberty. The navy renamed the USS Chancellorsville, which commemorates a Confederate victory, for Robert Smalls, a black civil-war hero. Since 2015, more than 480 Confederate symbols have been renamed, removed or moved from public places, according to the Southern Poverty Law Centre, which keeps count.
- Renaming Faneuil Hall is perhaps not such an obvious move. Arguments to remove Confederate names, many of which came into being decades after the civil war and were designed to reinforce segregation and Jim Crow laws, are clearer. Peter Faneuil is a bit more complicated, given the building's role in creating America and helping the abolitionist movement. "If you're not changing how the story exists," says Noelle Trent of the Museum of African-American History in Boston & Nantucket, "if you're not changing people's awareness around that name-change and the conversation around it, then its impact is minimal."

A newish exhibition in Faneuil Hall about slavery in Boston highlights individual slaves, including "Peter", who ran away from the Faneuil family. It aspires to teach Faneuil Hall's visitors—the building welcomes 18m of them a year—about Boston's role in the slave trade, as well as about how its enslaved people lived. A portrait of Faneuil hangs in the meeting hall. Until recently, visitors would have assumed he was one of the

³⁰ country's founding fathers. George Washington's portrait hangs nearby. Now, there is context. Byron Rushing, a civil-rights activist and a former state representative, is reluctant to see the name change. "Eradicate it and no one will ever ask again, 'Who was Faneuil?'"

(516 words) www.economist.com

Nov. 9, 2023 Pamela Paul

It's Not Kids With the Cellphone Problem, It's Parents



The hardest rule I ever set for my kids was refusing them cellphones until high school.

I'd seen the research on the doleful effects of social media, screens and surveillance parenting on kids' mental, physical and cognitive well-being. If it turns out that the data is wrong, I figured, they will have survived a mild deprivation in their relatively privileged lives and provided fodder for a future therapist's couch.

⁵ They'll be safer walking to school, we tell ourselves — fully aware that should they be hit by a car or snatched away, they won't be texting Mom about the situation. Even in a school shooting, cellphones have as much potential for danger as they do for safety.

We tell ourselves the phone will give our kids a sense of independence, even though phone trackers let us know exactly where they are. It will teach our kids to be responsible, even though we pay the bill.

¹⁰ We may genuinely believe these little lies; we may just love the convenience. Phones let kids check the forecast themselves rather than yell for a weather report while getting dressed. Phones let kids distract themselves rather than distract us when we're on our phones.

As much as we lament the besotted, agonized, needy relationship our kids have with their phones, that same phone lets parents off the hook. If we screw something up, we can always text: Remember your grandfather's birthday! Don't forget violin. So sorry, I can't pick you up this afternoon. You forgot your Chromebook!

The news that some districts are cracking down on cellphones is thus a bewildering case of competing interests among kids, administrators, teachers, parents and other parents. It overturns many pro-tech school policies embraced before Covid and resorted to during lockdown. It's also the smartest thing schools can do, and it's about time it got done.

- ²⁰ Years ago, schools largely rolled over on tech in the name of inculcating "21st-century skills." Schools boasted Chromebooks for every child, wired education, all kinds of apps. According to the Department of Education, as of 2020, about 77 percent of schools prohibited nonacademic cellphone use. Note the caveat "nonacademic"; many schools had simply integrated phones into their curriculum.
- Little surprise then, that a new study by Common Sense Media found that 97 percent of teen and pre-teen respondents said they use their phones during the school day, for a median of 43 minutes, primarily for social media, gaming and YouTube. According to the authors, students reported that policies about phone use in schools vary — sometimes from classroom to classroom — and aren't always enforced.

It's not the school's job to police kids' phone habits, something parents are acutely aware isn't easy. And that gets to the thorny crux of the issue: Parents are often the problem. When one group of parents in my district confronted the administration about its lax policy toward cellphones, the principal said whenever he raised the issue, parents were the ones who complained. How would they reach their children?!

But if we expect our kids to comply with no-phones policies, we've got to get over the deprivation. Our own parents would just call the front office — in an emergency. Not because they wanted to make sure we remembered to walk the dog.

And really, if we're trying to teach kids to be safe, responsible and independent, shouldn't we give them the leeway to do so? Phones don't teach kids these values; parents do.

For schools to enact what research overwhelmingly shows benefits students, we parents have to back them up. When parents say our kids are the ones with the cellphone problem, we're just kidding ourselves.

(609 words)

www.nytimes.com

Nov 9th 2023

Leaders | AI and culture

The dawn of the omnistar



How artificial intelligence will transform fame

Computers have spent decades disrupting humdrum jobs. Now artificial intelligence (AI) is coming for the most glamorous ones. Hollywood has been at a standstill for half the year, until studios agreed on November 8th to offer striking stars protection from robotic rivals. Living artists were nudged down this week's music charts by a dead Beatle, resurrected by AI. Actors like Scarlett Johansson and authors like John Grisham are suing tech firms over the unauthorised use of their image and words.

Stars may worry that AI is stealing their work and giving less talented performers the skills to snatch their audience. In fact, the famous folk complaining the loudest about the new technology are the ones who stand to benefit the most. Far from diluting star power, AI will make the biggest celebrities bigger than ever, by allowing them to be in all markets, in all formats, at all times. Put your hands together—or insert your earplugs if you prefer—for the rise of the omnistar. (...)

As AI-generated content floods into the entertainment business, the hardworking folk of Malibu are worrying once more that their fame will be diluted—and again, the outcome is likely to be the opposite. One of the paradoxes of the internet age is that, even as uploads to YouTube, TikTok and the like have created a vast "long tail" of user-made content, the biggest hits by the biggest artists have become even bigger. The number of musicians earning over \$1,000 a year in royalties on Spatify has more than doubled in the past six years but the

¹⁵ musicians earning over \$1,000 a year in royalties on Spotify has more than doubled in the past six years, but the number earning over \$10m a year has quintupled. Even as niche content thrives—sea shanties, whistling and all kinds of eccentricities—Taylor Swift is marching through the most lucrative concert tour in history. It is the mid-ranking artists who have suffered. (...)

AI will give these megastars the ability to be truly omnipresent for their fans. AI-powered dubbing is already ²⁰ allowing actors and podcasters to speak to foreign audiences instantly and in their own voice. It will soon be standard for video to be edited so that their lips match the new language, too. In-demand actors may get more work because AI removes the perennial Hollywood problem of crowded schedules, allowing stars to perform alongside each other while not being together at all. Digital Botox will increase actors' shelf-life and even enable them to perform posthumously. Disney has acquired the rights to the voice of James Earl Jones, 92, so that ²⁵ Darth Vader can scare children for generations to come.

Stars will also be able to perform for fans in formats that are only beginning to emerge. The ABBA avatars that sell out a London arena seven times a week, and the celebrity-voiced chatbots recently launched by Meta, are just a taste of the ways in which the biggest stars will be able to satisfy—and monetise—their fans.

These opportunities come with strings attached. Artists are right to worry about copyright, which must be protected if AI is not to become a legalised form of piracy. Past technologies were no different: the printing press led to the first copyright laws in the 18th century; royalty payments were rejigged in the 1960s to compensate big-screen actors whose work was shown on TV; the musical free-for-all unleashed by companies like Napster at the turn of the century eventually gave way to deals between streamers and record companies. Content creators have legitimate questions about permission and payment (we declare an interest here). Until those are answered,

³⁵ AI will be a legal Wild West. (...)

(588 words) www.economist.com

Leaders | Don't be a flaggard. Raise your standards!

September 20, 2023

Jun 29th 2023

How to design better flags



Some tips to avoid having an embarrassing emblem

HAVE YOU ever met a vexed vexillologist? This is someone who frets when flags are badly designed. Sadly, too many flags flutter to deceive: they are cluttered with imagery, a mess of colours and all too easily forgettable. Yet flags matter. Witness Ukraine's blue-and-yellow banner, which now serves as a potent symbol around the world (not to mention on this newspaper's covers). A fine flag can be something that citizens feel proud to pledge allegiance to, as well as an excellent marketing tool. Canada's red maple leaf, for example, has advertised the country on countless backpacks across the world.

A bad banner has an obvious solution: change it. That is what several American states and cities have been doing, or at least contemplating. In March, Utah approved a new standard with a bold beehive to replace its fussier old flag. Maine may ask voters to decide in November whether it should switch from its current, over-intricate design to a different one with a plain pine tree and a blue star, a reinterpretation of an older banner, which is already proving popular. The design is not yet settled, so perhaps a flag with a lobster could pinch the honours at the last minute.

Many people in Minnesota may not even realise they have a state flag—which is lucky. The state representative who has led a campaign to replace the current one has described it as "a cluttered genocidal mess". Its imagery includes three dates from the 1800s, a French motto and a Native American riding away in the background while, in the foreground, a farmer tills the land. A new design is due to replace it next May.

Fortunately, the world has centuries of experience that can help guide better flag design. This has led to a few well-established rules. First, keep it simple. A good test is whether a child can draw it from memory. Japan's red circle in a white rectangle passes the test with, er, flying colours. So does New Mexico's design (pictured), another red-sun symbol, against a yellow background; it is a thing of simple beauty.

Second, use meaningful symbolism: think Israel's Star of David, the Soviet hammer-and-sickle or America's 50 stars, representing all its states, and 13 stripes, evoking the original colonies. (Mozambique, displaying an AK-47 assault rifle, perhaps went too far.) Third, limit the palette to just a few basic colours. True, as South Africa's black-gold-green-white-red-blue emblem shows, it is possible to break this rule successfully, but even the rainbow Pride flag, in its most familiar version, cut two colours from its original eight, because hot pink and

²⁵ the rainbow Pride flag, in its most familiar version, cut two colours from its original eight, because hot pink and cool turquoise made it hard to manufacture. The fact that banners are often viewed from the back helps explain a fourth sensible rule: avoid lettering.

Last but certainly not least: be distinctive. You will then avoid the situation of Indonesia and Monaco, whose flags look the same, as do Romania's and Chad's. Nepal's jagged double-pennon, by contrast, is delightfully unique—the only national flag with an irregular shape. Similarly, Jamaica's is the only one without red, white or blue. Switzerland and the Vatican stand out as the only countries with flags that are square.

Sometimes proposals for new flags fail. Badges of identity arouse strong feelings. New Zealanders rejected a switch in a referendum in 2016. Traditionalists can feel attached to old emblems. But from Maine to Milwaukee, plenty of places—call them flaggards—have dreadful, old-fashioned banners that are ripe for change. In 2004

³⁵ Pocatello, Idaho, was reckoned in a survey of vexillologists to have the worst city flag in America. It was changed in 2017, and in a survey last year the new flag ranked 11th in the country. Come on, flaggards, do the Pocatello.

(617 words)

https://www.economist.com/leaders/2023/06/29/how-to-design-better-flags

Culture | Writing the wrongs of history

Sep 27th 2023



Some people in China are bravely trying to document the past

"Sparks", a new book by Ian Johnson, looks at China's censored history

Sparks. By Ian Johnson. Oxford University Press; 400 pages; \$27.95. Allen Lane; £25

Amid the global calamity of covid-19 in 2021, the Chinese Communist Party's elite had much to discuss at their secretive, annual conclave. But in the communique issued at the end, there were eight times as many mentions of the word "history" as of the word "pandemic". To China's leader, Xi Jinping, getting the party to agree to his version of the party's century-long past was a no less pressing matter.

Mr Xi's interpretation of history was contained in a 36,000-character document. It presented what officials called a "magnificent epic", with Mr Xi's "new era" as its glorious culmination. Only one paragraph dealt with the horrors ("mistakes", it called them) of the period under Mao Zedong, when millions died in a man-made famine and political violence. It made no mention of the deaths he caused and blamed others in the leadership for the Cultural Revolution's "many crimes".

Deng Xiaoping's crushing of the Tiananmen Square protests in 1989, at the cost of hundreds if not thousands of lives, was dealt with in just two sentences. Tiananmen was described as "a severe political disturbance" against which the party "took a clear stand". The new history did not even hint at the army's intervention, let alone its machine-gunning of protesters.

¹⁵ To Mr Xi, getting the party to agree on this narrative was not a mere ivory-tower exercise. It was aimed at demonstrating his power and silencing anyone who might attempt to undermine his or the party's authority by dwelling on past failings and brutality. In his new book, "Sparks", Ian Johnson, a former Pulitzer-prizewinning journalist who is now a fellow at the Council on Foreign Relations, says Mr Xi regards "counter-history"—the attempt by some people in China to correct the sanitised official record and provide truthful accounts—as an "existential threat".

The "underground historians", as Mr Johnson calls them, are a motley group of academics, artists, film-makers and journalists, often motivated by personal experiences. Most have families and take enormous risks to visit scenes of past horror and to interview survivors. They share their discoveries in samizdat form and publish or air them abroad, sometimes online using software to tunnel through China's "great firewall". One underground journal, called Remembrance, is circulated as a PDF every two weeks. It carefully avoids the most sensitive

topics, such as Tiananmen, but pulls no punches on the Mao era.

Mr Johnson's description of the historians' efforts exposes an important facet of Chinese life that is often ignored because it is so hard to access. Police keep close watch on meetings and communications with the party's critics. Mr Johnson's ability to evade controls and gain the trust of his subjects is evident in his compellingly written work. The result is a rare insight into the extraordinary risks that some Chinese take to illuminate the darkeet communication. These historians are united he save by "common ideas and beliefe that remain

darkest corners of communism. These historians are united, he says, by "common ideas and beliefs that remain widespread across China, so much so that it is not an exaggeration to call this a movement".

(...)

Many observers believe that China's citizens are supportive of the party and its nationalist cause and that truth-seeking contrarians are a marginal force. But as Mr Johnson writes, "Saying that 'most people' don't know or care is a truism applicable to almost every society in every era: what matters is that many Chinese do know and continue to battle, today, to change their society." Mr Xi appears acutely aware of this—and fearful the efforts of unofficial historians will spread.

(591 words)

https://www.economist.com/culture/2023/09/27/some-people-in-china-are-bravely-trying-to-document-the-past

Science and technology | Ice and fire

Glaciers on volcanoes could serve as early-warning systems



They could also skew measurements of climate change

Mapping glaciers was once a difficult and arduous job. So was monitoring volcanoes for the grumblings and rumblings that might herald an eruption. In recent decades, the old methods of hiking boots and mountaineering gear have been joined by satellites and remote sensing, making things both easier and safer.

But looking from afar has its drawbacks too. If a volcano is high enough to sport glaciers on its flanks (and many are), then the thick layer of ice can make it harder, or impossible, to get accurate temperature readings from the rock beneath.

And that is a particular problem, for glacier-topped volcanoes are some of the most dangerous of all. If they do erupt, the heat can melt the glaciers, forming torrents of fast-moving mud called lahars that can flatten anything in their path. In 1985 the Nevado del Ruiz volcano in western Colombia erupted. The glaciers on its summit and flanks formed several gigantic lahars, one of which buried the nearby town of Armero, killing more than 20,000 of its inhabitants. It remains the worst natural disaster in the country's history.

In a paper published last month in Geology, Matteo Spagnolo and Brice Rea, a pair of glaciologists at the University of Aberdeen, suggest a possible solution to the problem. The internal heat of volcanoes, they conclude, has a notable impact on the glaciers that sit on top of them. Monitoring those glaciers, rather than the volcano itself, may serve as an early-warning system for anyone living nearby.

The researchers and their colleagues studied 600 glaciers in the Andes (including those on Nevado del Ruiz) of which 74, being less than a kilometre from the mouth of an active volcano, were classed as "volcanic". One of the main features the scientists were looking for was the "equilibrium line". This is the point on a glacier that separates the "accumulation zone", where snow adds to the glacier's mass, from the "ablation zone", where melting subtracts from it. One of the things that affects the equilibrium line is the weather. Plenty of snowfall, or a cool summer, and the line will move downhill. A dry winter or a scorching summer will move it higher.

In theory, though, any source of heat—including volcanic heat from beneath the ground—ought to affect the height of the equilibrium line. When the researchers examined the data, that is exactly what they found. Glaciers on volcanoes had equilibrium lines notably higher than those on ordinary mountains. (...) Those data showed a strong link between changes in the amount of volcanic heat seeping to the surface and the movements of the equilibrium line.

This means, say the researchers, that, although volcanic glaciers obscure what is going on underneath, they could themselves serve as telltales. Sudden changes in the equilibrium line, particularly if they are out of kilter with those of other glaciers nearby, could be evidence that something is brewing beneath the surface, and that further attention is warranted. Although they are getting better, volcanologists still cannot predict exactly when

eruptions will occur. But a rise in heat suggests more magma is accumulating below, and makes a valuable early-warning sign.

The findings have implications beyond volcanology and warning nearby inhabitants of a looming disaster. Measurements of glaciers around the world provide one way for climate researchers to track the long-term effects of climate change. A warmer planet should mean that glaciers are receding everywhere, and by and large

they are. But Dr Spagnolo and Dr Rea's results suggest that not all glaciers make equally reliable thermometers. Those on the sides of volcanoes can advance and recede for reasons entirely unrelated to global warming. Climate scientists, they argue, should consider excluding such glaciers from their databases.

(617 words)

https://www.economist.com/science-and-technology/2023/09/27/glaciers-on-volcanoes-could-serve-as-early-warning-systems

Britain | Classroom war



Do Labour's plans for Britain's private schools make sense?

A proposal to charge VAT on fees arouses passion on all sides

For decades, on and off, the Labour Party has been promising to take a harder line on private, fee-paying schools. Before the general election in 2019 it pledged to explore ways of "integrating" them into the public sector. That idea has been dropped, along with one to strip private schools of their charitable status.

But the policies spelled out to enthusiastic applause at Labour's conference in October—to make private-school fees subject to value-added tax (VAT), at the standard rate of 20%, and to remove a discount these schools receive on business rates—are still controversial. Given the party's yawning lead in the polls, they are also likely to become reality. As claims and counterclaims fly, three questions dominate. What is the case for making the tax changes? Would they materially affect private schools? And would they improve education in Britain?

On the rationale for the policy, Sir Keir Starmer, Labour's leader, has batted away claims that his party is contemptuous of aspirational parents; he has said he sees "no case" for trying to abolish fee-paying schools. Instead Labour's argument is that it is unjust to continue exempting from tax a service bought mostly by the rich.

Research suggests that pupils in private schools learn more than they would if they studied in the state sector. Indeed, the fact that they get more and better qualifications is the biggest single reason they earn more than others in adulthood, according to academics at University College London (UCL) and Cambridge. (Chummy networks probably also help.) By the time they turn 25, privately educated Britons earn 17% more than workers

- networks probably also help.) By the time they turn 25, privately educated Britons earn 17% more than workers from similar homes, according to research published in 2020. The pay premium widens by the age of 42, according to earlier research, to around 21% for women and 35% for men.
- About three-quarters of children in Britain's private schools come from the richest 30% of families, according to another study by academics at UCL. In contrast, only 2% of pupils come from the poorest third of families (see chart). Although private schools sometimes offer means-tested discounts aimed at drawing in poorer children, last year only about 7% of private-school pupils benefited. Of this small group, only about half received help amounting to 50% or more of total costs; only about one-quarter attended free.

Critics say that the "partnerships" private schools boast of forming with state schools are underwhelming, sometimes involving little more than matches between their sports teams. It is also occasionally argued that private schools deprive government ones of wealthy and engaged parents. And according to Francis Green at UCL, private schools educate less than 7% of pupils in England but employ around 14% of teachers.

Private schools push back. They object in particular to Labour's claims that they are benefiting from "tax breaks". Most education spending is exempted from consumption taxes, on the principle that encouraging adults to invest in youngsters' brains will benefit the country in the long run. Parents do not pay VAT when they send toddlers to playgroups; undergraduates never pay VAT on their tuition fees (even though degrees can greatly boost their incomes). Julie Robinson of the Independent Schools Council (ISC), a group representing more than half of Britain's 2,400 or so private schools, says it is rare for countries to tax school fees, and that if Britain were still in the EU it would not be allowed. Fee or free

- ³⁵ Private schools also complain that debates about the sector focus on a handful of very toffee-nosed institutions, such as Eton, and on a subset of parents seeking a shortcut to Oxbridge. In fact, plenty of parents have turned to private schools in the hope that extra help might turn a struggling schoolchild into an average one. And lots of private schools offer specific educational or religious environments that are not available in the state sector. Lizzy Nesbitt, the principal of Emmanuel Christian School, a private primary with 60 pupils in Oxford
- that charges annual fees of about £6,500 (\$7,900), thinks her school's families—about one-third of whom earn $\pounds_{40,000}$ or less—are probably not the kind that Labour is imagining it is targeting.

The second debate is what the effects of changing the tax rules would be. The ISC insists the impact of adding VAT to school fees would be huge. A report it commissioned in 2018, when such a policy was last widely discussed, claimed that private-school enrolment could fall by 17-25% in the five years following; some

- ⁴⁵ 90,000-135,000 additional pupils would enter state schools. Competition for spots in the best government schools would inflate house prices in their catchment areas; adding lots of spots to the state system would cost money. Labour says it will raise £1.7bn from its plan; the ISC's study warned that the reform might raise little extra cash.
- There is good reason to think the consequences would be much less dramatic. The Institute for Fiscal Studies (IFS), a think-tank, argues that there is only a very weak relationship between the cost of private schooling and the number of parents who pay for it. Average private-school fees, now £15,200 a year, have jumped by 20% in real terms since 2010 and by 55% since 2003, for reasons unrelated to the government. Over that time the share of all children who are educated privately has barely budged. Private-school parents are increasingly concentrated in very high-earning professions such as finance, goes one explanation; fees are also more likely to be paid in part or in full by rich grandparents.
 - The IFS's best guess is that adding VAT to fees would cause private-school enrolment to fall by 3-7% (up to 40,000 kids) over several years. It thinks the policy would raise about £1.3bn-1.5bn for the government—equal to about 2% of the state-school budget. Unlike other analysts, it argues that parents who stop paying school fees will probably end up spending the money they save on other things, most of which would be taxed. So even if as many as 15% of pupils shifted, the change would still raise about £1bn.

Again, however, the impact is likely to be unevenly distributed. About half of private schools have fewer than 290 pupils; a quarter have fewer than 155. Even modest swings in enrolment could hit these fairly hard. The largest and most elite schools may be less affected. Businesses that charge VAT are exempt from paying the tax on their own "inputs"; the greatest beneficiaries would be schools that spend the most on things other than teachers' pay, including luxuries such as golf courses.

The final question is what scale of improvements Labour can drive in the state sector with the extra tax receipts. So far it has promised to spend £350m hiring 6,500 more teachers, which would swell the state-school workforce by around 1%. It talks of spending a similar amount providing breakfast clubs in primary schools, which some evidence suggests can boost how much the littlest pupils learn.

- ⁷⁰ A vaguer list of uncosted aspirations contains nothing anyone could find offensive but may not drive big improvements. Labour has rejected the government's proposal that all pupils study maths until 18; its alternative idea, to keep improving maths teaching in the early primary years, seems both less ambitious and less responsive to what international data suggest are currently schools' biggest flaws.
- During the years of Conservative rule England's schools have drifted up international league tables. That has probably had less to do with funding—which has too often been miserly—than with unpopular reforms to curriculums and tests. Pushing up standards in the state sector has made it gradually harder for private-school pupils to win places on the most prestigious degree courses. That, as well as efforts by elite universities to increase their state-school intake, may be a bigger threat to fee-paying schools than any change in tax rules.

Arguments, in other words, are being over-egged on all sides. Private schools will lose some pupils but fewer than they claim, especially among their core constituency of rich parents. Labour will draw a bit of cash from rich parents and please a lot of its voters, but the most-affected private schools and parents are likely to be smaller and less wealthy, respectively. The money raised will be useful at the margins but it will not fix the biggest issues in schools. The signals sent by this issue arouse passions; its actual importance is less great.

(1392 words)

https://www.economist.com/britain/2023/10/31/do-labours-plans-for-britains-private-schools-make-sense

Finance and economics | Economies of scales

Nov 23rd 2023



The obesity pay gap is worse than previously thought

It affects men as well as women, and is wider for the well-educated

Obese people experience discrimination in many parts of their lives, and the workplace is no exception. Studies have long shown that obese workers, defined as those with a body-mass index (BMI) of 30 or more, earn significantly less than their slimmer counterparts. In America, several state and local governments are contemplating laws against this treatment. On November 22nd, one such ban came into force in New York City.

⁵ Yet the costs of weight discrimination may be even greater than previously thought. "The overwhelming evidence," wrote the Institute for Employment Studies, a British think-tank, in a recent report, "is that it is only women living with obesity who experience the obesity wage penalty." They were expressing a view that is widely aired in academic papers. To test it, The Economist has analysed data concerning 23,000 workers from the American Time Use Survey, conducted by the Bureau of Labour Statistics. Our number-crunching suggests that, in fact, being obese hurts the earnings of both women and men.

The data we analysed cover men and women aged between 25 and 54 and in full-time employment. At an aggregate level, it is true that men's BMIs are unrelated to their wages. But that changes for men with university degrees. For them, obesity is associated with a wage penalty of nearly 8%, even after accounting for the separate effects of age, race, graduate education and marital status. When we re-ran our analysis, using a different dataset that covers nearly as one people from the Department of Health and Human Services.

¹⁵ dataset that covers nearly 90,000 people, from the Department of Health and Human Services, we got similar results.

The conclusion—that well-educated workers in particular are penalised for their weight—holds for both sexes. Moreover, the higher your level of education, the greater the penalty. We found that obese men with a bachelor's degree earn 5% less than their thinner colleagues, while those with a graduate degree earn 14% less. Obese women, it is true, still have it worse: for them, the equivalent figures are 12% and 19%, respectively.

Your line of work makes a difference, too. When we crunched the numbers for individual occupations and industries, we found the greatest disparities in high-skilled jobs. Obese workers in health care, for example, make 11% less than their slimmer colleagues; those in management roles make roughly 9% less, on average. In sectors such as construction and agriculture, meanwhile, obesity is actually associated with higher wages.

- These results suggest that the aggregate costs of wage discrimination borne by overweight workers in America are hefty. Suppose you assume that obese women, but not men, face a wage penalty of 7% (the average across all such women in our sample) and that this is the same regardless of their level of education. Then a back-of-the-envelope calculation suggests that they bear a total cost of some \$30bn a year. But if you account for both the discrimination faced by men, and for the higher wage penalty experienced by the more educated (who also tend to earn more), the total cost to this enlarged group more than doubles, to \$70bn per year.
 - What can be done? Several cities, such as San Francisco and Washington, DC, already ban discrimination on the basis of appearance. A handful of states—including Massachusetts, New York, New Jersey and Vermont—are considering similar bills. The ban New York City began to enforce on November 22nd prohibits weight-based discrimination in employment, housing and public accommodation such as hotels and restaurants. Alas, it is
- ³⁵ unlikely to accomplish much. When we restricted our analysis to workers in Michigan, where a similar ban has been in place for nearly 50 years, we found the obesity wage penalty to be no lower than for America as a whole. Outlawing prejudice is one thing. Ironing it out of society is quite another.

(620 words)

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United States | Blocking manoeuvres

America's states are trying to set rules for the internet



This sets up a clash between protecting children and free speech

The internet has changed a bit since America Online's discordant tones marked the slow progress towards an even slower online connection. But federal and state legislators have struggled to keep up with policies to regulate it. California's new online-safety law for children, signed by Governor Gavin Newsom in September 2022, was supposed to correct for this. Child-safety advocates hoped it would be a major step towards regulating the internet. However, a federal judge has intervened, setting up a clash of values between child safety and free speech.

NetChoice, a trade organisation that includes Google and Meta as members, sued California on First Amendment grounds. On September 18th Beth Labson Freeman, a district-court judge, temporarily blocked the law. California's was supposed to lead the way; instead, it looks like a warning to other states that would like to do the same.

The law, known as the California Age-Appropriate Design Code Act, was supposed to go into effect in July 2024, and would require online platforms to treat children with more sensitivity. Car seats, cots and pyjamas have special regulations for children, says Buffy Wicks, a California legislator and co-author of the law. "Products that kids access online should have similar consumer-protection regulations."

- ¹⁵ California modelled its law on Britain's Age Appropriate Design Code, which came into force in 2020. If California's law survives the legal challenges, companies would need to be careful about how they collect personal information, such as where a child is. Some firms might choose to disable direct messages between children and adults who are not in their network. Others may choose to turn off autoplay features or turn on bedtime reminders for children.
- After California's bill was signed, other states followed. Florida and Connecticut have drawn up similar bills. Other states are focused less on design and more on giving parents a say in what their children can do online. Utah's governor signed two laws in March that require children to have parental consent to use social media. The state also prohibits minors from using the sites between 10:30pm and 6:30am, and holds companies liable for harming children. Utah's laws will go into effect in March 2024. A similar law in Louisiana will start next summer. A different law in Arkansas that would have taken effect in September of this year has also been temporarily blocked by a federal judge.

Much of the legal pushback is on free-speech grounds. "Any law that limits the ability of younger people to access certain material... that sounds alarm bells," says Megan Crowley of Covington & Burling, a law firm. She has represented tech firms on first amendment cases. "The Supreme Court has made it clear that kids have First

Amendment rights," she says. Ms Wicks is hopeful that the law will survive legal challenges, but Eric Goldman, a professor of law at Santa Clara University, is sceptical. The First Amendment is "pretty foundational stuff for us," he says. "We were willing to go to war [with Britain] over that."

Other states attempting to regulate tech have also stirred-up controversy. In July Pornhub, a hub for porn, blocked its website in Virginia after the state passed a law requiring users to verify their age to access pornographic websites. In August a federal judge blocked a similar law in Texas. NetChoice is suing Texas and Florida over laws that prevent social-media companies from regulating content, such as removing extremist political opinions. That case could reach the Supreme Court in its next term. California's setback may give state legislators pause, but the legal battles over who rules the web have only just begun.

(598 words)

https://www.economist.com/united-states/2023/09/21/americas-states-are-trying-to-set-rules-for-the-internet

Nov 2nd 2023

Britain's prisons show up wider flaws in government

The entire criminal-justice system is under strain

No long-term planning. Disjointed decision-making. Tension between expert advice and political calculation. The covid-19 inquiry has been the best place this week to see the flaws in Britain's government laid bare. Largely hidden from public view lies another: a crisis in the country's prisons. Those same factors have left some parts of the criminal-justice system close to breakdown.

- ⁵ Start with the lack of long-term planning. In October it was revealed that the number of inmates in English and Welsh prisons is just a few hundred short of their maximum capacity. This should surprise no one. A long-standing push to be tough on crime has coincided with a more recent imposition of spending cuts. His Majesty's Inspectorate of Prisons has repeatedly reported that jails are overcrowded, squalid and unsafe. The number of people in jail is nearly double what it was three decades ago; prison-building has not kept pace.
- ¹⁰ Alarmed by suggestions that judges may have to stop sending down dangerous criminals, the Ministry of Justice (MoJ) has announced a number of emergency measures. Some of these are sensible. But they will not come close to tackling the crisis. That is partly because of its scale. But it is also because decision-making in Britain's government is often contradictory and incoherent. Efforts to ease one source of pressure exacerbate difficulties elsewhere in the justice system.
- ¹⁵ Take the most sensible emergency measure—limiting the use of short prison sentences in favour of community ones. This has myriad benefits beyond reducing prison numbers. Community sentences result in lower re-offending rates than the brief jail sentences given to petty offenders. They are cheaper, too.

But more community sentences means more strain on the probation service, which is in terrible shape. Its part-privatisation in 2014, designed to save money, was so disastrous that it was reversed in 2021. By then, however, many experienced probation officers had left; the service is now recruiting hard to try to replace them. The restructuring also reduced the number of probation trusts, each run by a chief probation officer, from 35 to 12, accelerating a longer-term trend towards centralised control of the service. It worked much better before; the MoJ should restore localised control.

Prison overcrowding has also been exacerbated by backlogs in the courts. In recent years there has been a huge increase in the number of prisoners awaiting trial on remand. This number surged during the pandemic, but the backlogs have been worsened by problems of the government's own making. Between 2010 and 2019 the MoJ's budget was reduced by 25% in real terms. The results are fewer courts, fewer judges and longer delays.

Yet even if the probation service is restored to health and court backlogs are unblocked, prisons will remain overcrowded. The MoJ predicts their population will keep rising, from around 88,000 now to 98,700 by 2026.

That is in large part because of the way that Britain's politicians choose to treat convicted criminals. Since the mid-1990s the length of the average prison sentence has increased. It is right to lock up those who commit serious and especially dangerous crimes, and tough-on-crime policies are popular with voters. But ever-longer sentences have unwelcome consequences.

The worst of these are endured by prisoners themselves. Overcrowding and understaffing mean that inmates are locked up in their cells for most of the day, unable to do any of the things, such as job training and cognitive behavioural therapy, that would help them live productive rather than predatory lives on release. Grim conditions lead to more assaults and suicides behind bars. And the strains in the criminal-justice system have wider effects, too. Jam-packed jails make it even harder to recruit prison workers, who are already in short supply. And poorly run services compromise public safety: when assessing the risk that criminals

⁴⁰ pose, probation officers are making domestic-abuse inquiries in less than half the cases they should be. The criminal-justice system has been trying to spend less and punish more for years. The circle can no longer be squared.

(665 words)

https://www.economist.com/leaders/2023/11/02/britains-prisons-show-up-wider-flaws-in-government

United States | Infrastructure weak

Spending on infrastructure has fallen in real terms in America



That is despite a huge push by the Biden administration

It is easy to take internet connectivity for granted these days. But when stringing up fibre-optic cable in the woods of Vermont, not much comes easily. Some homes are a mile back from the road, requiring thousands of dollars and much tree-pruning to link them to the network. In remote areas new poles are needed to replace ones that date back to the introduction of electricity. The wait for these can run to two years. The local broadband group responsible for Vermont's north-east corner brought high-speed internet access to about 2,500 homes in 2023. If not for the delays, it could have reached 7,000.

Bringing broadband to under-served parts of rural America is one element of a giant infrastructure programme that began two years ago when President Joe Biden signed it into law. It was hailed as a historic opportunity to repair America's bridges, rebuild its roads for electric vehicles and update its power grid and communications

technology. With headlines proclaiming its \$1.2trn in investments, worth about 5% of GDP, it was easy to get caught up in the excitement. That makes the current state of the big dig all the more disappointing. Instead of the anticipated surge, total infrastructure spending has fallen by more than 10% in real terms since the passage of the law (see chart).

The most charitable explanation is that it takes time for big projects to get going. There are lags as money goes from being authorised by Congress to being doled out by the federal officials to actually being spent by state and local officials. Moreover, as anyone who has ever renovated a home knows, construction is always behind schedule. Many of the biggest expenditures will come near the end of the infrastructure law's five-year term. John Porcari, a transport official in both the Biden and Obama administrations, draws a distinction with stimulus spending in 2009 during the global financial crisis. "The primary criterion then was getting people back to work. But with the infrastructure law, the primary criterion is the projects. We're replacing what our

parents and grandparents built and paid for," he says.

The problem is that inflation has been rampant in the construction sector, making delays that much more pernicious. The single biggest component of the infrastructure package was a 50% increase in funding for highways to \$350bn over five years. But highway construction costs soared by more than 50% from the end of 2020 to the start of 2023, in effect wiping out the extra funding. "A lot of the cost estimates that states and local agencies have are from three to five years ago, and they are just totally off now," says Santiago Ferrer of BCG, a consultance. This he adds loads to two outcomests either authorities get no hidden because contractors think

- consultancy. This, he adds, leads to two outcomes: either authorities get no bidders because contractors think their prices are too low; or they revise their cost estimates, which takes yet more time.
- Delays are also a product of the infrastructure law itself. It included strict "Buy America" rules, requiring
 ³⁰ builders to source things at home to boost domestic manufacturing. It also loaded on requirements to promote racial equity, environmental sustainability and fair wages. Laudable as these goals are, they have slowed things down. "The administration is at war against itself. It wants to advance these projects aggressively. But some of its requirements just preclude their delivery," says D.J. Gribbin, a consultant and former general counsel in the Transportation Department. The law also included more than 100 new competitive grant programmes, which
 ³⁵ require new application systems and new compliance procedures. "These are a nightmare to set up and run,"

Mr Gribbin says. Some state and local officials are not even bothering to apply for funding.

Beyond the structure of the law, infrastructure programmes inevitably run into headwinds in America. There is a substitution effect as the arrival of federal money allows states to step aside and spend less on construction. A recent wave of tax cuts by states has been made possible in part by the gusher of federal cash.

⁴⁰ America's federal system also presents a fiendishly difficult exercise in co-ordination. Broadband spending is one example. Before disbursing most of its funds, the federal government wanted to assess which states needed exactly how much, so it drew up detailed maps of nationwide internet connectivity. It was only this summer—18 months after the law was passed—that the state-by-state allocations were announced. Now, states

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are going to have to develop their own systems for spending the funds and monitoring progress. "It's been a wild panoply of states at different stages and needs," says Shirley Bloomfield, head of an association that represents 850 independent telecoms companies.

Another familiar obstacle is getting permits. The Biden administration has created a special action plan to try to speed up approvals for infrastructure and clean-energy projects. At the same time, though, its appointees in the Environmental Protection Agency have given states more power to block infrastructure projects because of fears about water quality. "The administration's record on permitting is mixed at best," says Ken Simonson of the Associated General Contractors of America. An example of states' willingness to wield vetoes came in

September, when regulators in South Dakota rejected a \$3.5bn carbon-dioxide pipeline that would have run through five states in all. It was a setback for those hoping to see America capture more of its carbon emissions.

(888 words)

30

Britain | Going up in smoke?

Nov 14th 2023

Vaping is big business in Britain



But a government consultation may signal a crackdown

Almost one in ten Britons is now a regular or occasional user of electronic cigarettes. On current trends vaping is set to become more common than smoking by the mid-2020s. But many in the industry fear that a government consultation, due to conclude in December, will be followed by a regulatory clampdown.

Catering to Britain's 4.7m vapers is increasingly big business. A report for the industry put the turnover at \pounds 2.8bn in 2021 and calculated that it supported almost 18,000 jobs. The number of vapers has risen by almost a third since.

The country has almost 3,500 specialist vape shops, according to the Local Data Company, a research firm. The largest chain, VPZ, was founded in Leith, in Edinburgh, in 2012 and now has more than 150 stores across Britain. The firm began manufacturing its own liquids in Scotland in 2016. It reported turnover of £36m in 2022, up by almost 60% over five years.

The industry's rapid growth partially reflects a supportive stance from public-health authorities. Although many governments have sounded cautious on the potential health benefits of inhaling nicotine by breathing in a vapour rather than tobacco smoke, the National Health Service has consistently made the case for switching. In April the government announced a "swap to stop" scheme that will give free vape starter-sets to up to 1m smokers, the first scheme of its type globally.

In recent years the industry has also been one of few direct beneficiaries of Britain's cost-of-living squeeze. An average packet of 20 cigarettes now costs £14.57, compared with around £5 for roughly the same number of puffs from a disposable vape and half that for the equivalent amount of nicotine in a refillable device. More and more cost-conscious smokers have been making the switch.

²⁰ But clouds loom. Just six months after announcing the giveaway of vaping kits, the government unveiled a consultation on vaping regulation that appears to herald a much tougher line. The change in attitude has been driven by two related issues—rising use of disposable devices and concerns over under-age vaping.

Sales of single-use devices have doubled since 2022 and are running at 360m a year, and Britain accounts for about 40% of the European disposables market. Supermarkets, convenience stores, petrol stations and launderettes all stock them.

Both the Local Government Association and the Scottish government have called for a total ban on disposables. That's partly because most of them wind up in landfill. It's also because youngsters can get hold of them easily. Although sales to under-18s are already illegal, enforcement is patchy. Responses to freedom-of-information requests covering ten London boroughs and the 11 largest provincial cities revealed that between 2018 and 2021 there were only 21 successful prosecutions for illicit vape sales and the total value of all fines was a minuscule

£2,188.

Incumbents are open to more regulation. A director at VPZ, says that sales of disposable devices account for less than 15% of its revenue. The industry is calling for a licensing scheme, similar to that required to sell alcohol, and automatic fines of up to £10,000 for breaches.

³⁵ What it does not want is for the government to follow Australia and some American states by banning flavours to reduce the appeal of vaping to young people. Even ex-smokers tend to prefer flavours. "Just because kids are buying alcohol doesn't mean we should only be allowed methylated spirits to drink," is how one attendee at a vaping-industry bash in London put it this week. Britain is a global leader on vaping regulation. International manufacturers will be watching to see if the industry's prospects smell as sweet as the vapours it produces.

(606 words)

Culture | Hands up, don't shoot

Some developers are pushing back against violent video games



Gratuitous bloodshed and the rise of female gamers have contributed to a backlash

(...) Unlike the noisy, big-budget productions that dominate gaming and its public image, Venba is peaceful and gentle. It cost less than \$1m to make but quickly managed to break into the top-sellers on Steam, a PC gaming hub, sitting alongside rivals that cost as much as \$100m. It might not get the recognition or nearly as many users as "Call of Duty" and "Assassin's Creed" do. But Venba is important, because it is part of a growing trend of non-violent games attracting both game developers and players.

Recently Steam held a sale, offering nearly 250 "wholesome" games that do not feature any violence. Such a notion would have been impossible until the recent past: there were just so few games that did not involve bloodlust. "The Best Non-Violent Video Games", a new book by James Batchelor, a gaming expert, celebrates 300 peaceful games from the past 50 years, all the way back to Pong (an early game that features a ball and two paddles, like a virtual game of tennis). More than half of them came out in the past ten years.

Two factors are contributing to the rise of kinder, gentler games. One is a backlash by those who design games. Many independent developers, who can choose their own projects (versus those who work for larger firms), do not want to spend their careers designing games about killing, says Mr Batchelor. Job Stauffer, a game-industry veteran, contributed to violent productions such as the "Grand Theft Auto" series, but has started refusing to work on brutal or murderous ones. "We see media reports of mass shootings and wars day after day," he

explains. "I decided that I didn't want to be a part of the problem, creating entertainment that involves firing rockets into buses," he adds.

Chris Chancey, a Canadian game developer, was in the midst of making a combat and adventure game when he learned that four-fifths of the games demonstrated at a leading gaming convention involved violence. This
prompted him to change course and design something that cut against the trend. In the resulting game, "Rainbow Billy: The Curse of the Leviathan", players speak instead of kill each other. It is popular with parents. "I get a lot of messages from parents who want to play games with their kids, but who don't want to expose them to gore and violence," he says.

As gaming becomes a pastime for the entire family, it is becoming more diverse, and this is fuelling demand for titles that do not involve pixellated machineguns or swords. When people think about gamers, they often picture them as male and on the cusp of puberty. Some are. But in reality, the average age of people who regularly play games is around 33, and about half are female. Wren Brier, developer of the popular narrative puzzle game "Unpacking", says the tastes and preferences of women gamers have started to influence developers; many are looking for play where caring and friendship are on display, instead of shooting and domination.

- Just like real life, however, peaceful experiences can exist alongside conflict and bloodshed. The most lavish productions and biggest commercial successes in gaming still usually include slaughter. (Many of the biggest Hollywood films do too, although they are not seeing the same backlash from film-industry folk or viewers—at least not yet.) "As soon as we attach a certain dollar amount to a project, it's like violence becomes as understood a feature as having graphics," says Laralyn McWilliams, a game developer. She hopes this will change in the
- ³⁵ future, as more developers and gamers choose a side. But of the 20 top-selling premium games so far this year, 15 feature combat.

(614 words)

https://www.economist.com/culture/2023/08/31/some-developers-are-pushing-back-against-violent-video-games

Science and technology | Sports science

Aug 16th 2023 | SYDNEY

Should women's football have different rules from men's?



Women are not just smaller men

(...) The women's football World Cup, held this year in Australia and New Zealand, is setting records. England eventually beat Colombia, and then Australia, to set up a final against Spain on August 20th. Attendance at the tournament is over 1.8m, up from 2015's record of 1.4m. TV viewership across all matches is set to pass 2bn, double the previous high point.

⁵ Much of the coverage has compared the women's game with the men's. One striking advert tries to dispel the idea that the women's game is less skilful. It shows a series of impressive highlights, ostensibly featuring members of the French men's squad. Later, the digital trickery is revealed: viewers have actually been watching the women's team. A paper published last month in Sport Management Review, a journal, had participants watch videos of men and women playing football. Viewers rated the men's videos more favourably than ¹⁰ women's—but the difference vanished when the players were blurred to hide their sex.

Yet another study, published in 2019 by Arve Vorland Pedersen, a neuroscientist and sports scientist at the Norwegian University of Science and Technology, and his colleagues, concludes that the women are indeed playing a game that is subtly different—and considerably harder—than the one being played by the men.

The researchers start from the observation that women are physically different from men in many ways. Women are shorter than men (168cm v 182cm in a Norwegian sample). Female footballers are lighter (65kg v 76kg). Women are slower (4.84 seconds to run 30 metres, v 4.25), and cannot jump as high (36cm v 57cm). Those differences persist even among the most athletic members of each sex.

The researchers then try to scale the size of a football pitch to account for those anthropometric differences. A pitch that was the same relative size for women as it is for men would, they say, be 93 metres long and 61 metres wide, down from the current recommended dimensions of 105 metres x 68 metres (...).

Nor is it just the pitch. Shorter female keepers can cover a smaller part of the goal than a man can. To achieve parity between the sexes, the women's goal, say the researchers, should be shrunk from 7.32 metres wide and 2.44 metres high to 6.76 metres across and 2.25 metres high. Even the ball would change: taking account of women's lower leg strength would require a ball weighing 287 grams, rather than the 430-grams of a standard male ball (though that would alter how the ball behaves in flight). Put another way, say the researchers, expecting women to play with a men's ball is a bit like asking men to kick a 623-gram basketball-sized sphere around.

Admittedly, the maths are rough-and-ready. And the researchers are quick to say they are not arguing that the rules should actually be changed (such discussions, they say, are for the game's administrators). But although football expects men and women to play by the same rules, many other sports try to account for sex differences. In athlatics, women put lighter charts, throw lighter discusses and leap over lower burdles than men do. The

In athletics, women put lighter shots, throw lighter discuses and leap over lower hurdles than men do. The WNBA, a women's professional basketball league in America, uses a lighter ball. Volleyball uses a lower net. Indeed, women's football used lighter balls until the 1990s.

But changing the rules of a sport is as much about culture as it is about science. World Rugby, the international governing body for rugby union, is planning tests of a ball sized for women's smaller hands. The response from the players themselves is said to have been mixed. Some are keen on the idea. Others worry that, after fighting for so long to be taken seriously, making the women's game even slightly easier might damage its reputation.

(...)

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(625 words)

https://www.economist.com/science-and-technology/2023/08/16/should-womens-football-have-different-rules-from-mens