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The threat from the illiberal left





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Contents



On the cover

Don't underestimate the threat from left-leaning identity politics: leader, page 9. How a loose set of radical ideas leapt from campus to American life, page 15. Old tactics are being revived in a new assault on liberalism, page 18. Liberalism and truth, page 69

Covid's stagflationary consequences Demand has recovered faster than supply. That is causing shortages and bottlenecks: leader, page 11, and analysis, page 44. At the Jackson Hole conference, central bankers considered how to steer an uneven recovery: Free exchange, page 61

Was Macron right about America? Europeans must ponder that uncomfortable thought: Charlemagne, page 43

China's bad-debt problem The antics of two giant firms show that debt markets are still rudimentary: leader, page 11. Can China stabilise its property market and its economy at the same time? Page 31

Meetings: Zoom or room? How to bring together employees, clients and investors, page 49

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The world this week

5 A summary of political and business news

Leaders

- **9 Political thought** The illiberal left
- **10 Afghanistan**How to move forwards
- **11 The world economy** Delta means change
- **11 Defaults in China** China's toxic twins
- **12 Madagascar**Why it is going hungry

Letters

14 On Afghanistan, vaccinations, chewing-gum, Berlin, corporate jargon

Briefing

- **15 America's illiberal left** Out of the academy
- **18 Imposing orthodoxy** Echoes of the confessional state

D

By Invitation

Our series of guest columns on the future of American power continues on Economist.com with Paul Kennedy on whether China's rise means America's fall



United States

- 19 Biden's drooping ratings
- 20 Texas's abortion law
- 21 Undeclaring war
- 22 Stargazing in Colorado
- **23** Woke philanthropy
- **24 Lexington** Storms, infernos and climate



The Americas

- **25** Venezuelan talks
- **26** Canada's Conservatives



Asia

- 27 Dealing with the Taliban
- **28** Afghan television
- 29 Sex work in Indonesia
- **29** Education in Singapore
- **30 Banyan** The uninspiring Suga Yoshihide



China

- **31** Property market jitters
- **32** Us-China climate talks
- **34 Chaguan** Xi Jinping Thought for children



Middle East & Africa

- **35** Madagascar's famine
- **36** Reform in Nigeria
- **37** Israel's foreign policy
- **38** Bulldozing history



Europe

- **39** Putin's war on universities
- 40 Germany's coalitions
- **41** A tale of two pubs
- 41 Sex selection in Georgia
- 42 The Poland-Belarus border
- **43 Charlemagne** Why Macron was right



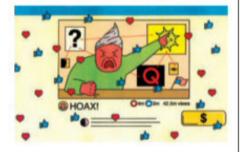
Britain

- **44** A bumpy recovery
- **45** Northern Ireland's Brexit tangle
- **46 Bagehot** The flailing foreign secretary



International

47 The conspiracy-theory boom



Business

- **49** The future of meetings
- 50 Databricks' AI ambitions
- **52** Rivian's electric roadmap
- 53 China's gaming ban
- **53** Theranos on trial
- **54 Bartleby** The bad jobs myth
- **55 Schumpeter** Competition in the metaverse



Finance & economics

- **56** Vietnam's success
- **57** Housing shortages
- **58** Bitcoin as legal tender
- **59** Climate risks and finance
- **60 Buttonwood** The trouble with virtuous investing
- **61 Free exchange** Jackson Hole



Biology brief

62 Finding living planets



Science & technology

- **65** Improving AI for cars
- **66** Hummingbirds cross-dress
- **67** Genes and autocorrection



Books & arts

- 68 Cuba and America
- 69 Liberalism and the truth
- **70 Johnson** Pronouns and gender
- 71 David Grossman's novel
- 71 The index, a book about



Economic & financial indicators

72 Statistics on 42 economies

Graphic detail

73 How much pollution does regulation stop?

Obituar

74 Gino Strada, war surgeon and hospital-builder

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to take part in "a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."

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The world this week Politics



The last American soldiers left Afghanistan, bringing an end to their 20-year mission. Taliban fighters celebrated, donning American uniforms and taking selfies with abandoned military equipment. The death toll from a suicide-bombing at Kabul airport passed 170. An American drone strike killed suicide-bombers preparing for another attack; the Taliban said ten civilians also died. Joe Biden described the evacuation as an "extraordinary success", despite the many Afghans who helped America and have been left behind to face Taliban reprisals.

Hurricane Ida struck Louisiana, leaving 1m people without power. Its remnants brought flooding to New York, shutting down the city's subway system. Residents were told not to use their cars.

America's Supreme Court refused to stop a Texan law coming into force that in effect bans abortion after the sixth week of pregnancy. It is the strictest such law to be implemented anywhere in the United States since 1973. Unusually, it allows private individuals to sue anyone who helps anyone else get an abortion. The court said the law raised "serious" constitutional questions, and suggested that the plaintiffs pursue those through state courts.

Also in Texas the state legislature passed a bill on election procedures that critics say is intended to deter black people and Hispanics from voting. Democratic lawmakers had delayed the bill by fleeing the state, denying the Republicans a quorum, but some of them returned to work recently.

Germany's election, to be held on September 26th, was poised on a knife-edge. Polls suggested stronger-than-expected support for the Social Democrats, whose candidate for chancellor, Olaf Scholz, performed well in the first of three televised debates with the candidates of the other two main parties: Annalena Baerbock for the Greens and Armin Laschet for the Christian Democrats, the party of Angela Merkel. Mr Laschet could be leading the party towards one of its worst-ever results.

Scientists in South Africa identified a new variant of covid-19 that seems to have mutated more rapidly than existing variants and spread to seven other countries in Africa, Europe and Asia. The variant appears to have changes associated with increased transmission and greater resistance to antibodies, but it is not clear whether it spreads more rapidly or evades the immune response generated by vaccines.

America's aid agency said that Tigrayan forces looted its warehouses in Ethiopia's Amhara region, hampering the distribution of food and medicine. Almost a million Tigrayans are in urgent need of assistance, after their region was blockaded by the federal government in November.

Freeman Mbowe, the leader of Tanzania's main opposition party, appeared in court on charges of terrorism. His supporters say the charges are trumped up and that he has been tortured in custody.

In the first official high-level meeting between Israel and the **Palestinians** in seven years, Benny Gantz, Israel's defence minister, met Mahmoud Abbas, the Palestinian president. They discussed security and economic issues.

The main opposition parties in Venezuela said they would participate in regional elections in November. This is the first time since 2017 that they

will take part in elections, though the Unity Platform, an umbrella opposition group, said the ballot would not be fair. The about-turn happened just before talks were due to start in Mexico City between representatives from both the autocratic socialist regime of Nicolás Maduro, the president, and the opposition.

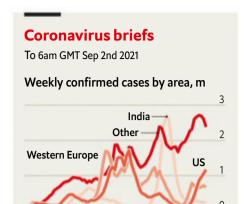
El Salvador's parliament, which is controlled by President Nayib Bukele, approved a law requiring judges over 60 or with more than 30 years of service to retire. Mr Bukele will probably replace them with loyalists, as he did after legislators in May dismissed five supreme court judges and the attorney-general.

America's intelligence agencies released a report on the origins of covid-19. It said they had been unable to determine how the pandemic began, but a "laboratory-associated incident" in the Chinese city of Wuhan was a possible cause. China called the findings "anti-science".

China's president, Xi Jinping, said the government should "guide" companies to obey the Communist Party. The party's discipline agency praised new "heavy-fisted" measures to curb celebrities' "chaotic" fan clubs. Broadcasters were later told to foster a "patriotic atmosphere" and bar effeminate actors from programmes.

South Korea's government proposed a budget in which it plans to spend a record 604trn won (\$520bn). Most of that will go on welfare programmes to help reduce inequality, as well as job creation. The debt-to-GDP ratio will subsequently hit 50.2%, also a record.

Japan recalled 1.6m doses of the Moderna vaccine after finding stainless-steel particles in vials made in Spain. The drugmaker said that the particles were not "an undue risk" to patient safety. Two people died after receiving the Moderna jab, though the deaths are thought to be unrelated.



2020

Vaccination doses		% of over-11s with	
	Total '000	1st dose	2nd
Malta	796	>99	>99
Iceland	527	97	91
Portugal	14,690	94	82
Seychelles	143	93	88
Mongolia	4,334	92	86
Uruguay	5,587	92	86
Qatar	4,454	91	83
Bhutan	1,037	91	77
Israel	13,743	90	82
Ireland	6,836	89	82

Sources: Johns Hopkins University CSSE; Our World in Data; United Nations

The director of the wно in Europe said that booster jabs were not a luxury and would protect vulnerable people. The comments came amid worries about a slowdown in vaccinations across the EU. They are also somewhat at odds with the who's position that boosters in rich countries may lead to vaccine shortages in poor ones.

Israel reported a record number of daily infections. The country has rolled out a programme of booster jabs. The rate of severe illness from covid-19 is much higher among the unvaccinated than among the vaccinated.

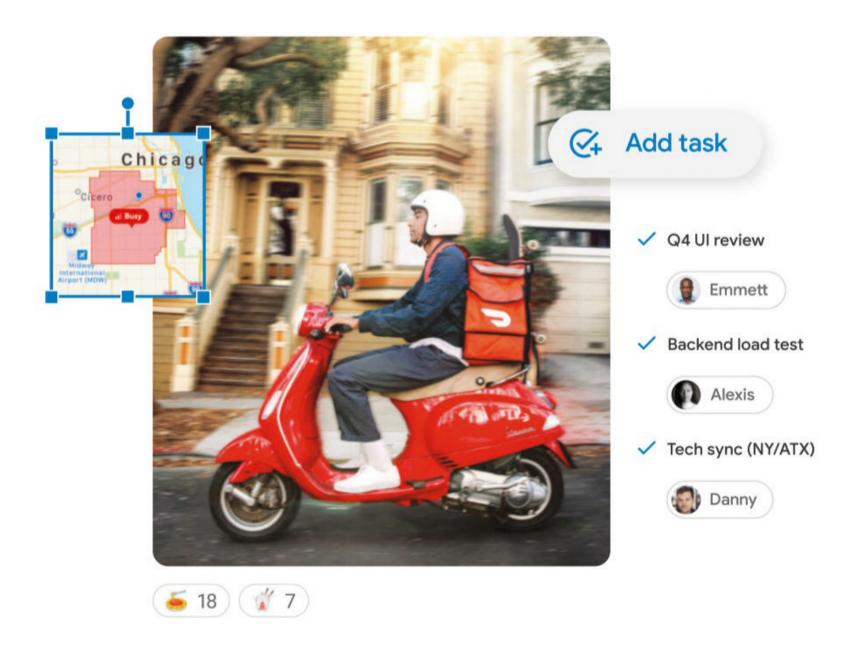
Britain's health service was told to get ready for vaccinating 12- to 15- year olds, pending official advice on whether it is safe to do so.

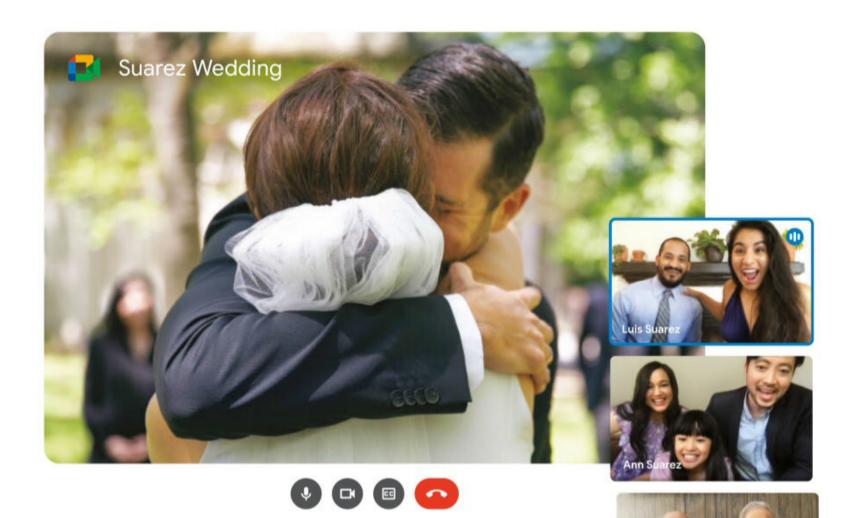
The EU removed America from a list of safe countries for travel and recommended that member states reimpose passenger restrictions.

 \rightarrow For our latest coverage of the virus please visit economist.com/ coronavirus or download the Economist app.



How DoorDash kept delivering • • during lockdown





is how the Suarez Family raised a glass. 78

Google Workspace is how teams (and families) of all sizes connect, create and collaborate. Whether you're moving millions of meals a month, or celebrating with people on three continents, Google Workspace is **how it's done**.



8 The world this week Business

The Chinese government published an edict limiting children's playing of video games to just one hour on only Fridays, Saturdays and Sundays. It is the authorities' latest attempt to rein in what they view as the troublesome power of tech companies, though the government has long expressed concerns about gaming addiction among Chinese youth. Unlike previous decrees this one probably won't hurt profits. Tencent, the biggest gaming company, generates only 2.6% of its total player spend from under-16s.

Working for the people

Wang Xing became the latest tech boss in China to adopt the government's line that the industry must do more to promote "common prosperity". The chief executive of **Meituan** said that the shopping platform would "conduct in-depth self reviews and actively rectify any issues" with new requirements. In May Mr Wang ran into trouble when lines he posted from an ancient poem on social media were seen as an attack on Xi Jinping, China's president.

As China's government clamped down on its digital companies, India's tech industry chalked up another big deal, with the acquisition of **BillDesk** by **Prosus** for \$4.7bn. Founded in 2000, BillDesk is India's oldest online-payments platform. Prosus, the investment arm of Naspers, a South African internet group, wants to combine BillDesk with its PayU fintech business, creating one of the world's biggest payment systems.

Tech regulators in various countries pondered the ramifications of the passage of a bill in South Korea that curtails the power of app-store providers such as Apple and Google, by allowing users to pay developers directly for their apps. The legislation also stops the inappropriate removal of apps from online stores. The head of Epic Games, which is fighting Apple's and Google's

stranglehold on the market, described the bill as a milestone in personal computing.

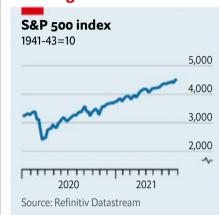
In San Jose the trial got under way of Elizabeth Holmes for criminal fraud at Theranos, which she founded. The start-up was a darling of Silicon Valley until 2015, when investigative journalists found that the revolutionary technology it used for blood testing didn't work. Ms Holmes has pleaded not guilty to defrauding investors.

The share price of Just Eat Takeaway recovered from the drubbing it received when New York City's council extended a cap on the amount that food-delivery apps can charge restaurants to use their services. Just Eat owns Grubhub, which has a 35% share of the market in the Big Apple. Many American cities imposed temporary caps on food-delivery charges at the start of the pandemic, as lockdowned diners got an appetite for the service, but some now want to make the caps permanent.

Zoom reported \$1bn in quarterly revenue for the first time. Net profit rose sharply, to \$317m. But its share price plunged amid concerns about growth prospects for the

video-conference company as more workers return to the office. Zoom is taking steps to diversify by moving into the virtual customer-contact business.

Breaking records



The **s&P 500** notched up its seventh consecutive month of gains in August. The American stockmarket index has risen by a fifth since the start of the year and more than doubled since the outbreak of covid-19 in March 2020, as investors shrug off concerns about inflation, labour shortages and supply-chain issues. In Europe the stoxx 600 also recorded its seventh straight month of gains, its best run since 2013.

The euro zone's annual rate of **inflation** jumped to 3% in August, from 2.2% in July. In Germany inflation hit 3.9%, according to the country's

statistics office, the highest since December 1993. Like its counterparts in America, Britain and elsewhere, the European Central Bank thinks the pressure on prices from the reopening of economies will ease next year.

Brazil's GDP contracted by o.1% in the second quarter compared with the first. The decline was unexpected, even though the country underwent another wave of covid-19.

A judge approved a bankruptcy plan that breaks up **Purdue Pharma**, the maker of
OxyContin. The plan largely protects the drug company's controlling Sackler family from liability claims related to the painkiller's role in America's opioid crisis.

Rivian, an electric-vehicle startup that is backed by Amazon and specialises in vans, filed for an IPO.

Ryanair's business is rebounding strongly, according to Michael O'Leary, its ebullient chief executive. Europe's biggest airline expects its flight capacity to be almost back to normal this October. It is busily expanding its fleet to 600 aircraft, up from 450, over the next few years.





The threat from the illiberal left

Don't underestimate the danger of left-leaning identity politics

SOMETHING HAS gone very wrong with Western liberalism. At its heart classical liberalism believes human progress is brought about by debate and reform. The best way to navigate disruptive change in a divided world is through a universal commitment to individual dignity, open markets and limited government. Yet a resurgent China sneers at liberalism for being selfish, decadent and unstable. At home, populists on the right and left rage at liberalism for its supposed elitism and privilege.

Over the past 250 years classical liberalism has helped bring about unparalleled progress. It will not vanish in a puff of smoke. But it is undergoing a severe test, just as it did a century ago when the cancers of Bolshevism and fascism began to eat away at liberal Europe from within. It is time for liberals to understand what they are up against and to fight back.

Nowhere is the fight fiercer than in America, where this week the Supreme Court chose not to strike down a draconian and bizarre anti-abortion law (see United States section). The most dangerous threat in liberalism's spiritual home comes from the Trumpian right. Populists denigrate liberal edifices such as science and the rule of law as façades for a plot by the deep state against the people. They subordinate facts and reason to tribal emotion. The enduring falsehood that the presidential election in 2020 was stolen points to where such impulses lead. If people

cannot settle their differences using debate and trusted institutions, they resort to force.

The attack from the left is harder to grasp, partly because in America "liberal" has come to include an illiberal left. We describe this week how a new style of politics has recently spread from elite university departments. As young graduates have taken jobs in the upmarket media and in politics, business and education,

they have brought with them a horror of feeling "unsafe" and an agenda obsessed with a narrow vision of obtaining justice for oppressed identity groups. They have also brought along tactics to enforce ideological purity, by no-platforming their enemies and cancelling allies who have transgressed—with echoes of the confessional state that dominated Europe before classical liberalism took root at the end of the 18th century (see Briefing).

Superficially, the illiberal left and classical liberals like *The Economist* want many of the same things. Both believe that people should be able to flourish whatever their sexuality or race. They share a suspicion of authority and entrenched interests. They believe in the desirability of change.

However, classical liberals and illiberal progressives could hardly disagree more over how to bring these things about. For classical liberals, the precise direction of progress is unknowable. It must be spontaneous and from the bottom up—and it depends on the separation of powers, so that nobody nor any group is able to exert lasting control. By contrast the illiberal left put their own power at the centre of things, because they are sure real progress is possible only after they have first seen to it that racial, sexual and other hierarchies are dismantled.

This difference in method has profound implications. Classical liberals believe in setting fair initial conditions and letting

events unfold through competition—by, say, eliminating corporate monopolies, opening up guilds, radically reforming taxation and making education accessible with vouchers. Progressives see laissez-faire as a pretence which powerful vested interests use to preserve the status quo. Instead, they believe in imposing "equity"—the outcomes that they deem just. For example, Ibram X. Kendi, a scholar-activist, asserts that any colour-blind policy, including the standardised testing of children, is racist if it ends up increasing average racial differentials, however enlightened the intentions behind it.

Mr Kendi is right to want an anti-racist policy that works. But his blunderbuss approach risks denying some disadvantaged children the help they need and others the chance to realise their talents. Individuals, not just groups, must be treated fairly for society to flourish. Besides, society has many goals. People worry about economic growth, welfare, crime, the environment and national security, and policies cannot be judged simply on whether they advance a particular group. Classical liberals use debate to hash out priorities and trade-offs in a pluralist society and then use elections to settle on a course. The illiberal left believe that the marketplace of ideas is rigged just like all the others. What masquerades as evidence and argument, they say, is really yet another assertion of raw power by the elite.

Progressives of the old school remain champions of free speech. But illiberal progressives think that equity requires the field to be tilted against those who are privileged and reactionary. That means restricting their freedom of speech, using a caste system of victimhood in which those on top must defer to those with a greater claim to restorative justice. It also involves making an example of supposed reac-

tionaries, by punishing them when they say something that is taken to make someone who is less privileged feel unsafe. The results are calling-out, cancellation and no-platforming.

Milton Friedman once said that the "society that puts equality before freedom will end up with neither". He was right. Illiberal progressives think they have a blueprint for freeing oppressed groups. In reality theirs is a formula for the oppression of individuals—and, in that, it is not so very different from the plans of the populist right. In their different ways both extremes put power before process, ends before means and the interests of the group before the freedom of the individual.

Countries run by the strongmen whom populists admire, such as Hungary under Viktor Orban and Russia under Vladimir Putin, show that unchecked power is a bad foundation for good government. Utopias like Cuba and Venezuela show that ends do not justify means. And nowhere at all do individuals willingly conform to state-imposed racial and economic stereotypes.

When populists put partisanship before truth, they sabotage good government. When progressives divide people into competing castes, they turn the nation against itself. Both diminish institutions that resolve social conflict. Hence they often resort to coercion, however much they like to talk about justice.

If classical liberalism is so much better than the alternatives,

why is it struggling around the world? One reason is that populists and progressives feed off each other pathologically. The hatred each camp feels for the other inflames its own supporters—to the benefit of both. Criticising your own tribe's excesses seems like treachery. Under these conditions, liberal debate is starved of oxygen. Just look at Britain, where politics in the past few years was consumed by the rows between uncompromising Tory Brexiteers and the Labour Party under Jeremy Corbyn.

Aspects of liberalism go against the grain of human nature. It requires you to defend your opponents' right to speak, even when you know they are wrong. You must be willing to question your deepest beliefs. Businesses must not be sheltered from the gales of creative destruction. Your loved ones must advance on merit alone, even if all your instincts are to bend the rules for them. You must accept the victory of your enemies at the ballot box, even if you think they will bring the country to ruin.

In short, it is hard work to be a genuine liberal. After the collapse of the Soviet Union, when their last ideological challenger seemed to crumble, arrogant elites lost touch with liberalism's humility and self-doubt. They fell into the habit of believing they were always right. They engineered America's meritocracy to favour people like them. After the financial crisis, they oversaw an economy that grew too slowly for people to feel prosperous. Far from treating white working-class critics with dignity, they sneered at their supposed lack of sophistication.

This complacency has let opponents blame lasting imperfec-

tions on liberalism—and, because of the treatment of race in America, to insist the whole country was rotten from the start. In the face of persistent inequality and racism, classical liberals can remind people that change takes time. But Washington is broken, China is storming ahead and people are restless.

A liberal lack of conviction

The ultimate complacency would be for classical liberals to underestimate the threat. Too many right-leaning liberals are inclined to choose a shameless marriage of convenience with populists. Too many left-leaning liberals focus on how they, too, want social justice. They comfort themselves with the thought that the most intolerant illiberalism belongs to a fringe. Don't worry, they say, intolerance is part of the mechanism of change: by focusing on injustice, they shift the centre ground.

Yet it is precisely by countering the forces propelling people to the extremes that classical liberals prevent the extremes from strengthening. By applying liberal principles, they help solve society's many problems without anyone resorting to coercion. Only liberals appreciate diversity in all its forms and understand how to make it a strength. Only they can deal fairly with everything from education to planning and foreign policy so as to release people's creative energies. Classical liberals must rediscover their fighting spirit. They should take on the bullies and cancellers. Liberalism is still the best engine for equitable progress. Liberals must have the courage to say so. ■

Afghanistan

Do not move on, move forwards

America should engage with the Taliban, very cautiously

Now what? The debate about who is to blame for the chaos at Kabul airport over the past few weeks, as well as all the mistakes that went before it, has raged so intensely that what the West should do next has seemed a secondary question. But it has become a pressing one. The last American soldiers left Kabul on August 30th, ending the 20-year effort to shape events in Afghanistan directly. America and its allies must now decide how best to influence the country from a distance.

For some, the answer is simple. The Taliban are so odious, so violent, repressive and untrustworthy, that America should have as little as possible to do with them. Handing out aid or initiating formal diplomatic ties would only strengthen the new regime, the argument runs; better to leave it to stew. Others make the opposite case. It is no use lamenting the outcome of the war, they say: if America wants to retain any influence in Afghanistan, it had better start engaging now, before China, Iran and Russia turn the country into their client.

Both arguments are wrong. America's adversaries will indeed try to win over the Taliban, but that does not matter (see Asia section). Afghanistan is a backwater, with little geopolitical or economic significance. America owes it to ordinary Afghans to try to make the situation it has bequeathed them less awful, but otherwise its most pressing interest is to prevent Afghanistan from again becoming a breeding ground for terrorism.

It will be impossible to achieve either of those goals, however, without some sort of dealings with the Taliban. That is not as big a reversal as it sounds: after all, American diplomats have been negotiating with the insurgents for several years now. Those talks were a sham, unfortunately. America was too obviously on its way out for the Taliban to take them seriously.

Now America and its allies have genuine, if limited, leverage. The Taliban regime is broke. Foreign aid, most of which has been suspended, accounted for three-quarters of the government's budget and almost half of GDP. The government's foreign reserves are sitting in frozen accounts in the West, and America's blessing is needed to get access to IMF loans. China is unlikely to bankroll the new regime on anything like the scale America and its allies did the old one. Iran or Russia certainly won't.

Engagement, one transaction at a time

The Taliban, of course, may prefer pious penury to growth and development. But to the extent that Western help is wanted, it should be dished out in small doses, tied to specific concessions. The main goals should be to allow access for aid agencies, and to keep schools, clinics and borders open (for women and girls as well as men). The more reasonable the Taliban are, the more money the West should hand over. But everything should be reversible, especially if there is any hint that the new regime is abetting terrorism.

The Taliban appear unsure how repressive and isolationist to be. They are clearly capable of feigning moderation. But some of their leaders may really want less hostile relations with America. And the rest may respond to pressure—especially now that the West has so little left inside Afghanistan to lose.

The world economy

Delta means change

How the pandemic became stagflationary

 $oldsymbol{\intercal}$ $oldsymbol{\intercal}$ HAS BEEN a summer of unpleasant surprises for the world $oldsymbol{1}$ economy. America, Europe and China are growing more slowly than investors had hoped. Consumer prices are rising uncomfortably fast, especially in America. Even in the euro area, used to tepid inflation, prices in August were 3% higher than a year earlier, the most in a decade. Economies are troubled by shortages of parts and labour, slow and expensive shipping and the bewildering variation of lockdown measures.

The spread of the Delta variant is to blame, but the way the pandemic is affecting the economy is shifting. The world had become accustomed to the virus battering growth, as waves of infection caused a sudden stop in activity, and prices moderated

or even fell. Delta, by contrast, looks like a stagflationary force that is sapping growth less dramatically but firing up inflation.

Delta is weighing on consumer spending in the rich world but not causing a collapse. In countries with lots of vaccine, cases are no longer doing as much to stop consumers from moving around (see Britain section). Europe's service sector has reopened amid its Delta wave.

Consumers seem less scared of the disease even if there are enough unvaccinated people to fill up hospitals. A year ago the number of diners in American restaurants was nearly half the level in 2019. Now service is about 10% down, even though hospitals are three times fuller. In Japan a state of emergency covering Tokyo does not seem to be keeping consumers away from the shops. Only in countries with draconian policies aimed at eliminating the virus are people stuck at home. Australia and New Zealand face new recessions as a result of their lockdowns and China's service sector appears to be shrinking.

Meanwhile, the spread of Delta continues to interfere with the global supply of goods just as consumers, especially Americans, are intent on buying more cars, devices and sporting gear than ever. Outbreaks in South-East Asian countries with low rates of vaccination are causing production plants and logistics networks to shut down temporarily, prolonging the disruption to supply chains. In America retailers, including Gap and Nike, have lobbied the White House to donate more vaccines to Vietnam, so crucial have its factories become to their businesses (see Finance section). Shortages are driving up prices.

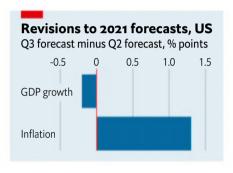
The changing relationship between the virus and the economy has implications for policymakers. They will not be able to repeat the trick from earlier in the pandemic of restricting people's movement as a way to contain the spread of the virus, while

> at the same time unleashing stimulus to create a compensating boom in demand for goods.

> A service-sector revival is now the only quick route to fast growth because that is where the slack is. In the second quarter of the year spending on services by American households was about 3% below its level in 2019 in real terms. Should the spread of Delta interfere with service industries such as leisure and hospital-

ity, more stimulus will only create more inflation.

It is also harder to argue that fear of the virus scares consumers off spending, and that government restrictions to slow the spread of disease therefore have little extra economic cost. A weaker link between cases and people's movement, and the necessity of service-sector growth, raise the cost of lockdowns. If pressure on hospitals causes even highly vaccinated countries like Britain to restrict services over the winter, the economic damage will be large and the benefits smaller. The Delta wave may subside soon, easing the pressure on the world economy. If it does not or another variant takes its place, the trade-offs involved in fighting the virus will become harder to justify.



Defaults in China

China's toxic twins

The antics of two giant firms show that China's debt markets are still rudimentary

THINA HAS been trying to clean up its bad corporate debts for upears. Although it made some progress before the pandemic, the task often seems interminable, it remains crucial for the country's long-run economic development—and for the growing ranks of global investors with exposure to Chinese stocks and bonds. The government insists it wants more market discipline and a transparent process for letting firms default without blowing up the financial system.

Now these claims are being tested by crises at Huarong, a state-run financial conglomerate, and Evergrande, the country's largest property firm. Together they have some \$540bn of liabilities, which they will struggle to repay (see China section). Their contrasting fates show that China's approach is still driven by politics and improvisation not market forces and the rule of law.

The level of debt is jaw-dropping. The private non-financial sector owed the equivalent of 222% of GDP at the end of 2020. Most of that sits with companies. By comparison, private non-financial debt in America is 164% of GDP. Stress in the property and interbank markets often flares up.

The government has been urging the courts to play more of a role in restructuring debt, as they do in America, with its Chapter 11 procedure. Yet in China the culture of "extend and pretend" runs deep. The default rate on bonds is artificially low and expected to be no more than 1% this year, far below the global corporate-default rate of around 2.7% last year. China's state-owned banks may be willing to express their admiration for Xi Jinping >> Thought, but they hesitate to confess to their dud loans.

The inadequacies of all this are being exposed by two debt monsters. Huarong was set up in 1999 as a bad bank for soured loans, but became a conglomerate. On August 29th it reported delayed results indicating liabilities of \$238bn in June, a \$16bn loss last year, and a leverage ratio of 1,333 times. Two days later Evergrande, with property projects in over 280 cities, reported liabilities of \$304bn and sustained a profit by selling subsidiaries. The companies have the second- and fourth-largest debt piles of any listed Chinese firms (excluding banks) and together account for 3.9% of the total. As the duo have tottered, so their bond prices have oscillated. Investors are trying to work out whether the firms will default, be bailed out or stagger on as zombies.

They now have an answer for Huarong. After a fraught negotiation at the top of the Communist Party, it will be rescued by other state-owned firms because it is judged too big to fail. The company buys 30-40% of the banking system's non-performing loans, according to PineBridge Investments, an asset manager, and its bonds were used as high-quality collateral in Chinese markets until earlier this year. A collapse would run the risk of destabilising the banking system.

What about Evergrande? The government may let the mainly foreign owners of its \$21bn in foreign-currency debts go to the

wall. But a majority of its liabilities are owned by other creditors, including suppliers and homebuyers who pay for properties before they are built. Rather than risk disrupting supply chains and enraging homebuyers, the government will probably find white knights to ensure Evergrande's core business survives.

Both episodes show that the hierarchy of creditors in China is based on politics and the priorities of the state. It is hard to know in advance which instruments enjoy a state guarantee, and even harder to second-guess the opaque process by which this is decided. The recognition of bad debts is grossly inconsistent. This year Ping An, a successful insurance firm with many foreign shareholders, has recognised bad property investments of \$5.6bn, and faced government probes, even as state-run banks loaded with bad debts stayed quiet.

A better system for dealing with bad debts would let China improve the efficiency of capital allocation in its economy and reduce moral hazard and corruption. But when bankruptcy threatens, China's rulers often play for time. Global investors have been increasing their exposure to Chinese debt, and the country's weight in global indices is rising. A rosy view has developed among some that China is making great strides in modernising its giant debt markets. Huarong and Evergrande are a reminder that there is still a long way to go.

Famine

Why Madagascar is going hungry

Blame covid-19, climate change and bad governance

The People of southern Madagascar are in peril. More than 1.1m of them are going hungry, according to the UN. More than 500,000 children under the age of five are at risk of being acutely malnourished. Many families are eking out their meagre diets with cactus. And the suffering is due to increase with the start of the "lean season", the hungry months before the next harvest (see Middle East & Africa section).

This calamity has several causes. The UN emphasises climate change. "This is an area of the world that has contributed nothing to climate change, but now, they're the ones paying the high-

est price," said David Beasley, the boss of the UN's World Food Programme, in a television interview. Headlines have called it the world's first "climate famine".

Man-made climate change has certainly affected the world's fourth-largest island. Southern Madagascar has long suffered from erratic rains. Droughts are common, and famines were recorded in 1903, 1910, 1916, 1921 and 1943 among other years. Yet of late the rains have become

even less regular; today's drought is the worst in 40 years. The harvest of cassava, a staple, is expected to be 60-90% less than in normal years. The price of rice is soaring.

In addition, covid-19 has made people poorer. Madagascar's economy shrank by 4.2% last year, despite a fast-growing population. The island has all but shut itself off from the outside world, causing its main source of hard currency, tourism, to collapse. The well-heeled foreigners who used to trek through its rainforests in search of lemurs stayed at home. The 1.5m people who depend on them lost their livelihoods.

Donors should pitch in to prevent people from starving. Children, especially, need enough nutrients if they are to avoid growing up with stunted bodies and minds. At the same time, the disaster should be a wake-up call for Madagascar's government. If successive regimes had not mismanaged the economy so badly for so long, the Malagasy would be prosperous enough to cope better with shocks.

The nearby tourism-dependent island of Mauritius has also been hammered by extreme weather and covid-19. Its economy shrank even more in 2020 than Madagascar's, and torrential

rains in April washed away roads and crops. Yet Mauritians are not starving. This is because they are about 17 times richer than their Malagasy neighbours.

Half a century ago Mauritians were barely twice as rich. But since then Mauritius has been politically stable, sensibly run and attractive to investors. Madagascar, by contrast, has suffered two decades of communism and a succession of coups (including one in 2009 by Andry Ra-

joelina, the current president, who later came to power through the ballot box). Because of bad government, Madagascar's 28m people are about as poor today as they were at independence in 1960. Mr Rajoelina is better than some of his predecessors, but hardly inspiring. He promoted a herbal "treatment" for covid-19, and has been dismally slow to roll out vaccines.

Madagascar's woes are a reminder that the world should cut greenhouse gases; and also that economic growth makes other problems easier to deal with. Just now, Madagascar's people need help. In the long run, they need better government.



Executive focus 13



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Rector

Institute for Human Sciences, Vienna/Austria

The Institute for Human Sciences (IWM) is an independent, international institute for advanced study in the humanities and social sciences. Since its foundation in 1982, it has promoted intellectual exchange between Eastern and Western Europe, between Europe and North America, between academia and society, and among a variety of disciplines and schools of thought. Looking beyond the confines of the academic world, the Institute is committed to broaching new and often contested topics of societal relevance, thus initiating or contributing to debates on a wide range of political, social, economic, and cultural issues.

The IWM now invites applications for the position of Rector. The ideal candidate is a visionary, creative personality, able to sustain and extend the programmatic mission, strategic and operational objectives for the future development of this unique enterprise in a way that respects and capitalizes on the IWM's forty years of achievements. S/He is a researcher and teacher with expertise in some of the Institute's fields of activity. Besides a strong record of scholarly achievement, the candidate should demonstrate senior-level management and executive leadership capacities. S/He has extensive knowledge of public and private funding agencies and mechanisms in Europe and North America. Excellent interpersonal and communication skills are a must, since the Rector will manage a broad range of external relations with a variety of stakeholders (cooperation partners, funders, policymakers, media, etc.). The candidate should speak and write in English and German, and other linguistic skills are most welcome.

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The IWM operates as a non-profit association. The Rector is appointed by the Board of Trustees at the motion of the President for a period of 5 years. Re-appointment is permitted. S/He will be offered a permanent employment contract according to Austrian labor law. Salary and benefits are competitive and commensurate with experience and credentials. The position is full-time and based in Vienna.

Applications should be addressed to:

Institute for Human Sciences, Attention: Heinz Fischer, President; Spittelauer Lände 3, 1090 Wien; Austria; or via email: rectorsearch@iwm.at. Questions may be directed to the Acting Rector Ivan Vejvoda: vejvoda@iwm.at.

Applications should include a letter of interest, a curriculum vitae and an expose for the future development of the IWM. **Applications will be considered until 30 September 2021.** The IWM would prefer employment to begin at the earliest possible date in 2022.



Investing in rural people

The International Fund for Agricultural Development (IFAD) is an international financial institution and a United Nations specialized agency dedicated to eradicating rural poverty and hunger. IFAD finances programmes and projects that increase agricultural productivity and raise rural incomes, and advocates at the local, national and international level for policies that contribute to rural transformation.

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For detailed information, visit our website www.ifad.org/en/careers. Please submit your application through the IFAD online system by 22 September 2021.

A failure of Western thinking

To hang the Afghanistan fiasco on Joe Biden is worse than unfair, it is unintelligent ("Biden's debacle", August 21st). Unfair, because it was foreseen by so many that the Afghanistan issue would end in a mess. Unintelligent, because the true sources of this disaster are neither political nor military, they are philosophical. Western thinking, shared by Europeans and Americans, is conditioned on Enlightenment thinking. which is centred on the improvement of the individual. Contrary to what was and is still thought by many of its dovens, this hardly helps one understand societies.

The consequent Western penchant for social tinkering, besides being arrogant, has not only failed to achieve its goals but has also resulted in a long list of social and political tragedies, such as communism in Russia and elsewhere, or the American state-building initiatives, in Vietnam, Iraq and now Afghanistan. PROFESSOR EVYATAR FRIESEL Hebrew University of **Ierusalem**

Regarding Henry Kissinger's article on America's diplomatic failures in Afghanistan (By Invitation, August 25th), it has been well documented how America and Britain were involved in creating a powerful group of mujahideen from a rag-tag cluster of vicious fundamentalists, the core of whom were not Afghans, well before the Soviet invasion of that country. The apparent reason for this was to draw the Soviet Union into a prolonged war. Both Ronald Reagan and Margaret Thatcher had openly expressed their admiration for the mujahideen, and arguably achieved their goal of defeating communism by providing substantial support for them.

Christopher Davidson's "Shadow Wars", published in 2016, contains a treasure trove of citations on declassified documents, interviews with retired CIA and MI6 agents, as well as references to many

other excellent books on the subject. Pitched against this knowledge, it is not surprising that Mr Kissinger chose to make some rather whimsical observations on diplomatic failures, rather than take a deeper look at the history of American involvement in the region.

By stating that "We entered Afghanistan amid wide support in response to the al-Qaeda attack on America" and making some lightweight criticism on diplomatic efforts. Mr Kissinger tried to whitewash a shameful chapter in American history that started back in the late 1970s, well before he claimed it did. PETER BASHFORD Dubai

Mr Biden is famously fond of W.B. Yeats. I wonder if he should have heeded the warning in one of the poet's most famous works, "The Second Coming": Things fall apart; the centre cannot hold. Mere anarchy is loosed upon the world...The best lack all conviction, while the worst are full of passionate intensity. AUGUSTUS HANEY New York

Proceed with care

A cautionary tale regarding your statement that one day, people could be vaccinated pre-emptively ("Vaxelerando", August 7th). In March 1976, at the behest of the director of the Centres for Disease Control, the us president announced the mass vaccination of every American, within a short period, against a speculated epidemic or pandemic of swine flu, akin to the one in 1918. The president wanted to protect public health.

The first swine-flu shots were given on October 1st 1976. They were hastily suspended just over two months later. The reason was that the incidence of Guillain-Barré syndrome in the vaccinated group was about four times greater than normal. The deadly swine-flu epidemic never came.

The process of decisionmaking at the highest political level, regarding the perils of "pre-emptive mass vaccination", is described in detail in a report from June 1978 prepared for the Department of Health, Education and Welfare by Richard Neustadt and Harvey Fineberg, later entitled "The epidemic that never was". PRIMO ARAMBULO Rockville, Maryland

Wrigley's gum

While we enjoyed seeing an article on chewing-gum products, there was a slight misquote in your piece, "Bursting the bubble: how gum lost its cool" (1843, July 26th). William Wrigley junior was a marketing genius whose pioneering tactics are studied to this day. His zest for advertising earned him the sobriquet "maestro of sales". So he never really considered selling gum to be a "problem", as you claimed, but rather a fun challenge at which he excelled.

He would quip that "The sale's the thing!" and riffed on another marketer's famous dictum that any fool can make soap; it takes a clever man to sell it. What he actually said was, "Anybody can make chewing gum. The trick is to sell it." But a trick does not a problem make. As Wrigley knew, and your piece outlined, great marketing is about capturing the moment. In the past, that was an athlete popping a piece of gum before a spectacular feat, or a teen blowing jaunty bubbles in a wilful moment. Every generation has its challenge to confront and gum can help by delivering better moments and more smiles. ANDREW CLARKE Global president Mars Wrigley McLean, Virginia

Kennedy and Berlin

It is not quite right to say, as a book review did, that John F. Kennedy became "obsessed" with divided Berlin ("An underground operation", August 7th). In fact, Kennedy was worried that using American troops to prevent the building of the Wall, as many

Germans had demanded in August 1961, including Willy Brandt, West Berlin's mayor, might have triggered an armed conflict with Moscow. Belatedly, almost two years after the Wall was built, Kennedy at last decided to visit the city. It was then that he gave his "Ich bin ein Berliner" speech.

I happened to have lived in Berlin in 1961 as a young reporter and helped my future wife to escape from East to West Berlin. Ironically, one of my stringer jobs was with NBC, which helped finance "Tunnel 29", so skilfully described by Helena Merriman in her book. LESLIE COLITT Berlin

Core competencies

I enjoyed Bartleby's column on the proliferation of corporate jargon (July 31st). I for one am going to take a proactive approach to ensure that I positively impact the exponential abuse of jargon. **ERIC EVANS** Brookline, Massachusetts

In 1956, C.S. Lewis told a young, aspiring writer:

> Always prefer the plain direct word to the long vague one. Don't implement promises, but keep them. Never use abstract nouns when concrete ones will do. If you mean "More people died" don't say "Mortality rose."

Good advice for children, managers, politicians, preachers, and so on. REVEREND DAVID GLADE Alexandria, Virginia

Bartleby made his point well about corporate jargon. The best use of the term I have ever encountered is the name of the firm Global Closure Solutions. It makes bottle tops. PAUL HARRISON London

Letters are welcome and should be addressed to the Editor at The Economist, The Adelphi Building, 1-11 John Adam Street, London wc2N 6HT Fmail: letters@economist.com More letters are available at: Economist.com/letters

Briefing The illiberal left



Out of the academy

WASHINGTON, DC

How did a loose set of radical ideas leap from campus to American life?

You could use a single word as a proxy. "Latinx" is a gender-neutral adjective which only 4% of American Hispanics say they prefer. Yet in 2018 the New York Times launched a column dedicated to "Latinx communities". It has crept into White House press releases and a presidential speech. Google's diversity reports use the even more inclusive "Latinx+". A term once championed by esoteric academics has gone mainstream.

The espousal of new vocabulary is one sign of a social mobilisation that is affecting ever more areas of American life. It has penetrated politics and the press. Sometimes it spills out into the streets, in demonstrations calling for the abolition of police departments. It is starting to spread to schools. San Francisco's education board, which for more than a year was unable to get children into classes, busied itself with stripping the names of Abraham Lincoln and George Washington from its schools, and ridding department names of acronyms such as VAPA (Visual and Performing Arts), on the ground that they are "a symptom of white supremacy".

What links these developments is a

loose constellation of ideas that is changing the way that mostly white, educated, left-leaning Americans view the world. This credo still lacks a definitive name: it is variously known as left-liberal identity politics, social-justice activism or, simply, wokeness. But it has a clear common thread: a belief that any disparities between racial groups are evidence of structural racism; that the norms of free speech, individualism and universalism which pretend to be progressive are really camouflage for this discrimination; and that injustice will persist until systems of language and privilege are dismantled.

These notions were incubated for years in the humanities departments of universities (elite ones in particular), without serious challenge. Moral panics about campus culture are hardly new, and the emergence of a new leftism in the early 2010s prompted little concern. Even as students began scouring the words of academics,

→ Also in this section

18 Echoes of the confessional state

administrators and fellow students for microaggressions, the oppressive slights embedded in everyday speech, and found them, complacency ruled. When invited speeches from people such as Christine Lagarde, then head of the International Monetary Fund, were cancelled after student activists accused her of complicity in "imperialist and patriarchal systems", the response was a collective shrug.

The complacency was naive. America harboured a "Vegas campus delusion", says Greg Lukianoff, president of the Foundation for Individual Rights in Education, an advocacy group. "What happens on campus will not stay on campus." It has not. The influence of the new social-justice mindset is now being felt in the media, the Democratic Party and, most recently, businesses and schools.

How did this breakout happen? Three things helped prepare the ground: a disaffected student body, an academic theory that was malleable enough to be shaped into a handbook for political activism, and a pliant university administration.

First came a new generation of students keenly aware of unsolved social problems and willing to see old-fashioned precepts of academic freedom (such as open debate) as obstacles to progress. Various events—the financial crisis, the election of Donald Trump, the police killings of unarmed black men, especially that of George Floyd—fed frustration with traditional liberalism's seeming inability to end longrun inequities. This hastened the adoption of an ideology that offered fresh answers.

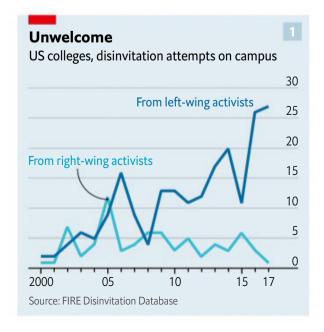
In a book entitled "The Coddling of the American Mind", Mr Lukianoff and a social psychologist, Jonathan Haidt, posit that overprotective parenting in the shadow of the war on terrorism and the great recession led to "safetyism", a belief that safety, including emotional safety, trumps all other practical and moral concerns. Its bounds grew to require disinviting disfavoured campus speakers (see chart 1), protesting about disagreeable readings and regulating the speech of fellow students.

Many students latched onto a body of theory which yokes obscurantist texts to calls for social action (or "praxis") that had been developing in the academy for decades. In 1965 Herbert Marcuse, a critical theorist, coined the phrase "repressive tolerance", the notion that freedom of speech should be withdrawn from the political right in order to bring about progress, since the "cancellation of the liberal creed of free and equal discussion" might be necessary to end oppression. Another influence was Paulo Freire, a Brazilian educator whose "Pedagogy of the Oppressed" (published in English in 1970) advocated a liberatory pedagogy in the spirit of Mao's Cultural Revolution in which "the oppressed unveil the world of oppression and through the praxis commit themselves to its transformation".

The Great Awokening

Today the most prominent evangelists for what political scientists such as Zachary Goldberg call the Great Awokening are Ibram X. Kendi and Robin DiAngelo. Both these scholar-activists have written best-selling books that sketch the expansive boundaries of systemic racism. Both minimise the role of intent, but in different ways. In Mr Kendi's Manichaean world-view actions are either actively narrowing racial gaps, and are therefore anti-racist, or they are not, in which case they are racist. "Capitalism is essentially racist; racism is essentially capitalist," he concludes.

Ms DiAngelo is concerned with the racism of everyday speech. For her, the intent



of the oppressor is immaterial if an oppressed person deems the conduct to be offensive. How "white progressives cause more daily harm [to black people] than, say, white nationalists" is the subject of her latest book, "Nice Racism". She sees liberal norms like individualism or the aspiration for colour-blind universalism as naive: "Liberalism doesn't account for power, and the differential in power," she says.

The embrace of this ideology by students and professors might have remained inconsequential had it not been for the part played by administrative staff. Since 2000, such staff in the University of California system has more than doubled, outpacing the increase in faculty and students. The growth in private universities has been even faster. Between 1975 and 2005 the ranks of administrators grew by 66% in public colleges but by 135% in private ones. As their headcount grew, so did their remit—ferreting out not just overt racism or sexual harassment but implicit bias too. The University of California, Los Angeles, now insists that faculty applying for tenure include a diversity statement.

In 2018 Samuel Abrams, a political scientist at Sarah Lawrence College, published data showing that these administrators are even more left-leaning than the professors: liberals outnumber conservatives by 12 to one. For writing about this, Mr Abrams faced a campaign by outraged students aiming to revoke his tenure. Campaigns by a vocal minority of activists have cast a pall on campus life, he says. "Large numbers of people hate this. They just don't know what to do," he laments. "They don't want the mob coming to them."

An upheaval in mass communication accelerated the trend. On Twitter, a determined minority can be amplified, and an uneasy centre-left can be cowed. "Weaponisation of social media became part of the game. But what I think nobody foresaw was that these tactics could so easily be imported to the *New York Times* or Penguin Random House or Google," says Niall Ferguson, a historian at Stanford's Hoover Institution. "The invasion...was just a case of the old problem: that liberals defer to progressives. And progressives defer to outright totalitarians."

Mr Trump's election added to centrists' unease, leaving the poles to grow ever more extreme. "Anything but far-left progressivism was lumped in with Trump," says one (Democratic) prosecutor in San Francisco. In the protest against Mr Trump's handling of the Mexican border, for instance, the old Democratic line of enhanced border security and a path to citizenship for the long-term undocumented became passé. Progressives proved their sincerity by being in favour of abolishing immigration authorities entirely.

Having grown strong roots, social-jus-

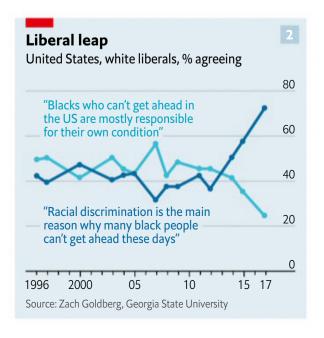
tice consciousness has spread most readily to non-academic institutions largely peopled by those who have come through elite universities. As the students who have embraced this messy body of theory leave university, they enter into jobs and positions of influence. The question is whether, outside the ivory tower, the ideology will retain its intolerant and belligerent zeal, or whether it will mellow into a benign urge for society to be a little fairer.

Newspapers are a prime example. The digital revolution has devastated local newspapers and crowned new online-only champions. As newsrooms adapted by aping the upstarts, hacks who had risen through the ranks thanks to shoe-leather reporting were replaced by younger staffers stuffed with new ideas from elite universities. One prominent journalist argued for replacing "neutral objectivity" with "moral clarity"—making unflinching distinctions between right and wrong.

The urge to purge

Changes in newsrooms were also related to efforts to increase demographic diversity, on the assumption that this is the only authentic way to give voice to minorities. But the campus zeal for deplatforming voices deemed offensive and defenestrating those found guilty of violating the ethos has also been imported. (James Bennet, who resigned as editorial-page editor of the New York Times after one such row, now works for The Economist; he was not involved in this article.) Non-journalists on the staff of newspapers, including young engineers, can be even more activist in campaigning against colleagues judged to be producing content at odds with the new vision of social justice.

As with universities, this stridency met little rebuke from the heads of newsrooms. Lee Fang, a left-leaning journalist for "The Intercept", an online publication specialising in "adversarial journalism", was accused by a colleague of racism for posting an interview with an African-American supporter of Black Lives Matter who of-



• fered a personal criticism of the group. He was made to apologise.

The quiet cultural revolution has also affected the Democratic Party. A decade ago, around 40% of white liberals agreed that "racial discrimination is the main reason why many black people can't get ahead these days"; today over 70% do (see chart 2 on previous page). In 2013, according to Gallup, a pollster, 70% of Americans thought black-white race relations were going well; that has dropped to 42%. Among white conservatives and moderates, there has been little movement on such questions.

In the past decade a far greater share of white liberals than African-Americans came to believe that blacks should have "special favours" to get ahead (see chart 3). Ideas for promoting racial equity that once belonged to the Democrats' left fringe have become mainstream. Cash reparations for African-Americans are supported by 49% of Democrats, for example, and 41% endorse reducing police funding.

Democratic politicians have responded. In 2008 Barack Obama criticised overheated sermons of his pastor, saying "they expressed a profoundly distorted view of this country—a view that sees white racism as endemic, and that elevates what is wrong with America above all that we know is right with America." The pastor's view is now ascendant among Democrats.

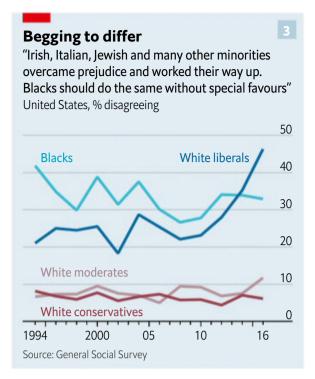
In 2016 Hillary Clinton started giving speeches on the need to end systemic racism. By 2020 this movement was the defining fault line of the presidential primary. Joe Biden, an avatar for Democratic consensus, won by taking positions far to the left of Mr Obama, including on matters of identity politics. That is why his administration speaks much more social-justice patois than Mr Obama's ever did. And why it embraces reparations-adjacent policies like the creation of a \$4bn fund to pay off the debts of only non-white farmers, and a proposal that 40% of benefits from climate-change investment go to previously disadvantaged communities.

Wokers of the world, unite!

This new political prominence makes the question of what happens to the ideology of social activism as it spreads beyond the ivory tower all the more important. Does it retain its purity and potency? Or does it become diluted?

The corporate world will be a big test. Businesses, particularly those in the knowledge economy, have been grappling with the challenge of how to respond to social-justice consciousness as young employees agitate for change and woke consumers threaten boycotts.

An increasingly common argument is that there is no trade-off between greater diversity and profits. "I'd like to get to a



place where we thought that diverse representation was just as important as profitability, because we believed it was linked to so many things that were going to come back and drive value," says Julie Coffman, the chief diversity officer of Bain & Company, a management consultancy. Others make an explicit business case. McKinsey, another consultancy, has released a stream of reports arguing that firms with greater ethnic and gender diversity have a greater chance of financial outperformance.

Since Floyd's murder, American businesses have issued a dizzying number of equity-related missives and quotas for hiring and procurement. Facebook, a socialmedia giant, has promised to hire 30% more black people in leadership positions and has set a goal that "50% of our workforce be from underrepresented communities by the end of 2023". Target, a retailer, has pledged to spend more than \$2bn with black-owned businesses by the end of 2025. Walmart, another retail titan, has set up a Centre for Racial Equity and says it will give it \$100m to "address the drivers of systemic racism".

Importing the language of equity without university-style blow-ups can be difficult. "What you're seeing is Gen Z or young millennials basically engaging in this collective war against the boomers and the Gen Xers who actually run the organisations," says Antonio García Martínez, whom Apple fired in May after 2,000 employees circulated a petition questioning his hiring, citing passages they found to be misogynistic in an autobiography published five years ago. When Brian Armstrong, the boss of Coinbase, announced that workplace activism was to be discouraged, he was inundated with private messages of admiration from ceos who felt that they could not do the same—and public criticism.

"Corporate wokeism I believe is the product of self-interest intermingled with the appearance of pursuing social justice," says Vivek Ramaswamy, a former biotechnology executive and author of "Woke, Inc.". He argues that Big Tech pursues corporate wokeism because appearing to embrace social justice suits such firms' commercial interests-both in terms of recruitment and appeal to their customers. It performs allegiance to identity politics while simultaneously rejecting the left's critique of capitalism. "A lot of Big Tech has agreed to bend to the progressive left," he says, but "they effectively expect that the new left look the other way when it comes to leaving their monopoly power."

Such hypocrisy is increasingly prevalent. The founder of Salesforce, a tech behemoth based in San Francisco, is known for championing social-justice causes like a surtax to fund homelessness services in the city. Yet the firm itself paid no federal taxes on \$2.6bn in profits in 2020.

Wokeness's next frontier, with the greatest potential to make a mark on the future, will be the classroom. In California's recently approved ethnic-studies curriculum, which may become a highschool graduation requirement, one lesson plan aims to help students "dispel the model-minority myth" (the idea that to dwell on Asian-American success is wrong). Roughly one-sixth of the state's proposed new maths instruction framework is devoted to social justice. It approvingly quotes from studies suggesting that word problems about boys and girls knitting scarves be accompanied by a debate about gender norms. Last month the governor of Oregon signed a bill eliminating high-school graduation requirements of proficiency in reading, writing and maths until 2024—justified as necessary to promote equity for non-white students.

Woker or weaker?

Such proposals hint at the difficulties of translating some of the theories embraced by the new left into policy. Because disparities are theorised to be the result of largely implicit discrimination, systems must be dismantled. This leads to odd conclusions: that racial test-score gaps in maths can be ameliorated by dialectic; and that not testing for the ability to read is a worthy substitute for teaching it. Material conditions that the old left cared about, such as persistent segregation in poor districts and schools, get little attention.

There are some signs of a backlash. Three members of San Francisco's board of education, including its president, are under threat of a recall election. So is the city's ultra-progressive district attorney. However, the underlying engine—the questionable ideas of some academics, and the generational change they are renderingis not shutting off. America has not yet reached peak woke. ■

Imposing orthodoxy

Echoes of the confessional state

Old tactics are being revived in a new assault on liberalism

Lagainst the confessional state that had ruled Europe for more than a millennium. In medieval Europe the Roman Catholic church employed a transnational army of black-coated clerics who demanded obedience on all matters spiritual and moral, and had a monopoly in education. The Reformation introduced religious competition, strengthening the confessional state. John Calvin crushed dissent in Geneva with imprisonment, exile and execution. Henry VIII took to boiling dissenters alive. The Roman church invented the Inquisition and the Index of Forbidden Books.

Liberalism started to pick apart this fusion of church and state 350 years ago. John Milton wrote that if the waters of truth "flow not in a perpetual progression they sicken into a muddy pool of conformity and tradition". Baruch Spinoza insisted that scripture must be interpreted like any other book. David Hume and John Stuart Mill argued that the best way to establish truth is by vigorous debate.

The fruit of this thinking was plucked in three revolutions. In America's, Thomas Jefferson called "the loathsome combination of church and state" the root of most of the world's ills. The French also established a secular republic. The gradualist English revolution left the Church of England intact but marginalised.

Yet something extraordinary is happening in the West: a new generation of progressives is reviving methods that uncannily resemble those of the confessional state, with modern versions of loyalty oaths and blasphemy laws. And this effort is being spearheaded in the heartland of Anglo-Saxon liberalism—often by people who call themselves liberals. Here is how the old tactics are being revived.

Imposing orthodoxy. Today's orthodoxy is sustained by an intellectual elite instead of a spiritual one. Their natural home is the university. Some 70-80% of right-leaning academics and doctoral students in Britain and America say that their departments are hostile environments, according to Eric Kaufmann, of Birkbeck College, London.

The progressive left is even more dominant among students. There's nothing new about left-wing student revolts, but the protests of the 1960s were against the remnants of the confessional state: radicals at Berkeley in California turned Sproul Plaza

into a free-speech zone, where anything could be said, and People's Park into a free-for-all zone, where anything could be done. Today's radicals demand the enforcement of codes of behaviour and speech. A poll of more than 4,000 four-year college students for the Knight Foundation in 2019 found that 68% felt that students cannot say what they think because their classmates might find it offensive.

Proselytising. Religious faiths have always had a vanguard, such as the Jesuit order, who see it as their job to move the boundaries of belief and behaviour towards righteousness. The vanguard of the woke revolution are young activists. Belief in foundations of liberalism such as free speech declines with each generation. The Pew Research Centre notes that 40% of millennials favour suppressing, in various unspecified ways, speech deemed offensive to minorities, compared with 27% among Gen Xers, 24% among baby-boomers and only 12% among the oldest cohorts.

Progressives replace the liberal emphasis on tolerance and choice with a focus on compulsion and power. As in many religions, righteous folk have a duty to challenge immorality wherever they find it. They find a lot of it, believing that white people can be guilty of racism even if they don't consciously discriminate against others on the basis of race, because they are beneficiaries of a system of exploitation. Classical liberals conceded that your freedom to swing your fist stops where my nose begins. Today's progressives argue that your freedom to express your opinions stops where my feelings begin.

Expelling heretics. The new confessional state enforces ideological conformity by expelling heretics from their jobs, a practice that liberals shed much blood trying to



eradicate. In academia this is becoming wearily familiar.

In 2018 Colin Wright, a post-doctoral student at Penn State University, wrote two articles arguing that sex is a biological reality not a social construct, a statement that would once have been uncontroversial. Critics posted a warning that "Colin Wright is a Transphobe who supports Race Science" and sent emails to search committees condemning him. Sympathetic academics told him privately that they could not offer him a job as it was "too risky".

Book banning. In Restoration England Oxford University burned the works of Hobbes and Milton in the great quad next to the Bodleian Library. Today academics put trigger warnings on books, alerting students to the dangers of reading them. Young publishers try to get controversial books "cancelled".

Though they have failed on their highest-profile targets such as J.K. Rowling (publishers have to make money), they are succeeding with lesser fry, creating an atmosphere in which senior editors are less likely to bet on unknown authors with controversial opinions. Alexandra Duncan, a white American, even cancelled her own book, "Ember Days", after writing from the point of view of a black woman, something that is now dismissed as "cultural appropriation".

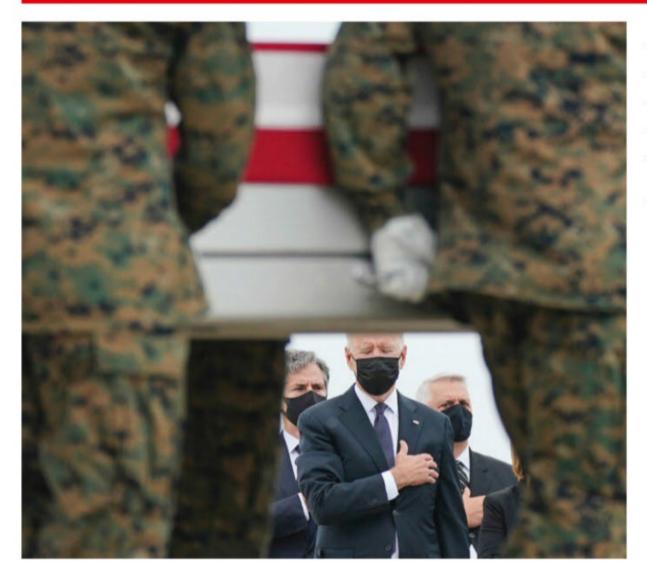
Creeds. Churches demanded that people sign a statement of religious beliefs, like the Anglican church's 39 Articles, before they could hold civil office. The University of California (UC) is doing something similar. Applicants for faculty posts have to complete statements about how they will advance diversity and inclusion.

These are worthy goals. But Abigail Thompson, until recently chair of maths at UC Davis and a lifelong liberal, points out that UC's scoring system rewards a woke view of how to realise them. In 2019 the life-sciences department at UC Berkeley rejected 76% of applicants on the basis of their diversity statements without looking at their research records.

Blasphemy. Scotland, a cradle of the Enlightenment, abolished the crime of blasphemy in March. At the same time, however, it reintroduced it by creating new offences such as "stirring up hatred" and "abusive speech"—punishable by up to seven years in prison.

The analogy with the past has its limits: no one is getting burnt at the stake. But it is a useful reminder that liberal values such as tolerance cannot be taken for granted. They were the product of centuries of argument and effort. The liberal state is still much younger today than the confessional state was when liberalism replaced it.

United States



- → Also in this section
- 20 SCOTUS, Texas and abortion
- 21 Undeclaring war
- 22 Stargazing in Colorado
- 23 Woke philanthropy
- 24 Lexington: Storms, infernos and climate politics

The White House

Polling realpolitik

WASHINGTON, DC

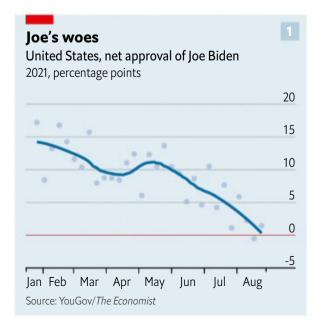
How damaging has the Afghanistan withdrawal been to Joe Biden's presidency?

THE BEGINNING of September marked L the end of America's 20-year campaign in Afghanistan. It also marked the end of President Joe Biden's worst month in office. The electorate's mood had soured on the intervention a long time ago: ending the "forever wars" was a campaign promise both of Mr Biden and of Donald Trump. Even so, many Americans were appalled once the immediate consequences of withdrawal became visible. They included the swift collapse of the Afghan government, the scenes of human tragedy during the evacuation at Kabul airport and the Islamic State Khorasan Province (ISKP) suicidebombing soon afterwards that killed at least 180 people, including 13 American soldiers. As for Mr Biden, he would like to turn to the next chapter of his presidency. It will not be so simple.

In a speech to mark the day, Mr Biden was by turns angry, defiant and unrepentant. He began by lauding the evacuation effort as an "extraordinary success". "No nation has ever done anything like it in all of history," he boasted. To critics who ar-

gued the extraction could have been better handled, the president said: "I respectfully disagree." Those who insisted that a lowgrade deployment of American soldiers could have remained did not understand that there was no such thing as low-grade war, he countered.

"I made a commitment to the American



people that I would end this war," he said proudly. His speech was steeped in realpolitik, almost Nixonian. Mr Biden argued that America had in essence squandered \$2trn in a country that had long ceased to present any clear national-security interest, and in the process had spoiled its own ability to deal with contemporary challenges from China and Russia.

Ending the war in Vietnam did not do much for the presidency of Gerald Ford. Things are not that bad for Mr Biden, but his presidency has taken a blow. On August 1st he had a net approval rating of 8.1 points, according to an average computed by FiveThirtyEight, a data-journalism outfit. By the end of the month, Mr Biden was slightly underwater at -0.6 points. Part of this may be due to what political scientists call "differential partisan non-response" the tendency for partisan supporters to avoid pollsters when their man is having a bad week, or a bad month. Most presidents face a gradual drop in approval after the honeymoon period of the inauguration, and Mr Biden was no exception. Still, an abrupt slide of 8.7 percentage points cannot be shrugged off. For comparison, after the attack on the Capitol on January 6th, Mr Trump suffered a ratings slide of nine points, albeit from a lower base.

Our polling shows a smaller decline (see chart 1). Between August 16th and August 30th, the two weeks after Kabul fell to the Taliban, Mr Biden's net approval rating among American adults fell by five per-

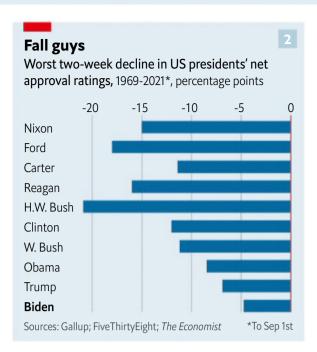
of polls—still a worse decline than in 92% of previous fortnights going back to Richard Nixon's inauguration in 1969. But the drop, though steep, did not beat other records. George H.W. Bush's net approval sank by 21 points in mid-January 1992 as economic issues dogged him and the end of the Gulf war brought an end to his inflated ratings. Nixon's numbers fell by 15 points in the spring of 1973 as the depth of his role in the Watergate scandal became apparent (see chart 2). Yet this should offer little comfort to the president; these echoes of history are not enviable ones.

Despite Mr Biden's defiance, Americans are blaming him for the mishandling of Afghanistan. Polling from YouGov (taken before the ISKP attack at the Kabul airport) shows that just 33% of Americans approve of how the president has dealt with Afghanistan. Only 16% of Americans (and, remarkably, just 28% of Democrats) say that the evacuation has been handled well. Such is the pall cast by the chaos, that even the public's firm anti-interventionism looks shaken. At the start of July, an overwhelming majority of Americans, 70%, supported the planned withdrawal of all troops by September 11th 2021. Now they are evenly divided on whether leaving was a mistake.

Public opinion is shaped by elites, and Mr Biden has taken sustained criticism from all quarters. That from Republicans was expected, even if it was inconsistent with their approval for the agreement struck by the Trump administration with the Taliban. Having previously criticised Mr Biden for not adhering to Mr Trump's earlier deadline of complete withdrawal by May 1st, Josh Hawley, an ambitious Republican senator, has now called on Mr Biden to resign. But Democrats in Congress have also condemned the administration's planning as riven with "failures". Their committees intend to investigate the debacle. Mainstream news outlets, which Democrats still trust, have turned against Mr Biden in a way that the conservative media never did against Mr Trump.

If Mr Biden is at the nadir of the Afghan affair, his presidency is salvageable. Slides in approval ratings can be reversed. Americans have relatively little interest in foreign affairs. Even now, they rank national security as only the seventh-most-important issue for the country. The next opportunity for voters to punish Mr Biden will be in the mid-term elections held in November 2022—an aeon away in American politics. Even if his foreign-policy judgment looks much more questionable now, American voters have not decided an election principally on that issue since 2004.

But the Afghan debacle could still linger. Republicans are split over whether to criticise Mr Biden for leaving allies behind



or allowing floods of Afghan refugees into America (though, like all refugees entering America, they will be thoroughly vetted). Scenes of women being abused or forced into burqas could also prove politically damaging, as could stories about the killing of Afghans who helped Americans but were unable to leave. The White House estimates that fewer than 200 Americans who wish to leave remain in the country (for all the criticism of the evacuation, America and its allies got 120,000 people out of Afghanistan after the government collapsed). If any of them were to be harmed, especially by ISKP, that would trigger another harsh round of criticism.

September is supposed to be a different sort of month for the White House. Mr Biden's proposal to "build back better" after the covid-19 pandemic by spending \$4trn on infrastructure and a much-expanded safety-net will be thrashed out in Congress. The slide in the president's approval ratings will probably not alter the calculus of Democrats in Congress on the wisdom of a spending spree now. Since 1935, only two incumbent presidents have improved their party's congressional margins in mid-term elections. Unified government is a rare gift in Washington. Democrats are unlikely to let it go to waste.

The Supreme Court

Roe on the ropes

The justices green-light a near-total abortion ban in Texas

At Two minutes to midnight on September 1st, when the Supreme Court quietly let Senate Bill 8 go into effect, Texas became the most inhospitable state for a woman seeking an abortion. Challengers may still press their case. But in the meantime Senate Bill 8 prohibits abortion when a fetal heartbeat begins, at about six weeks' gestation, and makes no exception for women who were impregnated via incest or rape. The law's great peculiarity, though, is its enforcement mechanism, which is outsourced to anyone who espies someone "aiding or abetting" an abortion.

Health-care providers, Uber drivers, clergy, family members, friends—anyone who plays even a bit part in facilitating an abortion is subject to a \$10,000 fine that becomes a bounty for the accuser and may close the offending clinic. A whistleblower website invites anonymous tips to nab those who are complicit in helping a woman terminate her pregnancy.

This dystopian enterprise has a practical purpose: deflecting legal challenges. If the state is not enforcing the law, defendants are harder to pinpoint. When Planned Parenthood and a coalition of abortion providers and pastors sued in July, they targeted one Mark Lee Dickson, an anti-abortion activist who had threatened

to sue under the law, as well as a state judge and a county clerk who would be integral to enforcing the scheme. The legal strategy was novel by necessity.

Before the theory could be tested in district court, a circuit court abruptly cancelled the hearing. This spurred the ill-fated last-ditch plea to the Supreme Court to block the law before it took effect. The law-suit may raise "serious questions regarding the constitutionality of the Texas law"—as it bans abortion three months earlier than *Roev Wade* permits—wrote the majority. But since the state of Texas had argued that neither it nor its employees had the power to enforce the law, the justices declined to step in.

Chief Justice Roberts who, unusually, joined the minority, identified the catch-22 in this reasoning. The "statutory scheme before the Court is not only unusual", he wrote, "but unprecedented". As it seems specifically designed to "insulate the state from responsibility", it would be better to freeze the law and subject it to "at least preliminary judicial consideration" before imposing it on Texas's 7m women of reproductive age. Some scrutiny is important, he added, since the law may serve "as a model for action in other areas."

The three liberal justices each penned >>

dissents, too. For Justice Stephen Breyer, casually blessing the law will bring "imminent and serious harm"-indeed on the first day it came into force 50 of 55 women seeking care at a clinic in Fort Worth were turned away. Justice Sonia Sotomayor accused her five conservative colleaguesincluding the three appointed by Donald Trump-of a "breathtaking" act that rewards cynical lawmaking and undermines nearly half a century of abortion-rights rulings. Justice Elena Kagan added that the order came hastily and with a bare-bones explanation emblematic of recent shadowdocket rulings that are "unreasoned, inconsistent and impossible to defend".

Senate Bill 8 may eventually run up against judicial resistance, but its impact could inspire other Republican states to take up similar measures. *Roe* itself is on the line next spring when the justices decide on the constitutionality of a 15-week ban in Mississippi. The court's dismissiveness in the Texas case does not bode well for the survival of the 1973 precedent.

Closing the 9/11 era

Wauthorisation

NEW YORK

After two decades of conflict, Congress struggles with undeclaring war

GABRIEL GARCÍA MÁRQUEZ Wrote that it is easier to start a war than to end it, an observation that might also serve as a summary of America's experience since 9/11. The constitution vests Congress with the awesome power to declare war, so it is a persistent source of vexation on Capitol Hill that presidents so often drop bombs without asking permission. Yet it is possible to understand why presidents might roll their eyes at that prospect considering how much difficulty Congress is having resolving a far less weighty question: when is it the right time to undeclare a war?

At issue are two congressional authorisations to wage war in Iraq, the first issued 30 years ago, the second 19 years ago, both to presidents called George Bush. The first war ended years before the second began, and the second ended almost ten years ago. Yet both laws remain on the books, and presidents remain free to start a war against Iraq. They have not chosen to, presumably because Iraq is now an ally.

Earlier this summer, after years of struggle by a handful of senators, the Senate Foreign Relations Committee took a step towards revoking the Iraq authorisations by voting to let the full Senate consider a bill to do so. Its supporters, and even its opponents, see it as a small step towards

Congress reasserting its power over warmaking. Some in Congress hope to turn next to revising another legacy of 9/11, the authorisation of force in 2001 that four successive presidents have relied on to wage America's "war on terror" in 14 countries. Yet even the revocation of the two Iraq war resolutions is not assured.

In explaining his vote against that bill, the leading Republican on the committee, James Risch of Idaho, noted that "virtually all of us have the same agreement" about the need for Congress to assert itself, and he conceded the bill would have "zero effect" on a president's ability to respond to threats. But by repealing these authorisations, Congress would send a dangerous signal to Iran, he warned. "There are people that are going to look at this and say, 'Aha, the us is getting weak on the region."

Senator Ted Cruz of Texas went a step further—in both directions. He said he opposed the last Iraq war and that it was "a good thing" to repeal the authorisations. "We have allowed executives, both Republican and Democrat, far too much leeway in exercising the awesome might of calling into battle the us armed forces," he said. Yet he added that he would vote against the bill unless it was amended to give the president even more leeway to use force in the future, because he was also worried about Iran. This is the pickle several hawkish lawmakers find themselves in. They want to undeclare these wars, because they worry that the president, particularly one from another party, feels too free to wage war. But they do not want to undeclare these wars-because they fear the president might not go to war.

The constitution says Congress, not the president, "shall have Power" to declare war. In theory, the president appeals to Congress for authority to fight or even for a declaration of war, as Franklin Delano Roo-

sevelt did after Japan bombed Pearl Harbor. But voting for a war can be politically risky, as can voting to end a war, which might be seen as undermining troops in the field.

For their part, presidents do not like to be constrained by Congress, and they have taken to stretching previous congressional authorisations rather than seeking new ones. The classic example is the authorisation in 2001 to use force against al-Qaeda and the Taliban, which Congress passed less than a week after the World Trade Centre fell. That is the authorisation that Barack Obama invoked to strike at Islamic State (IS), which did not even exist in 2001.

Mr Biden relied on the same authority in August to justify air strikes in Somalia against what the military chiefs said were al-Qaeda affiliates. Lawmakers of both parties criticised that rationale as exceeding Congress's intent. But despite such objections, Congress has given its implicit approval to these acts of presidential creativity by appropriating money as the military mission expanded. The bill pending before the Senate does not touch the authorisation of 2001, and rewriting it will be a much tougher political proposition.

Yet as the last Iraq war shows, Congress does not necessarily get it right when it does provide authority to use force. Claims by the administration that Saddam Hussein possessed weapons of mass destruction proved false, and many members of Congress came to regret their votes. In any case, presidents often insist no authorisation is needed. When Mr Obama intervened in Libya as part of a NATO coalition in 2011, the Justice Department contended the president was acting within his constitutional authority because the use of force was in the national interest and limited in "anticipated nature, scope and duration". The bombing campaign lasted for months and helped topple the Libyan regime.



Over but not over



Where it all started

Congress spent more time investigating the killing of four American officials and contractors in Benghazi, Libya than it did looking into the 9/11 attacks. But though some representatives grumbled about Mr Obama's assertion of presidential power, Congress held only a handful of hearings on the intervention in Libya itself. Such scrutiny might have saved Mr Obama from what he later called the worst mistake of his presidency, the failure to plan for the aftermath of the intervention.

Barely a month after Mr Biden became president he dispatched two F-15 fighters to fire missiles at facilities in Syria which the armed forces said were controlled by Iranian militias. The administration said the strike was legal because it was an act of self-defence, in response to attacks on American personnel in Iraq, and also an effort to deter future attacks. Though Republicans were generally supportive, some influential Democrats did not buy the argument. Senator Tim Kaine of Virginia. a leader of congressional efforts to constrain presidential warmaking, declared that "offensive military action without congressional approval is not constitutional absent extraordinary circumstances."

The administration did not retreat from its legal claim. But Wendy Sherman, the deputy secretary of state, told the Senate Foreign Relations Committee that Mr Biden wants to work with Congress to replace "outdated authorisations" for using force with "narrow and specific frameworks". That might help restore some balance between Congress and the president when it comes to starting wars. But after America stumbled out of Afghanistan, 20 years after invading it, one hard lesson is that, regardless of which branch of government starts a war, America would benefit most from dogged congressional oversight of how that war is conducted.

Dim the lights

Star power

CREEDE

Campaigns to lessen light pollution reveal how the West is changing

T IS CALLED Colorado's last boom town. Ten thousand people stampeded into Creede in the late 1800s in search of the silver hidden within the San Juan Mountains. The town was the epitome of the Wild West, a hangout for outlaws and conmen. But more than the shoot-outs and gamblers, it was the mines that made Creede. For nearly 100 years its prosperity was tied to the price of silver. The town's last mine closed in 1985 and only about 300 people remain. Ghost towns and the creaky remnants of old mining camps litter the mountains. Now environmentalists and residents are looking to another sparkly resource to revive the economy: the stars.

Headwaters Alliance, a local non-profit organisation, wants to create a "dark-sky reserve" in aptly named Mineral County, which includes Creede. The campaign is not unique to southern Colorado. Dark-sky communities are cropping up around the American West. The International Dark-Sky Association (IDA), based in Tucson, wants towns to curb their light pollution, which harms nocturnal wildlife and obscures the stars. The IDA has certified more than 130 dark-sky places globally since 2001; 14 of them are in Colorado.

Creede may have an easier time dimming the lights than other towns.
Around 95% of Mineral County is public land. The Rio Grande National Forest and the jagged cliffs of the San Juans envelop visitors in darkness. Alex Handloff, who

is leading the effort to create the reserve, has equipped volunteer "Astro-rangers" with meters to measure the light emitted in different parts of the county.

In addition to the environmental benefits of darkness, Creede residents hope their pristine night skies will draw more tourists to help prop up the town's post-mining economy. Campers and hikers visit in the summer, but the rest of the year is lonelier, says Ian Crawford. one of the first supporters of the reserve. "There is a joke", Ms Crawford offers, that "there's a \$50 bill that floats around Creede and just goes from one place to another all winter long." But floods of people are not wanted either. Mineral County's population has grown by 22% in the past decade, though locals suggest that is due, in part, to better peoplecounting. As more Americans move West, small towns are puzzling over how to encourage economic growth without sacrificing their rural charms. Focusing on dark skies, Mr Handloff suggests, is the kind of "low-impact" tourism that might strike the right balance.

Some residents are still wary. Many small-town Coloradans share a libertarian aversion to being told what to do— even with something as small as the kind of porch light they install. More than anything else, though, preserving the night sky means getting comfortable with near-total blackness. "There's wonders out there," says Ms Crawford, "so don't be afraid of the dark."



Creede's clear air revival

Philanthropy

The woking class

OAKLAND

A narrow focus on equity risks leading left-leaning grant-makers astray

C Walloped by the pandemic. The opposite happened. Fidelity Charitable, America's largest administrator of grants on behalf of donors, handed out \$9.1bn last year, up from \$7.3bn in 2019. A study in 2020 of more than 250 American foundations showed that a majority were increasing grants for the year, by an average of 17%.

Amid this welcome rise, philanthropy is veering left. In July the MacArthur Foundation said that it would give \$80m to "combat anti-Blackness, uplift Indigenous Peoples" and otherwise advance "ethnic justice", including through reparations. In April the Ford Foundation announced \$1bn in funding for social justice. The month before Goldman Sachs, a bank, trumpeted \$100m in grants to curb bias against black women. The Mellon Foundation, traditionally a big arts and humanities supporter, announced last year a "major strategic evolution" to prioritise social justice. PolicyLink, an Oakland think-tank, tallies \$1.5bn in grants awarded for racial equity in America last year: nearly half the total for the previous nine years.

Covid-19 has had a hand in this. Reports of higher mortality among black Americans have shocked many. Purse-strings have also been loosened by loud protests against killings of African-Americans—"I've doubled down after George Floyd's murder," says Don Howard, president of California's James Irvine Foundation. The grant-maker is pulling an additional \$20m out of its endowment to serve black Americans and is now "an anti-racist organisation", says its CEO, Don Howard. The surge in giving is also due, progressive grant-makers quietly say, to Donald Trump's time in the limelight.

Amid these heady times for liberal philanthropists, many are reaching higher. Racial equity is a big goal. This is commonly defined not as equal opportunity, but rather as equal outcomes. One outfit pushing for racial equity is Northern California Grantmakers, a San Francisco non-profit advising organisations that award \$5bn in grants annually. Its CEO, Dwayne Marsh, says "equal access and equal resources" won't be enough. This view has led many grant-makers, including the Ford and MacArthur foundations, to prefer where possible grant-seekers who are black or brown.

To make this easier, lists of fund-seeking bodies led by people of colour have

been drawn up by charities like the San Francisco Foundation and Give Blck. The latter, based in Seattle, drops organisations that hire too many whites, says Christina Lewis, its co-founder, though some exceptions are made for groups that serve black Americans. Give Blck has received funding from Microsoft and the Ford Foundation.

The policy of favouring non-white grant-seekers became "much more explicit" following Mr Trump's rise, says Richard Tate of the California Wellness Foundation's Oakland office. Having white skin does not disqualify applicants, but colour plays a role in all decisions, says Mr Tate, who adds that this approach dovetails "with my identity as a biracial gay". The foundation hands out \$45m annually in grants for everything from parks to scholarships to medical school.

Giving in

Some outfits are more blunt. One is the Miami Foundation, which is partly funded by Facebook. Its strategy adviser, Charisse Grant, says applicants of colour are generally better at serving poor communities. If you choose whites, she says, "you're not necessarily getting the best." She sees growing political support for this view. The Philanthropic Initiative for Racial Equity, a publisher of grant-making guides based in Washington, DC, writes that mostly-white organisations should be subject to "far more rigorous" vetting than usual.



Such practices have boomed in the past two years. Most big foundations now require detailed reporting on ethnicity, says Debi Ghate of the Philanthropy Roundtable, a non-profit organisation in Washington, DC. She argues that the newfound focus on group identity can divert attention away from scrutinising the charity's performance. Asking if diversity is always visible (as opposed to things that cannot be seen, like sexuality or religious orientation), she adds, is now "outside the guardrails...you will be called a racist." The Philanthropy Roundtable, she says, is regularly contacted by charity professionals who say they lost their jobs "because I don't fit the checklist".

Despite such criticism, the tide is not turning. The California Wellness Foundation intends to reduce the proportion of whites who invest in its \$1bn endowment. As for fundraising, more organisations say they now pay less attention to potential donors' net worth, focusing instead on their race and gender. Ms Grant of the Miami Foundation calls this "democratising philanthropy". Edgar Villanueva of the Decolonising Wealth Project, a New York grant-maker, says the extra selectivity also curbs "reputational laundering" by undesirable would-be donors with an eye on philanthropy's "very selfish benefits".

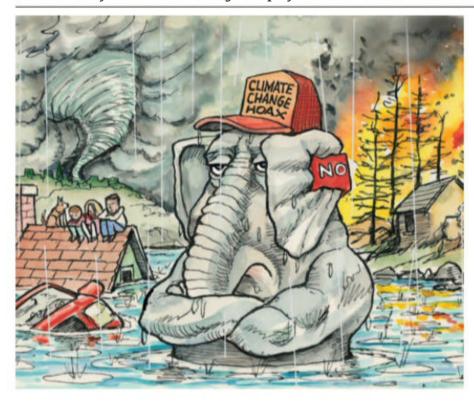
Other ambitious goals are cropping up. One relies on a creative argument promoted by Joanne Barkan, an editor of *Dissent*, a New York magazine. Charitable donations can reduce tax bills. Since this diverts money from public coffers, it's "almost obscene", she says, that grants are awarded without some state control. Ms Barkan seeks legally mandated racial and gender quotas for foundation boards.

A different approach to constraining charitable giving is making more headway. By one count, at least 16 states this year alone have mulled limiting donor anonymity (under guises including combating fraud). Such laws would encourage shaming on Twitter. However, activists should note that limiting anonymity will also cut donations to progressive outfits like the San Francisco Foundation, says Fred Blackwell, its CEO. Many people want to give without alerting the world's fund-raisers, not to mention their adult heirs.

Where is this heading? Naomi Schaefer Riley, a philanthropy expert at the American Enterprise Institute, a conservative think-tank, reckons nowhere good. Ms Ghate gives the example of a charity doing work with ex-prisoners. Though the white woman running the charity, who had herself been to prison, was producing results, the charity's funder shifted funding to other organisations led by people of colour. "This is no longer about the community: it's a new issue of what the leadership looks like," she says.

Lexington | Through a glass darkly

Storms and fires will not bring escape from America's stuck climate politics. But an exit is visible



Reading his local newspaper last month, Bruce, a 70-year-old retired executive, could take it no longer. "Almost every article" on Nola.com—website of the *Times-Picayune*, New Orleans's paper of record since 1837—had "an element of Wokeism", he wrote in an email cancelling his subscription. Among those elements, he objected especially to references to climate change, an issue that he considered "had not been empirically established".

"Case in point: It's August 23rd and there is **no** tropical activity presently being monitored in the Atlantic or the Caribbean," he wrote. "But just a couple of weeks ago Nola.com advised that we should be ready for a higher-than-normal level of tropical activity this season—due to Climate Change." As Bruce was desperately manning the defences of his home this week against the severe flooding wrought by one of the fiercest tropical storms on record to hit Louisiana, your columnist got in touch to ask whether he had revised his sceptical view.

Not a bit. Louisiana had had bigger hurricanes than Ida, he said. His house on the Bogue Falaya River was flooded in 2016. And though he didn't claim to understand storms, Bruce (who asked for his surname to be withheld because he feared retribution from the federal flood-insurance agency) felt scientists didn't either. He did not deny climate change was happening. But he believed it was "on a longer cycle" than that described by scientists and journalists, whom he accused of trying to "divide people".

It was once hoped that as Americans started to experience global warming's devastating effects they would become more accepting of climate science. But as Bruce and millions like him illustrate, this is not happening. After four years of warming-related tempests in the south-east and infernos out west, public opinion has hardly budged. Six in ten Americans think global warming is anthropogenic and already manifest, and want drastic cuts in fossil-fuel use. The rest, a group that represents a majority of Republican voters, say the opposite, come fire or high water.

This capacity for motivated reasoning is losing its power to amaze. Every day brings reports of Trump voters denouncing co-vid-19 vaccines on their covid-19 deathbeds. By comparison, the complacency the same voters show towards the impacts of warming is almost rational. Bruce believes in hurricanes. He just

doesn't believe climate change is making them more frequent or fiercer; so why should a bad storm, or several, make him think differently? Especially—as covid-19 also shows—because people normalise extreme circumstances. In a seminal study of white conservatives in coastal Louisiana, the sociologist Arlie Russell Hochschild asked how they reconciled their loathing of environmental regulation with living in one of the most polluted areas of the country. Part of the explanation was that they grew used to the pollution. Unlike the maligned frog, which will try to flee a dangerously high temperature however gradually it has been raised, humans are liable to wallow and boil.

Another part of the answer is short-term self-interest. Many coastal Louisianans (including formerly Bruce) owe their living to carbon-intensive industries. Evidence from Australia suggests this is an obstacle to climate realism everywhere. Yet America is the world's leader on climate-change scepticism for additional political and cultural reasons that will be hard to unwind.

Most obvious is how systematically one of the two governing parties has misled its voters on the issue. Until the mid-1990s, Republicans and Democrats worried about climate change equally. Voters on the right were then persuaded to quit worrying by a well-documented misinformation campaign, paid for by industrialists and executed by conservative think-tanks, politicians and media. The parties diverged so sharply on the issue that their respective positions—accepting climate science or rubbishing it—became a mark of political identity. That made them even more entrenched.

There have always been Republicans arguing against the misinformation, including John McCain and in recent years lesser figures, such as the members of the newly formed Conservative Climate Caucus. Yet the sceptics hold sway because of how strongly their message is aligned with the party's other main currents.

One is a pessimistic strain of evangelical Christianity. On global warming, as on covid-19, white evangelicals are especially anti-science and ready to rationalise the negative fallout of their views as God's will for a fallen world. Another is mistrust of expertise, cemented by decades of misinformation. Both factors propelled Donald Trump—the most anti-science Republican leader ever. And it is unclear that even he could now redirect his followers on climate change. When he recommended they get vaccinated against covid-19 at a rally last month, Mr Trump was booed.

Shelter from the storm

Yet despite these depressing fundamentals, the situation is not hopeless. The falling cost of renewable energy, and its deployment across Republican states, has created surprisingly broad support for decarbonisation even among those who claim to see no need for it. A recent poll found that Joe Biden's plan for a zero-carbon electricity grid by 2035 is backed by a majority of voters in every state and all but six congressional districts. The proposed means to pay for that shift—borrowing trillions from the future—also has something approaching bipartisan support among voters. To launch the transition, via the sweeping budget bill the Democrats are now preparing, all that is needed is unanimity among their own senators. And the natural disasters that are now buffeting both coasts have probably made that more likely.

It may be little consolation to the million Louisianans without electricity in 90-degree heat, but storms always bring, as well as destruction, a hope of refuge. Ida is no exception. The front door may be barred; but America is inching towards a possible escape from its dysfunctional climate politics round the back.

25



Venezuelan talks

Machiavellian manoeuvres

CARACAS

Nicolás Maduro's regime and the Venezuelan opposition meet in Mexico

The darkened rooms of Mexico's Museum of Anthropology contain countless relics of civilisations that rose and fell long ago. So it was an eerily suitable setting for the latest round of talks designed to move Venezuela beyond its current, wretched era. With a Norwegian mediator and Mexico's foreign minister looking on, representatives of Nicolás Maduro's dictatorial regime and the opposition signed a memorandum of understanding on August 13th, laying out a framework for further talks. The stated goal is to hold fair elections in return for the lifting of international sanctions.

The new negotiations were due to begin on September 3rd (after *The Economist* went to press). They may go on for months or even years. In Venezuela many people are sceptical. "It's the same 'blah blah' we've heard before," says Nordelys, a teacher in the city of Maracay. It will be the fifth time the government and the opposition have held formal negotiations since Mr Maduro took over from the late Hugo Chávez in 2013. Previous efforts have come to naught. Instead Mr Maduro has consolidated his

authoritarian rule, and further impoverished his country. Since 2013 GDP has shrunk by over 75%.

Those behind the negotiations insist that this time is different. "A lot of hard work—on many fronts—has gone on to get us this far," says a European diplomat in Caracas. Unlike previous talks in Barbados in 2019 and the Dominican Republic in 2017, which were low-key affairs, the meetings in Mexico have international backers. Russia, which has close ties with the Venezuelan military, will attend as one of a "group of friends" of the regime. The Netherlands will assist the opposition.

Optimists note that Donald Trump is no longer in the White House. His policy towards Venezuela was one of "maximum pressure". That meant ramping up sanctions and vaguely threatening military action. His administration was also instru-

→ Also in this section

26 Cuddlier Canadian Conservatives

Bello is away

mental in forming an international coalition of almost 60 nations which recognised Juan Guaidó, an opposition leader, as Venezuela's legitimate president, on the basis that Mr Maduro had stolen elections in 2018 and was ruling as a dictator. The ambition then was to topple Mr Maduro, not to talk to him.

That policy failed. Although Mr Maduro is supported by only 16% of Venezuelans, according to Datanalisis, a pollster in Caracas, he has all the guns and is prepared to use them. The opposition are exhausted, hungry and scared. Mr Guaidó, who in 2019 was able to bring a million supporters out onto the streets, is no longer a threat. The number of countries that still refer to him as president has dwindled to eight. The army remains solidly behind Mr Maduro, not least because he gives officers golden opportunities to enrich themselves. Nearly 6m people—a fifth of Venezuelans—have emigrated in despair.

That raises the question of why Mr Maduro would bother to send a delegation of negotiators to Mexico. The most basic motive is Machiavellian: a desire to divide his enemies and end the declared "interim presidency" of Mr Guaidó. Perhaps it is no accident that the lead negotiator on the regime side is Jorge Rodríguez, a former vicepresident and a trained psychiatrist. Some suggest Mr Rodríguez enjoys playing mind games with an opposition which, for months, agonised over whether it should take part in the talks.

Mr Guaidó and Leopoldo López, an ex-

iled politician who is his mentor, were especially wary. Both have previously argued that Mr Maduro, whom they call a "usurper", should stand down before serious negotiations about the future of Venezuela can begin. Other members of the opposition, notably Henrique Capriles, a former presidential candidate, have taken a more nuanced stance, arguing that engagement, including participation in far-from-perfect elections, should continue, to avoid becoming politically irrelevant. Mr Guaidó finally agreed to be part of the talks in May. That decision was influenced by the conclusion of President Joe Biden's administration that there is no quick fix to Venezuela's disaster. "It's been an enjoyable spectator sport for us," admitted a regime ally, referring to the opposition's dithering.

But beyond taunting a weakened opposition, Mr Maduro also has plenty to gain from successful talks. The main advantage would be at least a partial lifting of sanctions, which have been progressively stacked up against his regime since 2015. Those imposed by the United States target the oil industry, access to capital markets, and on an individual level almost all of the regime's top brass. The economy has little hope of recovery so long as the sanctions remain in place.

The Biden administration has said it is prepared to offer some relief. It will do so once Mr Maduro's regime, which has spent the past eight years hijacking all democratic institutions, shows it has changed its ways. The first test of that will come on November 21st, when regional elections are scheduled to choose the country's 23 governors and 335 mayors.

Most of the opposition stopped participating in elections after those in 2017, in protest at rampant rigging. However on August 31st Unity Platform, an umbrella group of all the main opposition parties, declared it would take part in the vote, while also conceding that the process would probably not be "fair or conventional". The decision appears to be a show of goodwill towards the talks.

Similarly, earlier that day Freddy Guevara, a prominent politician in Mr Guaidó's party, unexpectedly called for an end to the combative strategy against Mr Maduro's regime. "For years, one of the sides has felt strong and has believed it could smash or completely displace the other," he said. "This dynamic, this vicious circle, has to stop. We need a process of coexistence." Days earlier he had been released from prison, after being arbitrarily arrested by state security forces in Caracas in July. He may now form part of the opposition's negotiation team.

Few ordinary Venezuelans expect the Mexico talks to achieve much. But the participants seem strangely confident that change is possible. ■

Canada's election

A cuddlier kind of Conservatism

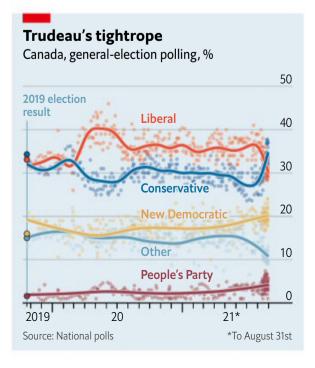
VANCOUVER

Erin O'Toole is trying to win over centrist voters

7 HEN JUSTIN TRUDEAU called a snap Welection last month, to be held on September 20th, he wagered that a grateful electorate emerging from lockdown would reward his minority Liberal government with a whopping majority. The prime minister has done a decent job of dealing with the pandemic (notwithstanding a recent spike in cases). As a share of the population, Canada's 26,900 confirmed deaths are just over a third of those of the United States. Three in four Canadians aged 12 and older are fully vaccinated. Yet a flurry of recent polls puts Canada's Conservatives, led by Erin O'Toole, an indefatigable if uncharismatic campaigner, within striking distance of unseating Mr Trudeau (see chart).

Many Canadians detect some opportunism behind the timing of the election call. Two-thirds of voters say now is the wrong time for a federal election, as it is less than two years since the previous one. But the rise in Conservative fortunes is also partly due to Mr O'Toole, a former helicopter navigator. He is rebranding his party to make it more palatable to centrist voters. A pair of televised debates for party leaders on September 8th and 9th may be more important than in any recent campaign.

Mr O'Toole's strategy is simple. He is convinced that if his party is to win again, it must become a bit cuddlier. Elections in Canada are won and lost in the comfortable, moderate suburbs of Toronto and Vancouver. The more divisive views of Mr O'Toole's predecessors, Stephen Harper and Andrew Scheer, such as their narrow interpretation of "Canadian values" and,



more recently, their doubts about whether refugees could fit in, went down badly in such places. This contributed to the party's electoral defeats in 2015 and 2019.

Mr O'Toole sounds less hawkish on public spending than his predecessors. Canada's net debt as a share of GDP stayed flat at around 31% under Mr Harper, who was prime minister from 2006 to 2015. Covid-19 and Mr Trudeau have pushed it higher, to 50%. Mr O'Toole says that Mr Trudeau's pandemic largesse, such as cash grants of C\$500 (\$396) a week to laid-off workers, was necessary. He would extend the government's income-subsidy scheme by agreeing to cover for employers up to 50% of a new hire's salary for six additional months. As for eliminating the budget deficit, which soared to C\$314bn (14% of GDP) last fiscal year, Mr O'Toole says he will do it in ten years, which is three elections away.

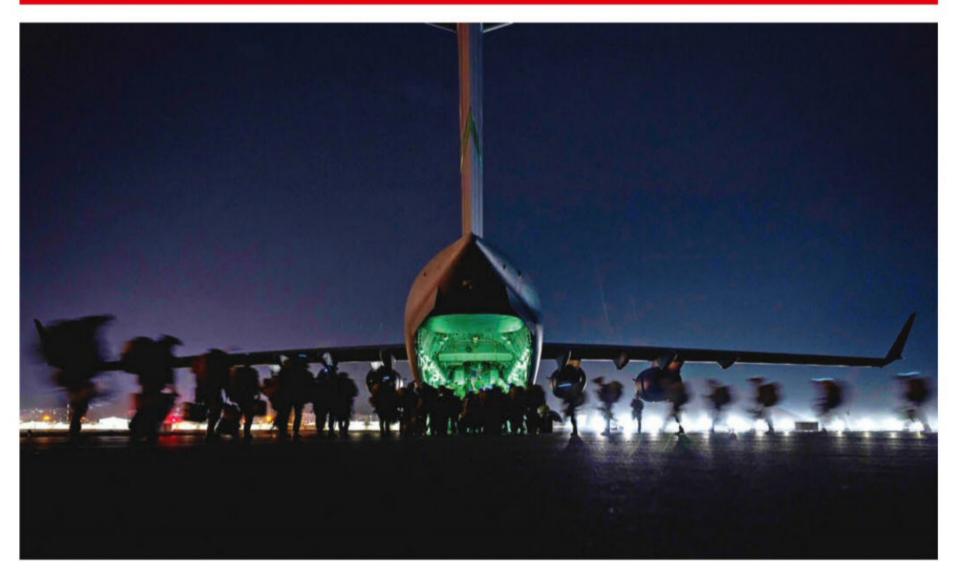
On social issues, Mr O'Toole is a moderate. He says he will "address the gender pay gap". The leader of the Tories proposes paying C\$200 per month to any Canadian who is living with and taking care of a parent over the age of 70. Most beneficiaries will be women. Whereas Mr Scheer said he was against abortion (though he would not seek to change the law), Mr O'Toole is prochoice. He is also less hostile to trade unions, pledging to "level the playing field" between them and big businesses.

Mr O'Toole is also keen to parade his green credentials. For a start, he has vowed to expel climate-change sceptics from his caucus. He supports a price on carbon of C\$50 a tonne but no more. That is far less ambitious than what Mr Trudeau has proposed: a national floor that would eventually rise to C\$170 a tonne. Yet Mr O'Toole faced an enormous backlash from party members. Any kind of carbon tax is unpopular in Canada's oil-producing west, the heartland of Canadian conservatism. The Tories would also require 30% of light vehicles sold in the country to be emissionsfree by 2030.

The Conservative leader has displayed keen political instincts on the campaign trail. He avoids broaching topics which, though they may animate his base, risk alienating the broader public. Party stalwarts, for example, routinely complain about what they see as the left-wing bias of the CBC, the country's public broadcaster. But Mr O'Toole has refrained from attacking it, possibly because the CBC remains popular in much of Canada.

The risk of adopting a more moderate stance, however, is that disaffected voters on the right may cast their lot instead with the People's Party, a populist outfit which has endeared itself to anti-vaxxers. Mr O'Toole has reason to worry. The People's Party is polling at a record 6% in some polls. A divided vote on the right could yet help the Liberals secure a third term.

Asia



Afghanistan

After the airlift

ISLAMABAD

The world faces up to a victorious Taliban

MERICA WAS defeated," Zabihullah Mujahid, the Taliban's spokesman, declared at Kabul airport on August 31st. Hours earlier the last American soldiers in Afghanistan had trudged onto a cargo plane and flown home, leaving their client state in ruins and their enemies in charge. Celebratory gunfire echoed around the city. But Mr Mujahid was circumspect in victory: "We want to have good relations with the Us and the world."

The US and the world, though, are playing it cool. On August 30th the UN Security Council issued a list of demands to the Taliban. The first was that they should combat terrorism: an implicit rebuke of their alliance with al-Qaeda, a terrorist group. Another was that they should respect human rights and form an "inclusive" government "with the full, equal and meaningful participation of women". The third was a warning that the Taliban should allow free emigration; tens of thousands of Afghans eligible for resettlement abroad have been left behind.

The Taliban are eager to shed their old

image as theocratic brutes. Yet they are not rushing to meet these conditions. On the same day that diplomats met in New York, Amin al-Haq, a former security chief for Osama bin Laden, returned triumphantly to his home in Nangarhar province, no longer afraid of American drones. The Taliban's proposed cabinet is not just insular, but so dominated by southern Talibs that it has "enraged the easterners and northerners" in the movement, says Antonio Giustozzi of King's College London.

The West's hope is that a mix of carrot and stick can induce better behaviour. Aid to Afghanistan previously ran to \$8.5bn a year, or 42% of GDP. Less than \$800m of that, spent on humanitarian projects, is

→ Also in this section

- 28 Afghanistan's television channels
- 29 A natural experiment in Indonesia
- 29 Singapore closes a liberal-arts college
- 30 Banyan: The uninspiring Mr Suga

likely to survive. The World Bank and the IMF have suspended financing, and America has frozen \$7bn in Afghan foreign reserves held in New York. At home, the Taliban can raise \$3bn annually at best, says one expert. They will have smaller outgoings than the old regime—they will not need to bankroll such a bloated army—but they will still face a crunch, and an acute shortage of dollars. A weakening currency is already causing prices to rise.

On August 24th Boris Johnson, Britain's prime minister, boasted that the G7, a club of rich countries, had "huge leverage" over the Taliban. In fact, the two sides are co-dependent. Around 200 Americans and over 100 Britons remain in Afghanistan, along with large numbers of vulnerable Afghans. Getting them out requires not only the assent of the Taliban, who have said they want to discourage emigration, but also a functioning airport. Qatar, which hosts the Taliban's political office in Doha, currently has a technical team at the airport, and, along with Turkey, is in talks with the Taliban to reopen and run it. Yet this cannot happen without the Taliban dropping their opposition to a foreign military presence.

There may also be pragmatic deals to be done on counter-terrorism. Though the Taliban remain close to al-Qaeda, they detest Islamic State Khorasan Province (ISKP), a jihadist outfit which killed over 170 Afghans and 13 American troops on August 26th. During its evacuation from Kabul, America quietly slipped intelligence

to the Taliban about ISKP, according to an American general, and the Taliban thwarted some attacks. It may be America that is soon in need of the intelligence; a drone strike targeting ISKP on August 29th is reported to have killed ten Afghan civilians. Yet co-operation with the Taliban would be awkward, if not legally tricky.

For the Taliban, the West is not the only purveyor of cash, recognition and co-operation. Qatari and Turkish involvement suggests that Saudi Arabia and the United Arab Emirates, their rivals, cannot be far behind. Pakistani sources say that recognition of the Taliban is not yet on the cards, but they urge the West not to cut off the group entirely. One official acknowledges that recognition and aid should be conditional on behaviour, but insists that the group is not as autarkic as it once was: "They realise that to make a government and run a country, they need international support. It can't be run like North Korea."

Notably, China and Russia both abstained from the UN Security Council Resolution on August 30th. Behind the scenes, they argued it was unnecessary and diluted its language to ease pressure on the Taliban, says Richard Gowan of the International Crisis Group, a think-tank headquartered in Brussels. Russia publicly criticised the scale of America's evacuation, describing it as a "brain drain".

China's interests in Afghanistan—political stability and counter-terrorism, particularly against Uyghur militants-are not dissimilar to those of America, says Andrew Small of the German Marshall Fund, a think-tank in Washington. On August 28th Yue Xiaoyong, China's envoy to Afghanistan, demanded that the Taliban make a "clean break with all terrorist organisations". Yet his government is undoubtedly keener than the West to move ahead with diplomatic recognition. "We are pleased to see that all forces from different traditions, tribes, nationalities or political parties have come together," said Mr Yue. (They have not).

Some sceptics have fallen in line. India, which views the Taliban as a proxy of Pakistan, sent a diplomat to meet Sher Mohammad Abbas Stanikzai, the head of the Taliban's political office, in Doha on August 31st—India's first ever official meeting with the group. Officials from Britain and the Netherlands made the same trip.

Sir Nicholas Kay, a former British ambassador to Afghanistan, says he doubts that the Taliban have changed much at all, but he urges Britain to re-establish a diplomatic presence in Kabul, if not a fullblown embassy. "We test what they say by their actions, but engaging is very important," he adds. "We ought to be a great deal more realistic and humble than we have been over the last 20 years about our ability to influence Kabul."

Cutting Kabul's cable

Thriving television channels prepare for a crackdown



MILLIONS OF AFGHANS tuned in to Tolo, a local broadcaster, to watch an interview on August 20th with Malala Yousafzai, a campaigner for girls' education who won the Nobel peace prize after the Pakistani Taliban shot her in the head and nearly killed her. Soon afterwards an Afghan Taliban spokesman visited Tolo's offices in Kabul for a two-hour discussion on the media and women's rights. Rather than complain or issue threats, he promised that the new government would respect the freedom of the press.

A few days earlier, another spokesman was interviewed on Tolo by a female anchor, a first for the Islamists. At press conferences the Taliban's officials have answered tough questions ("Have the Afghan people forgiven you?") that might get a journalist in Saudi Arabia thrown out of the room. The Taliban say they have mellowed since the last time they were in power. Their initial tolerance of Afghan television is part of a campaign to persuade the world they mean it.

The Taliban, like any half-competent political outfit, are skilled in using social media. That helps them reach an international audience. But the group's approach to commercial television will play a bigger role in influencing how Afghans see their new government. When the Taliban ruled the country in the late 1990s, they attempted to ban TV and went around smashing Afghans' sets. To do the same today would be politically costly. Tolo, the country's leading broadcaster, was set up in 2004. There are now more than 200 local and international TV channels, with pro-

gramming covering the gamut from cooking contests and game shows to Islamic education and sports. Many Afghans have no experience of life without mass media.

Nearly 70% of Afghans watch TV, according to a survey by the Asia Foundation, a non-profit, in 2019, whereas only 30% have internet access. Prime-time shows can attract 10m-12m viewers, more than a quarter of the population. Far more people voted last year in the finals of "Afghan Star", a music competition (pictured) resembling "American Idol", than in the national election. "There is nothing else to do," says Saad Mohseni, Tolo's boss. "People all gather round the TV and discuss the shows for hours. It's like the United States in the '50s." And unlike social media, which often isolate users in ideological bubbles, Afghan TV is mostly a moderating force.

In 2008 the government attempted to ban a popular Indian soap opera, "Because the Mother-in-Law Was Once the Daughter-in-Law", which the culture minister considered too racy. Fans were outraged. Tolo fought the ban in court and the government backed down. It also backed down that year in a tussle with another popular broadcaster, Ariana Television Network, after detaining the host of an investigative programme for criticising the performance of two government ministers.

While Tolo has stood its ground on news, it has made some concessions on its entertainment programming. In anticipation of more puritanical rules, the channel has stopped airing two Turkish soap operas, as well as shows that feature singing. It has filled the time by doubling the length of the 6pm news broadcast to an hour and by showing cricket matches and a historical series about the Ottoman Empire.

Many Afghans think the Taliban will gradually tighten the reins. The female presenter who interviewed a Taliban spokesman has fled. Taliban footsoldiers recently beat up a Tolo journalist and a cameraman. Yet if the Taliban make television dull and conservative, or ban it altogether, they will alienate a huge proportion of Afghans and also lose a means to influence them. What is more, censoring or outlawing television would undermine their campaign to convince the world that they have joined the 21st century—or at least the 20th.

Prostitution in Indonesia

Perverse outcomes

Criminalising sex work does more harm than good

Sunti Ani, an Indonesian sex worker, has been arrested more times than she can count. She lives in Malang, in the province of East Java, where her trade was criminalised in 2014 on the basis that prostitution is "prohibited by all religions". Until then, she worked in a brothel. But after, she says, "we were forced to see our clients in cafés and on the streets." She earns less money than before. And she is more wary of the police, who once used her possession of a condom as evidence against her.

Indonesia has no national law that directly regulates prostitution. But some local governments have used an ambiguous "Crimes Against Morals" law to ban sex work in their districts. In 2014 Malang shut down brothels as a "birthday present" to the district, timing the closure to coincide with the 1,254th anniversary of its founding. An official told sex workers to "get a job that is more pleasing to God".

Some prostitutes in Malang stayed at the brothels and worked clandestinely. Others took their work to the streets. Some gave up on sex work and returned to their villages. Where once such work was done during the day, it shifted to the night. A sign in a brothel that said "condoms must be used here" was changed to advertise karaoke, though opportunities for warbling to old chartbusters proved scarce. Ms Sunti Ani took up the God-pleasing vocation of waiting tables but quit when her co-workers found out about her former career.

Even as Malang embarked on its crackdown on prostitution, brothels in two nearby districts remained open. That presented researchers with a control group. Comparing indicators from Malang and its neighbours, Lisa Cameron of the University of Melbourne, Jennifer Seager of George Washington University and Manisha Shah of the University of California, Los Angeles found that within six months of criminalisation, sexually transmitted infections (STIS) among sex workers in Malang had risen by 58%, even as they remained stable in the control group. Nor was the policy effective at reducing prostitution: though the sex market initially shrank, it grew back to its original size after five years.

Public-health measures suffered as a result of the ban. Many prostitutes in Malang lost access to the STI checks and cheap condoms that non-profits and local health officials used to provide. Some organisations stopped administering services to sex workers because they were wary of aiding a criminalised trade. Those that continued have had a harder time locating sex workers because they are no longer centralised in brothels. Condom prices tripled as subsidised ones disappeared. As sex workers' earnings fell, some compensated by offering clients unprotected sex, for which they can charge more.

The findings fit into an existing body of evidence that suggests criminalising sex work leads to bad outcomes. Negotiations may be rushed if sex workers must keep an eye out for the police, and this reduces their bargaining power. They become more vulnerable to assaults if they are reluctant to report them. Criminal records often prevent them from getting other kinds of jobs. One study suggests that decriminalising sex work may reduce rapes, even among the general population. These costs can be particularly high in poor countries, where relatively more women sell sex. For now. Ms Sunti Ani continues for the sake of her family. Her sex work pays for her daughter's education. ■



Into the shadows

Higher education in Singapore

Lessons learnt

SINGAPORE

Singapore's first liberal-arts college closes its doors

Chasses the next day were cancelled, the email said, and everyone was encouraged to attend a town hall instead. A wave of speculation rippled through the student body at Yale-Nus, a college set up in 2013 as a tie-up between Yale University and the National University of Singapore (Nus). At the meeting on August 27th administrators announced that the college's programmes will be combined with another at Nus to form a new institution by 2022. When the current crop of first-years graduate, Yale-Nus will cease to exist.

Most undergraduate students in Singapore choose specialised courses of study, such as medicine or law. Some universities had begun experimenting with interdisciplinary curriculums but it was with Yalenus, the city-state's first liberal-arts college, that Singapore signalled its commitment to a new approach. Its launch was billed as a grand experiment testing whether an American-style liberal-arts education could sink roots in Asia.

The decision to close the college was made by NUS, which is consolidating six departments, Yale-NUS among them, into three new colleges. The restructuring, which affects about 18,000 students or half the student body, is in fact a mark of the university's commitment to the liberal arts, argues Chan Heng Chee, a diplomat who sits on the college's board. The purpose is to make "liberal-arts education more accessible [to Singaporeans] and more inclusive", she says. Yale-NUS is "exclusive", she argues. It admits at most 1,000 students a year, 40% of whom are foreign. The new college will enroll twice as many students and will, if NUS fees are anything to go by, charge them less.

Another reason to close the college was its "financial unsustainability", says Ms Chan. Yale-Nus had hoped eventually to secure as much private funding as do toptier American liberal-arts colleges, but by March had raised just a measly \$320m. Concern about the financial model "started the conversation" about what to do with the college, says Ms Chan. But Pericles Lewis, the first president of Yale-Nus, who also sits on the board, notes that it had "a few years left" to achieve its fundraising targets, and could have doubled the number of students it admits.

Some professors and students suspect there were other considerations at play. Political activism is frowned upon in Singapore, which has been ruled by the same party since 1959. Yale-NUS students were more likely to express their political views and were better organised than their peers at other universities, says Cherian George, the author of a recent report on academic freedom in Singapore. Ms Chan poohpoohs the notion that the government was keen to muzzle mouthy students. The government, she says, knew what it was signing up for when it launched the college.

At the opening of the new campus in 2015 Lee Hsien Loong, Singapore's prime minister, said that the college would have "to adapt the Yale model to Asia". Four years later the college appeared to do just that when it cancelled a course on dissent taught by a prominent playwright because, it said, it was not sufficiently rigorous. Responding to allegations that the college had caved to political pressure, Mr Lewis conducted an investigation which yielded no evidence of government coercion. Yet Ong Ye Kung, then the education minister, supported cancelling the course, declaring in Parliament that "political conscientisation"—when people become aware of how they are oppressed—"is not the taxpayer's

idea of what education means".

News of the closure came as a shock to students and teachers, who were not consulted. Neither was the college president, Tan Tai Yong, who was reportedly "gobsmacked and flabbergasted" when informed in July. During the virtual town hall, microphones were muted; students had to send questions via a mediator. At the end of the meeting, students could be heard shouting with frustration, according to the college newspaper. All they are likely to get in return for their "conscientisation" on this issue is silence.

Banyan The missing warrior

Suga Yoshihide is unpopular, uninspiring and struggling to survive

N IMAGE OF seven samurai hangs in Athe meeting room of Amari Akira, a heavyweight from Japan's ruling Liberal Democratic Party (LDP). Designed by a popular video-game artist, the print served as promotional fare ahead of the country's last nationwide parliamentary elections, an upper-house ballot in 2019. The principal samurai is meant to be Abe Shinzo, then the prime minister, while the secondary figures represent his allies, including Mr Amari and Suga Yoshihide, who served as Mr Abe's chief cabinet secretary for nearly eight years.

When Mr Suga took over as LDP president, and thus as Japan's prime minister, after Mr Abe resigned a year ago, many wondered how he would adapt to being in the leading role. Mr Suga had excelled at the shadowy side of politics—haggling over legislation and bashing bureaucratic heads—but not the public-facing part. A year later, the answer is clear: poorly. His cabinet began with approval ratings above 70%. They have now dipped below 30% in some polls.

Moreover, his party has struggled in a string of by-elections and local contests over the past year, a record many see as a verdict on Mr Suga's leadership. National lower-house elections loom later this autumn. But first Mr Suga must win a full term as LDP president in a vote of party members and parliamentarians on September 29th. Many in the LDP, especially younger backbenchers, fret about keeping Mr Suga on as the party's face.

Mr Suga's administration has had some successes. He set Japan, long a climate-change laggard, a goal of becoming carbon neutral by 2050. He is trying to solve its problems of archaic government services with a push for more use of digital technology. And even though his approach to covid-19 has been muddled and flat-footed, leaving much of the population dissatisfied, Japan has seen fewer deaths, both in absolute and proportional terms, than any other G7 country.

Mr Suga's main problem is his inability to communicate effectively with the public. His speeches sound like dry bureaucratic briefings. In parliamentary debates he often stonewalls instead of defending his policies. He "doesn't say anything", says Shii Kazuo, the head of the Japanese Communist Party, an opposition party. Theories about the source of his coldness abound, many of them spurious. Some reckon it is because he grew up in Akita, a snowy northern region said to breed taciturnity. Others write him off as a lowly farmer's son, an immigrant to Tokyo unsuited to positions normally held by hereditary politicians (Mr Abe's grandfather was prime minister and his father foreign minister).

A more generous explanation is that Mr Suga is a man of policy, not politics. "Mr Suga is someone who believes that results are everything," says Mr Amari, who supports Mr Suga in the LDP presidential race.





Unfortunately for Mr Suga, that is exactly what Japanese voters seem to want from their political leaders right now. In a time of crisis, people want to feel a sense of sympathy from their politicians, says one younger LDP parliamentarian. "They aren't getting that from Suga." While Japanese politicians of an earlier era could get away with being colourless and paying little attention to messaging, "these qualities are much less acceptable to the Japanese public today," says Gerald Curtis, a long-time observer of Japanese politics.

Nonetheless, Mr Suga's chances of surviving the LDP leadership contest are better than such criticisms might suggest. He topped a recent poll among LDP supporters. He retains the support of three key party elders with large factions of Diet members behind them: Mr Abe. Aso Taro, the finance minister, and Nikai Yoshihiro, the LDP's secretary-general. Observers reckon they are unlikely to be swayed. Nor are the current challengers any more compelling than Mr Suga.

That Mr Suga has a good chance of surviving despite his obvious unsuitability for the role is a reflection on the sorry lack of competition in Japanese politics. Although LDP members may worry about losing many seats in the Diet elections, few think they could actually lose power—the opposition parties remain too unpopular for that. Nor is intra-LDP competition producing a healthy crop of leaders. That too is a change, says Mr Curtis: "It's an indication of the lack of [the] dynamism that we used to see in the LDP." In Japanese politics these days, even one good samurai is hard to find.

China



Property

Red lines, grey rhinos and big mountains

HONG KONG

Can China stabilise its property market and its economy at the same time?

Oday in Washington. It was not the kind of day that augured wrenching change in economic policy. But on that date Paul Volcker, then chairman of America's central bank, announced a radical plan to quash persistent inflation. Before the battle was won, America's interest rates reached 20% and unemployment surpassed 10%. Car dealers sent him the keys to vehicles they could not sell, in coffins.

China is now facing its own "Volcker moment", according to Ting Lu of Nomura, a bank. The government's aim is not to curb an inflationary spiral (China's consumer prices are rising only modestly) but to break a vicious circle of property speculation and credit expansion. Regulators are making it harder for developers to raise money and for households to buy homes. The new rules have already pushed several property firms, including the country's biggest homebuilder, Evergrande, to the brink and contributed to a decline in home sales. But are China's rulers willing to endure anything like the economic discomfort that Volcker inflicted to achieve their

goals? The world may be about to find out.

An Englishman's home is his castle. In China, a home is much more besides. As well as providing shelter and security, housing often serves as collateral, nestegg, speculative investment, bride-price and ticket to a good school. Housing makes up three-quarters of household wealth, according to the China Household Financial Survey, a data set compiled by academics in China. It accounts for the biggest chunk of household debt, which by one estimate exceeded 70% of GDP at the end of last year. Local governments raise 30% of their revenue by selling land to developers. And policymakers often rely on homebuilding to revive the economy in downturns.

Property dons other guises, too. The high price of housing is often likened to a "big mountain" (alongside costly health care and education) and a "grey rhino" (an

→ Also in this section

32 The problem of coal

34 Chaguan: Teaching Xi Jinping Thought

obvious but neglected risk). In March Guo Shuqing, the head of China's banking and insurance regulator, warned that if house prices were to drop, people holding multiple properties would not only suffer "huge losses", they might also fall delinquent on their mortgages, endangering the banks and leading to "economic chaos".

The government wants property to play a more modest role. In December 2016 President Xi Jinping said homes were for "living in, not for speculating", a phrase that officials now often repeat. In 2019 the Communist Party declared that property was not a tool for short-term economic stimulus, a commitment reiterated at a meeting of the ruling Politburo in July.

The authorities are facing the grey rhino more squarely by trying to tackle the industry's financial fragilities. Last year regulators capped the share of mortgages and property-related loans that banks may hold. They also imposed "three red lines" on prominent property developers, limiting the size of their debts relative to their assets, equity and cash. Now when the president of Country Garden, a high-end developer, talks of his aim to "turn green" he is not referring to the environment, but to keeping clear of those lines.

The impact of the curbs on the property market is becoming more stark. Sales of new homes in 30 cities tracked by Wind, a financial-data firm, fell by 23% in August compared with a year earlier, having fallen less sharply in July and June. Sales were also lower than in the same period of 2019,

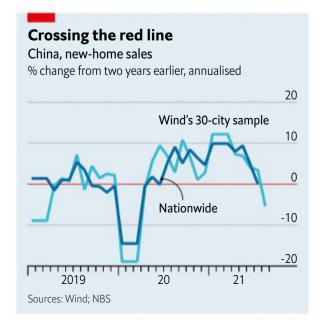
before the pandemic (see chart). Nomura's Mr Lu says investors should prepare for a "much worse-than-expected growth slowdown, more loan and bond defaults, and potential stockmarket turmoil."

Will the regulators blink? In the past, policymakers have been quick to ease property curbs in downturns. A big drop in house sales or prices over several months would probably "jolt the government into a more dovish stance", argues Rosealea Yao of Gavekal Dragonomics, a consultancy. But Mr Lu believes it will be hard for leaders to reverse course. They have publicly committed themselves to a tighter policy and created bureaucratic momentum behind it. Earlier this year the central government sacked officials in the southern city of Shenzhen for failing to tame prices.

The curbs can be seen as part of the government's new preoccupation with creating "common prosperity". Unaffordable housing conflicts with this aim. Research by three Chinese academics—Guanghua Wan, Chen Wang and Yu Wu—has found that the cost of housing causes about 75% of China's wealth inequality. It may also be one reason why China's families now have so few children, a trend that increasingly worries the government.

To shore up growth, China may try building more subsidised homes. It has ordered 40 cities to construct almost 1m low-rent housing units this year. But it will take time to ramp up such work on a sufficient scale. Meanwhile, China's growth will face other threats. Service industries may suffer from pandemic-related lockdowns. Exports may grow more slowly as manufacturing recovers abroad. And infrastructure spending will weaken if local governments cannot sell as much land to developers.

It is hard to imagine China pushing things nearly as far as Volcker did. But then Volcker himself did not foresee the full economic pain that would follow that beautiful Saturday. China's hard-pressed developers may find themselves with many unsold properties in the months ahead. Where will they send the keys?



Coal projects

Squeezing out the carbon

NEW YORK

America wants China to end support for coal projects abroad

Sident in January, few senior American officials have visited China. But as *The Economist* went to press, Mr Biden's special envoy for climate change, John Kerry, was in the middle of his second trip this year. With relations so rancorous in almost every other domain, the two countries appear to welcome the chance to talk about a problem they hope can be tackled together. There may be political dividends for both.

Mr Kerry has set his sights on coal, a big contributor to global warming. China is not only the world's biggest producer and consumer of it, but has also been a leading financer of coal-fired power plants in developing countries. During his talks with Chinese officials in the northern city of Tianjin, which began on September 1st and were due to end on September 3rd, Mr Kerry was expected to urge China to cease its involvement in such projects abroad.

At first glance, Mr Kerry's request may seem odd. Until 2019 China's support for coal-fired energy was a big part of its Belt and Road Initiative (BRI), a global infrastructure-building scheme. But the picture has been changing fast. In 2019 and 2020 Chinese-backed coal projects abroad worth about \$47bn were suspended or terminated. In the first half of 2021 China financed no new coal plants in countries involved in the BRI. This had little to do with global warming. Shuang Liu of the World Resources Institute, a think-tank in Washington, reckons that coal is no longer competitive in BRI countries due to a plunge in the price of renewable energy.

The elephant in the room is China's burning of coal at home. The country's power plants last year produced over half of the world's coal-generated electricity. Despite China's professed concern about the climate, the share is about to get bigger. In 2020 China built more than three times as much new coal-fired power capacity as the rest of the world combined, at a pace of roughly a new coal plant a week. Taking account of the decommissioning of plants, the country's capacity rose by a net 30 gigawatts in 2020, whereas the rest of the world's saw a net decline of 17GW.

Look closer, though, and Mr Kerry's focus on China's global involvement in coal becomes easier to explain. Consider American politics. To people at home, the gentlemanly American envoy wants to appear tough on China—there is seething biparti-

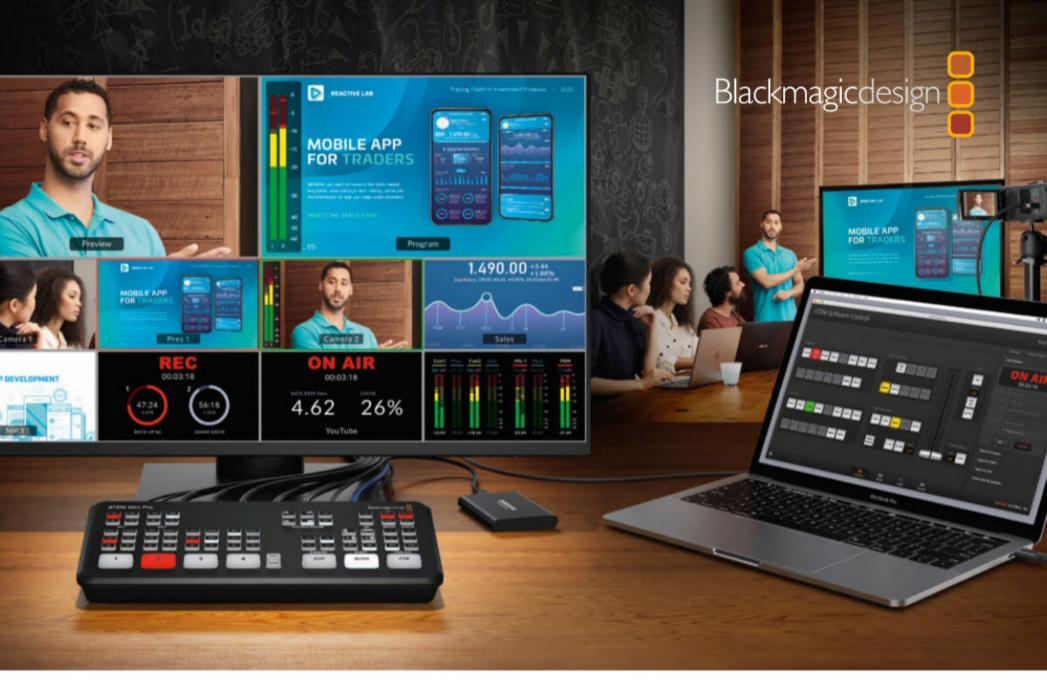
san animosity towards the country. A headline in the *Wall Street Journal* on the eve of Mr Kerry's trip, "Kerry to press China to stop financing coal-fired energy projects," captured the desired pose.

Bashing China's domestic addiction to coal would also smack of hypocrisy: America still gets over a fifth of its power from the stuff. Joe Manchin, a Democratic senator from West Virginia whose backing is vitally important to Mr Biden, is an unabashed supporter of coal. China has sent mixed signals about its own use of it. But despite its prodigious building of new carbon-spewing plants, it has pledged that its CO₂ emissions from coal will stop rising after 2025 and that China's overall emissions of the gas will peak by 2030.

Mr Kerry is right to worry about China's activities abroad. In recent months, America, Japan and South Korea have followed an example set by the European Union and Britain by ending official financing of overseas coal projects. But China has not yet issued such a ban to its own banks and development institutions. As a result, observes Leo Roberts of E3G, a British environmental think-tank, "China is the public lender of last resort to an increasingly stigmatised industry."

The British organisers of a UN climate summit in Glasgow later this year hope it will help "consign coal power to history". Given that new coal plants in most countries have bleak commercial prospects anyway, China may make a show of ending support for them abroad. That would be welcomed. But the real test of China's dedication to fighting climate change will be what it does about the ones at home.





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AVAXHOME

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Chaguan | Xi Jinping Thought for children

China rolls out new textbooks on its supreme leader's philosophy



SK MEMBERS of China's elite—from senior officials to academ- ${f A}$ ics at leading universities, well-known commentators or bosses at big companies—to explain the beliefs of the country's leader, Xi Jinping, and their replies are surprisingly unhelpful. Even simple questions elicit waffly answers. Take an ongoing campaign to clip the wings of some of China's largest firms, notably technology giants. The authorities have variously accused such businesses of seeking excessive profits, harming national security with a cavalier approach to data, abusing workers, bullying smaller firms or exploiting young consumers with addictive video games and online fan clubs. Is Mr Xi revealing himself as an ideologue, bent on re-imposing Communist Party control over the economy at the expense of growth? Or is he more pragmatic than that: a nationalist strongman who is helping to make China stable at home and mighty abroad? There is chatter among the country's grandees, but no consensus.

Given such confusion among grown-ups, this is a bold moment to issue a new series of textbooks to all students in Chinese schools, colleges and universities, with the aim of explaining Xi Jinping Thought on Socialism with Chinese Characteristics for the New Era, as Mr Xi's political philosophy is formally known.

As the academic year began on September 1st, teachers and lecturers began distributing these books, tailored for each age-group, down to children as young as six. The use of stand-alone schoolbooks devoted to a serving leader marks a break with decades of caution. The last time that hundreds of millions of youngsters clutched books devoted to the wisdom of one man was under Mao Zedong, the object (and instigator) of a disastrous personality cult.

Books for the young are especially revealing, for they have to keep their messages simple. Primary schools have long taught the general rudiments of ideology. Via courses with names like "ethics and law", children have studied good deeds by the party's founders and modern-day leaders. They have contemplated the magnificence of the motherland (helped by copious images of wind farms and border-marker stones). Textbooks have devoted many pages to wholesome lessons about honesty, friendship, the importance of hand-washing and respect for elders.

The latest books for primary schools are still wholesome. But

they are more focused on defining citizenship as a relationship with the party and its leader. Official guides for teachers concede that it is challenging for very young students to grasp abstract concepts. As a result, the new textbooks will use "golden" maxims from Mr Xi, as well as vivid stories and emotional experiences to "plant the seeds of love for the party, love for the nation and love for socialism in their little hearts". A notice issued in late August by the education ministry's National Textbook Committee sets out further aims. Youngsters should be guided to understand that Mr Xi is the leader of the whole party and country, it says. They must also resolve to obey and follow the party from their earliest years.

In addition to praising conformity, the new books offer homely warnings about those who fail to fit in. The last chapter of the new textbook for six- to eight-year-olds opens with an injunction to "Button the First Button of Life Correctly". Mr Xi often uses this phrase in speeches to the young. It refers to what he calls the duty of schools and families "to teach the first lessons of life well", so that children do not end up out of line with their peers, like a misbuttoned coat that will have to be adjusted later.

Another lesson in the book tells children about "Grandpa Xi's expectations of us". Alongside images of Mr Xi with members of the Young Pioneers, a party organisation for children aged between six and 14, it informs pupils: "As paramount leader of the party and state, Grandpa Xi Jinping has always cared for us, and wishes for us to strive to grow into worthy builders and inheritors of socialism." In practice, teachers of politics and ideology—who form a highly trained elite, and a pool for future school heads—are encouraged to leaven this stodge with singing contests or lessons in patriotism based on news stories. Teachers say that instructive recent events include last year's border clash between Chinese and Indian troops, and the American export bans on components needed by Huawei, a Chinese electronics giant.

Power is the point

At first glance these textbooks for small children, filled with Mr Xi's quotes about caring for the environment, and with songs such as "I Love You, China", (sample lyrics: "I love your boundless forest, I love your towering mountains") may not seem to settle hard questions about the country's ruling philosophy. Arguably, though, Chinese youngsters are getting something close to the true essence of Xi Jinping Thought. The overall aim of this reform, the textbook committee explains, is for the school and university curriculum to "comprehensively introduce" Mr Xi's views on economics, politics, the rule of law, science and technology, culture, education, ethnic policies, religion, national defence, ecological civilisation, party-building and diplomacy, among other subjects. Put more concisely, Mr Xi is to be seen as the undisputed authority on everything.

This is not the same as a Maoist personality cult. Mao encouraged the young to attack their teachers. He egged on fanatical Red Guards as they destroyed ancient temples. He wanted followers to attack a party establishment whose revolutionary fervour and loyalty he had come to doubt. In contrast, Mr Xi wants the young to study diligently, to take regular exercise and to listen to teachers talk about 5,000 years of glorious Chinese culture. Mr Xi is the establishment: the supreme incarnation of party authority. The party's legitimacy, in turn, rests on its claims to unrivalled competence and success. It is not for ordinary citizens to second-guess or debate what Mr Xi personally believes. Like children heeding a teacher or an elder, it is their role to obey.



Madagascar

Hunger island

MAROALOPOTY

A toxic mix of climate change, pandemic and bad governance

Masy, a listless three-year-old, has just sucked up a packet of Plumpy-'Nut, a peanut-butter paste that donors give to malnourished children. It may save her life. Yet her grandmother, Zemele, is still gloomy. Sitting on the ground outside a clinic in Maroalopoty, a village in southern Madagascar, she describes how hard life has become. Her land has had almost no rain for three years. Sandstorms have made the soil less fertile. Masy's parents have gone away to find work. To make ends meet, Zemele has had to sell three of her four fields. "Before, it was bad," she says, "but not so bad."

Madagascar, the world's fourth-largest island, has long been prone to droughts, cyclones and floods. Now it is reeling from a double catastrophe: crop failure in the south, partly due to climate change, and a covid-19-induced economic crunch.

On August 19th UN agencies appealed for \$155m to help feed 1.3m people in south-

ern Madagascar, where some areas are dangerously close to full-blown famine. Some families are so desperate they are selling their daughters, frets Mialy Radrianasolo of Unicef, the UN's agency for children. "Because of hunger," she says, the poorest families "want to get rid" of their daughters, so a "man of 60" who may already have four or five wives "can get a 12-year-old in marriage."

Many children are dropping out of school to work or forage for food. Jean-Chrysostome Gege, the deputy head of a primary school in a village called Ehavo, says it had 250 pupils in 2018 but only 110

→ Also in this section

- 36 Nigeria's reforming governor
- 37 Israel's new foreign policy
- 38 Bulldozing history in the Middle East

last year. Education may yield rich rewards eventually, but hungry households need food today.

The emergency has many causes. Climate change has made the rains less reliable, say un officials. In Madagascar's deep south people have long been used to the *keré* (a drought that brings hunger). But in some places of late the *keré* has lasted for years instead of months. The un says this one is the worst in 40 years.

Covid-19, meanwhile, has clobbered the economy. Before the pandemic the World Bank expected GDP to grow by a healthy 5.2% in 2020; instead it shrank by 4.2%. This is even worse than it sounds, since the population is rising by 2.7% a year.

Tourist contraction

Moreover, GDP is expected to rebound slowly, with the IMF forecasting economic growth this year of just 3.2%. To defend Madagascar from the pandemic, the government has sealed it off, admitting only a handful of foreigners and allowing only a few flights to land. Tourists, who used to flock to see Madagascar's lemur-filled rainforests or wild and unspoilt coast, cannot come. The estimated 1.5m people who depend on them are struggling. Noeline, who sells colourful wooden trucks by a road near Antananarivo, the capital, sold a dozen a day before the pandemic. Now she

> sells only one, she says.

Malnutrition, though always a scourge, was until recently becoming rarer. The proportion of Malagasy children under five who are stunted fell from around 61% in 1992 to 42% in 2018, according to the World Bank. But it has jumped back up to 47%, says Unicef, and the rate of stunting is higher in the south.

Small-bore solutions

With 28m people in an area bigger than metropolitan France, Madagascar is not densely populated. But it is very poor. In the south, goods and people must move along rutted tracks rather than tarmac roads. The chopping down of trees for fuel has led to soil erosion. Some people are trying to reverse this. In Maroalopoty, a car that arrives from the UN Development Programme is rapidly surrounded by hundreds of villagers. The UN is recruiting them for a couple of dollars a day to plant lines of drought-resistant sisal to tamp down the earth and nearby sand dunes. For some, it will be too little, too late.

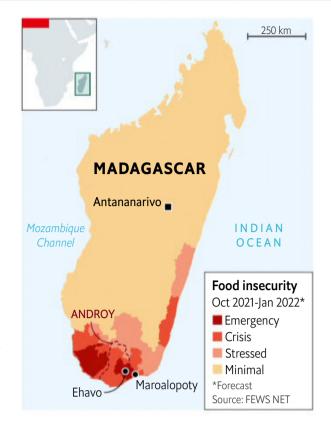
Michel Saint-Lot of Unicef complains of decades of poor governance. "You cannot just drill small boreholes equipped with a hand pump for drinking water," he says. The country needs long-term fixes, he argues, such as water pipelines for drinking water, cattle and irrigation.

Soja Lahimaro, the governor of Androy, one of the worst-affected regions, says he used to think that governments in the faraway capital kept the south poor to show to foreigners, so they would dish out aid. Now he says that President Andry Rajoelina, who appointed him, is doing his best.

Others have doubts. Mr Rajoelina has built costly stadiums and a Roman-style colosseum next to a historic palace in Antananarivo. He also wants to found a new city to relieve the capital of overcrowding. But education and health care remain woeful. When covid-19 struck Mr Rajoelina touted a herbal treatment called "Covid-Organics", made from local plants. There is no evidence it works. He also initially spurned covax, the big global programme that gives free vaccines to poor countries. So far, less than 1% of the population has had even one dose.

Juvence Ramasy, an analyst, says Mr Rajoelina is a populist who makes promises but does not follow through. His grandly titled Initiative for the Emergence of Madagascar, which aims to promote mining and infrastructure, is still just a draft. Some public money has been spent in the south, says Mr Ramasy, but much of it has been stolen by politicians. The region is known as the "graveyard of projects".

Last week Mr Rajoelina went to Paris to woo foreign investors. It would help if his government quarrelled less with existing investors: for example, over a new airport



terminal and two hydroelectric plants built by French companies. Reports after Mr Rajoelina met France's president, Emmanuel Macron, on August 27th, suggest that these disputes may soon be settled.

But some investors worry about Madagascar's stability. Two decades ago it came close to civil war, and the army has intervened regularly in politics. Mr Rajoelina's first term as president, from 2009 to 2014,

was the result of a coup. He then won a reasonably fair election in 2018, but politics is far from calm. Recently the government arrested 27 people, including several military officers and two French citizens, who, it said, were planning to assassinate Mr Rajoelina. Details are unclear but police say one of the plotters asked a local oil company for \$10m to overthrow the president, and promised oil concessions in return.

The economy is riven with cronyism. Most media are controlled by pro-Rajoelina politicians. The opposition is weak. In May the Global Initiative on Transnational Organised Crime, an NGO based in Geneva, said that Madagascar was becoming a hub for heroin and cocaine trafficking. Local media ignored the story, complains Riana Raymonde Randrianarisoa, an investigative reporter. She believes the traffickers have high-level protection.

Madagascar's lean season starts in September. Without short-term aid many children will grow up with stunted bodies and stunted minds. To help families feed themselves in the long run, Madagascar needs to develop. Except for a few commercial farms, agriculture has barely begun to be mechanised. Only 15% of Malagasy have electricity; in the countryside, far fewer. At night villages like Zemele's are almost pitch black. Worse, says Mr Ramasy, "nothing much is changing."

Nigeria's accidental public servant

Reform, and its malcontents

KADUNA

Governor El-Rufai stands up for taxpayers and irks unions

STANDING AT ABOUT five-foot-four, Nasir El-Rufai, governor of Nigeria's northern state of Kaduna, says he models himself on Deng Xiaoping, who put China on a path to growth after the misery of rule by Mao Zedong. Mr El-Rufai sees a new path for Kaduna and, some say, for Nigeria itself.

Mr El-Rufai prizes education: he has a law degree from London, a master's in public administration from Harvard and is writing a doctorate at Maastricht university. He is usually addressed by the title "Mallam", out of respect for his erudition, particularly in Koranic studies. So it may seem odd that one of his early acts as governor was to fire almost 22,000 primary-school teachers. Yet he had cause. Those he booted out had failed a test designed for nine-year-olds. Some couldn't complete a comprehension test. Others couldn't name a rectangle. Mr El-Rufai has sacked thousands more workers. And he is not done.

With two years left of his second term,

the governor is determined to balance the state's budget by reducing the number of people working for the government. This is something of a rarity in Nigeria, where the governor of another state recently boasted he had hired 38,000 aides, ostensibly to reduce poverty, arguing it was better to spend money on employing people than to invest in roads or ports.

When Nigeria locked down last year to slow the spread of covid-19, it quickly became clear that Kaduna's administration was not noticeably worse with most of the state's employees not working than when they were supposedly toiling in the service of taxpayers. Since then Mr El-Rufai has proposed to sack a further 7,000 government workers.

His latest move has provoked the trade unions, whose members went on strike under banners reading "Hell-Rufai". Once seen as a liberal, he now has a reputation as a harsh disciplinarian. Yet the governor is



What would Deng do?

undaunted. He has dared disgruntled workers to challenge him in court.

Though his means may be unpopular and his critics accuse him of riding roughshod over opponents, his case for streamlining the civil service is strong. Of the 50bn naira (\$121m) that Kaduna will receive this year from the federal government (its main source of funds), it will spend about 80% on staff salaries. This is an improvement on last year, when personnel costs outstripped the federal allocation.

Mr El-Rufai argues that unless he can slim the payroll, he will not have the cash to invest in good things like hospitals and bridges. It could also free up funds to fight insecurity, a persistent scourge in Nigeria's northern states, bedevilled by gangs of kidnappers and by fighting between crop farmers and cattle herders. Sectarian tension in the north between the Muslim majority and the Christian minority is another frequent source of violence. Since Mr El-Rufai was elected governor in 2015 the number of ethnic clashes has fallen.

The governor, who is thought to have presidential ambitions, has had little support for his reforms from the federal government or ruling party, of which he is a member. Yet he is pushing on regardless. He believes that just like Deng, who revoked many of Mao's stifling economic policies, he may have to defy his party in order to force through his plans.

But Mr El-Rufai would do well to remember that he must worry about more than just his party. Unlike leaders of China, who can lock up critics and never face voters, he operates in a raucous democracy. In June his party lost a by-election in Kaduna, perhaps an early sign of a backlash against his policies. If he does not keep an eye on his dwindling popularity, he may soon have little chance to reform anything.

Israel's foreign policy

Manage the conflict

JERUSALEM

Their tone has changed but the Israelis are loth to engage with the Palestinians

Even though Ramallah and Jerusalem are but a few minutes' drive apart, no Israeli minister had met the Palestinian president for seven years. The taboo was broken on August 29th when Israel's defence minister, Benny Gantz, visited Mahmoud Abbas in Ramallah, the Palestinians' administrative capital. The Israelis were at pains to emphasise that they had discussed only "routine security matters" and that "there is no diplomatic process with the Palestinians and will not be." Mr Gantz touched on nothing of substance, least of all the long-moribund peace process.

The new Israeli government, which came to office on June 13th, is too fragile to make any serious moves on this front. Its prime minister, Naftali Bennett, and three of the eight parties in his coalition, are adamantly opposed to territorial concessions to the Palestinians. Mr Bennett is flatly against the creation of a Palestinian state.

The new government also includes centrists and left-wingers and, for the first time, an Arab-Israeli party. Most of them support establishing a Palestinian state. Unlike the previous government, led by Binyamin Netanyahu, it will not seek to build new Jewish settlements on the Palestinians' West Bank, nor will it annex bits of it. But nor will it try to solve the enduring conflict between Israel and Palestine.

Like its predecessor, Israel's government will make sure that America remains its most stalwart guarantor. Five days before Mr Gantz's handshake with the Palestinian leader, Mr Bennett arrived in Washington on his first major foreign trip, to meet President Joe Biden (pictured), whose administration was relieved to see the back of Mr Netanyahu, a close ally of Donald Trump. Mr Biden delighted the Israelis with tough talk on Iran. However, they exchanged only the blandest of bromides on peace between Israelis and Palestinians.

Israel's new government is enjoying a honeymoon in its relations with other Western governments, too. Unless another big wave of violence breaks out, like the n-day war over Gaza in May and the accompanying ructions in Israel, Mr Bennett's government is unlikely to come under renewed diplomatic pressure soon. It has already improved strained relations with Israel's neighbours, Jordan and Egypt.

Its new foreign minister, Yair Lapid, who is due to replace Mr Bennett as prime minister in two years, is a centrist who in-

tends to shift the emphasis of Israel's diplomatic alliances. Mr Netanyahu loved to hobnob with like-minded populists, such as India's Narendra Modi and Brazil's Jair Bolsonaro. In Europe he applauded the leaders of Hungary and Poland.

Mr Lapid has distanced himself from such associations. And he has vigorously tackled Poland's government over a law that restricts survivors of the Holocaust and their heirs from claiming property they owned before the second world war.

But on the biggest issue confronting any Israeli government—relations with the Palestinians—the fundamentals remain the same. The new Israeli leaders may be harking back to the old if rebranded concept of "shrinking the conflict" rather than solving it. Their hope is that the Palestinians will be content with increased "self-governance" and more economic aid within the West Bank. At a later stage, the blockade imposed by Israel and Egypt on Gaza for the past 14 years may be eased.

Meanwhile, the core issues of Palestinian statehood, demarcating the borders and granting rights to Palestinian refugees will be deferred indefinitely. "The important thing is not to cause any unnecessary problems and try to make life easier for the Palestinians," says an aide to Mr Bennett.

For their part, the Palestinians are making it easier for Israel to push their cause to the margins. Mr Abbas, now in the 17th year of what was supposed to be a four-year term, has refused to hold elections either for the presidency or for the Palestinian parliament. His administration is widely seen as corrupt and ineffectual. Like the previous Israeli government, the new one seems indifferent to the Palestinians' fate. There may be bouts of violence for years to come. Meanwhile it is betting on "managing the conflict".



Close enough

The Middle East's heritage

Bulldozing history

The region's rulers often ruin historical sites in the name of modernisation

THE FIGHTERS of Islamic State turned THE FIGHTERS OF ISLAMICS TO Ancient sledgehammers and drills on ancient temples after conquering north-western Iraq and north-eastern Syria in 2014. They raided the tombs of Assyrian kings in Nineveh, blew up Roman colonnades in Palmyra and sold priceless relics to smugglers. But their vandalism was on a modest scale compared with some of the megaprojects that are habitually undertaken by many Middle Eastern governments. A few months ago, a short distance downriver from the archway toppled by the jihadists in Ashur, the religious capital of the Assyrian empire, Iraq's government began to build the Makhoul dam. Once complete, it is likely to flood Ashur—and another 200 historical sites.

Similar archaeological tragedies have occurred across the region, mainly thanks to the appetite of governments for gigantism in the name of modernisation. Some want to stamp a new identity on an old land. Corruption often plays a part: the bigger the project, the bigger the contractors' bribes. Human tragedies often ensue. The re-landscaping displaces people as well as erasing their heritage, sometimes as a kind of social engineering.

Governments the world over mould landscapes with grand schemes. But in the Middle East they interfere more than most, says Jala Makhzoumi of the American University of Beirut. In part this is because large and growing populations are packed into such small habitable areas. With a megaproject or two, governments argue that they can overcome poverty and decrepit services by bringing electricity and infrastructure. By providing irrigation to make deserts bloom, they can feed people.

Such, at least, was the reasoning behind the Makhoul dam, a few hours' drive north of Baghdad. Back in 2002, when Saddam Hussein first broached its construction, UNESCO, the UN's heritage body, warned that "an essential element of human civilisation would disappear for ever".

Appeals to Saddam's successors to stop the diggers have fallen on deaf ears. "This government cares nothing for the history of Iraq and the tens of thousands of sites in the cradle of civilisation," says Azzam Alwash, an Iraqi environmentalist.

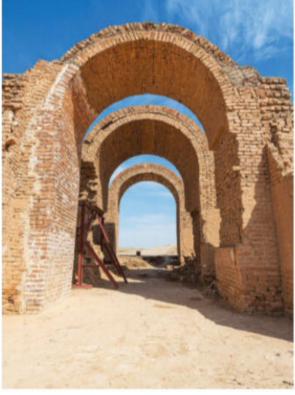
At least since the time of Pharaoh Zoser, Middle Eastern rulers have tried to express the grandeur of their vision in stone, and today's lot are no exception. "They want something impressive but too often they ruin the landscape and displace and alienate people," laments Ms Makhzoumi. Egypt's dictator, Abdel Fattah al-Sisi, has bulldozed swathes of Cairo, the old capital, to make way for motorways, flyovers and shiny skyscrapers that line the road to the new administrative capital he is building.

To ease congestion he has scythed a thoroughfare named Paradise through the City of the Dead, a 1,000-year-old necropolis that is a UN-designated world heritage site. Hundreds of tombs were destroyed. He has turfed out tens of thousands of people from their homes in Boulaq, along the Nile, calling it slum clearance. This was where Cairo's old port prospered in Ottoman times. Instead of rehabilitating it, Mr Sisi is letting property magnates carpet the area with high-rise apartment buildings.

Look on my works, ye mighty

Mr Sisi has allowed investors from the United Arab Emirates to build a mini-Dubai on Cairo's largest green space, a nature reserve on al-Warraq island. Its 90,000 residents will be shunted off, mainly to estates on the city's edge. Protesters have been condemned as Islamist terrorists and sent to prison, many for 15 years.

Mr Sisi is not the first modern Egyptian ruler with pharaonic ambitions. Gamal Abdel Nasser put up Aswan's High Dam in the 1960s to regulate seasonal floods and



Where the waters will rise

provide electricity, while also submerging the cradle of ancient Nubian civilisation. Western archaeologists rushed to save as many temples, tombs and cities as they could along 550km of the Nile. Some of the rescued antiquities still adorn Western museums. To this day displaced Nubians campaign to be allowed to return to the water's edge. Tens of thousands of them should be compensated for their lost land and homes, activists argue. Sudan's recently ousted Islamist regime, deeming Nubian and Pharaonic relics heretical, extended the damage southwards up the Nile in 2009 by completing the Merowe dam, flooding another 170km of Nubia's past.

Some rulers have security in mind when they bulldoze history. Mr Sisi can send in the tanks faster on wider roads. Removing Egypt's poor from city centres may curb the risk of revolution. "They know that poor areas revolted in 2011," says Abdelrahman Hegazy, a Cairene city planner. "They're afraid of population density." During Syria's current civil war, President Bashar al-Assad and his Russian patrons ruined parts of the old cities of Homs and Aleppo, treasure troves of antiquity that were also rebel strongholds, with relentless barrel-bombing.

Israel also has a tendency to obliterate the past, in its case to discourage the return of Palestinian former inhabitants or their descendants. The names of their villages, now often hidden beneath forests planted on once-terraced hills, have been expunged from modern maps. A recent exhibition at Israel's national art museum in Tel Aviv recorded the villages' vanished contours using drone photography. "We want to put the villages back on the map," says Miki Kratsman, a photographer involved in the show. Even that would be futile in Libva, where Muammar Oaddafi, its former dictator, obliterated much of his country's Jewish past by building its poshest hotel, the Corinthia, on the Iewish quarter in Tripoli, the capital.

Occasionally the damage is partially reversible. America is returning more than 17,000 old artefacts smuggled out of Iraq since its invasion in 2003. And the UN is helping to rebuild medieval mosques, churches and souks in the Iraqi city of Mosul that America and its allies flattened while destroying Islamic State's caliphate in 2017. Bassel Hariri, a Syrian exile in London, is rebuilding Aleppo—as a virtual city. His 150,000 followers on Facebook share their testimonies of the city they lost.

Governments sometimes have second thoughts. After long decrying ancient Nabataean rock tombs as pagan idolatry, Saudi Arabia's rulers now promote them as tourist attractions. Saudi officials even speak of reopening ancient churches, whose very existence they used to deny, not just to tourists but also to worshippers.

Europe



Russia

Get them while they're young

MOSCOW

Vladimir Putin's henchmen target Russia's universities and students

A SALEXEI NAVALNY, Russia's leading opposition politician, was being hauled off to jail in January, four editors of "Doxa", an online student magazine, posted a YouTube video. The two men and two women were students at the Higher School of Economics in Moscow, generally considered to be Russia's best liberal university. They spoke out about the intimidation being deployed by the staff of schools and universities in order to dissuade young people from joining a planned protest against Mr Navalny's mistreatment.

The four appealed to universities across the country. "Expelling students for taking part in peaceful action is illegal. All you will achieve is to destroy science and education in Russia," said Armen Aramyan, one of the four. But they also appealed to fellow students. "Don't be scared and don't abstain. It is our lawful right to express protest by any peaceful means. The state has declared war on youth, but the youth is us and we will certainly prevail," said an-

other of the quartet.

On April 14th, as part of that war, Russian prosecutors arrested Mr Aramyan and the three other "Doxa" editors and charged them with "encouraging minors to take part in illegal action", by which they meant the protest in January. Their video has been taken down and they have been under house arrest ever since. The case has brought them recognition beyond anything they could have imagined when they recorded their video.

The unsuccessful attempt to kill Mr Na-

→ Also in this section

- 40 Germany's coalition conundrum
- 41 A tale of two pubs
- 41 Sex selection in Georgia
- 42 Trapped on the Poland-Belarus border
- 43 Charlemagne: Why Macron was right

valny with poison on a plane a year ago marked the start of a new wave of repression in Russia. Other opposition politicians have been barred from public appearances, chased out of the country or even arrested. The few remaining independent media outlets have been barred as "undesirable" or stigmatised as "foreign agents". The latest such "foreign agent" is TV Rain, an independent online channel that extensively covered the protests; the designation means that advertising will dry up, and the station may end up having to close.

But going after politicians and the media, and arresting students and activists, is no longer sufficient. The Kremlin is now trying to get a grip over schools and universities in a more systematic way. In the past nine months some 20 universities and institutes across Russia have had their deans replaced. In July the Kremlin "accepted" the resignation of Yaroslav Kuzminov, the head of the Higher School of Economics, better known as HSE, Russia's first and most successful post-Soviet university.

In a parting note on social media Mr Kuzminov claimed he was stepping down to concentrate on his work as an economist. Few took this at face value. "He would never have left of his own volition. This was the Kremlin's decision," wrote Kirill Rogov, a political analyst.

Mr Kuzminov had long navigated his way around the Kremlin to carve out some

space for his university while also providing advice to the government. That space has now shrunk and the advice is no longer needed. His departure marks the end of an era. He helped set up the HSE in the early 1990s, as Russians newly liberated from Soviet controls sought ways to connect with the West. At around the same time St Petersburg University, Russia's oldest, teamed up with Bard College from America to set up Smolny College, Russia's first liberal arts and science college. It was backed by Alexei Kudrin, a former finance minister who is a rare liberal voice in Mr Putin's entourage.

These institutions survived Russia's turn towards authoritarianism in the 2000s. The Kremlin did not fear them, not least because young Russians in the 2000s and early 2010s were among Mr Putin's most loyal supporters. It was also partly due to a centuries-long tradition in which autocratic rulers allowed a degree of freedom to a few exclusive institutions, says Andrei Zorin, a professor of Russian at Oxford University. The aim was to nurture a sophisticated cadre familiar with Western ideas and technology, who might then modernise and strengthen the state.

But now any Western influence is seen as a threat. Nikolai Patrushev, the secretary of the Security Council of Russia and a key ideologue of Russia's new isolationism, said in a recent interview that "the destructive liberal political forces [of the West] are paying particular attention to the educated and successful young people in prestigious universities."

Less than a fortnight before Mr Kuzminov's departure, prosecutors banned Bard College from Russia, designating it an "undesirable foreign organisation". And a recently passed law put all educational activity in Russia, from popular science lectures to public discussion clubs, under tight state control.

Russian students and young people, once lauded by the Kremlin as part of Mr Putin's base, are now seen as one of the biggest dangers to its power. The shift in young people's sentiment first became visible in 2017, when Mr Navalny's anti-corruption videos triggered protests that were dominated by students and high-school graduates. They were also angered by the Kremlin's infringement of their personal freedoms and attempts to impose "patriotic" and "traditional" values on them. At around the same time, Mr Aramyan and his friends started publishing "Doxa".

Over the past few years, Mr Putin and his circle have gradually become alienated from the young and the economically active. "In fact it is not the young cohort that is an outlier, but Putin's own generation that is increasingly at odds with the rest of the population," says Ekaterina Schulmann, a prominent political scientist. Sur-

veys show that young people rarely watch television (the main vehicle for government propaganda). Instead they rely on social media and the internet, which the Kremlin is now targeting. They have a more positive view of the West, particularly Europe, and care more about human rights than they do about the greatness of the state or past victories, the staples of Mr Putin's ideology.

With parliamentary elections due later this month, on September 19th, and a presidential one in 2024, Mr Aramyan says a crunch is approaching. "Either they will purge and suppress everything in sight, or we will deprive them of their majority." Mr Putin, who will turn 70 next year, has plenty of repressive tools at his disposal. But the young have one crucial advantage. Time is on their side, not his.

Germany's election

It's complicated

BERLIN

Voters confront a head-spinning kaleidoscope of possible coalitions

er friends would kill her if they knew Her Friends would know the Free she had considered voting for the Free she had considered voting Democrats (FDP), says Marijana, a 39-yearold arts PR consultant. A lifelong supporter of the left-leaning Social Democrats (SPD), she had always dismissed the FDP, a small, liberal outfit, as a party for the wealthy few. But Germany's wide-open election on September 26th is forcing voters to contemplate strange choices. Marijana fears the SPD may join the hard-left Die Linke, which she reckons is unprepared for government, as well as the Greens in a left-wing coalition. Hence the idea of lending one of her votes to the FDP, to bolster the chances of an SPD-Green-FDP "traffic-light" coalition. (Germans get two votes: one for a

local MP, and one for a party, apportioned proportionally based on lists.)

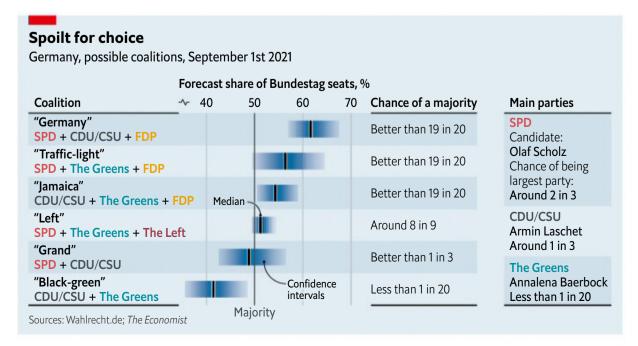
If Germany's election campaign has hardly been fizzing with ideas, the volatility of the polls has provided tremendous sport. Three different parties have led in the past four months. Having long languished in the polls, the SPD has recently surged. The Economist's election model now puts its chances of coming first at around two-thirds. A big lump of undecided voters, and what may be the largest-ever postal vote, add to the uncertainty. Yet in Germany's proportional voting system the horse race is only half the story. The coalition wrangles that follow election day will be at least as important, and twice as complex, as the voting that happens on it.

A record 27% of Germans split their votes between two parties at the last election, in 2017. Such "strategic" voting is often done to help lift a smaller party, such as the FDP, over the 5% threshold to enter the Bundestag, or to boost its chances of playing kingmaker in coalition talks. This year the mind-boggling intricacies of the election make the coalition calculus tricky for even the best-informed voter.

This is explained partly by the decline of the *Lagerkampf*, or "camp struggle". There was a time when the centre-right Christian Democrats (CDU), their Bavarian ally the Christian Social Union (CSU) and the FDP made up a broad "conservative camp", and the SPD and Greens a "progressive" one. Many Germans voted accordingly, even if the result was a muddy "grand coalition" of the CDU/CSU and the SPD.

But the big parties have declined, and new ones have emerged. Some of them, like the hard-right Alternative for Germany, are unwelcome in any coalition. With the old camps unable to win majorities, parties are forced into political crossdressing. (The 16 states have led the way: there are 14 flavours of coalition in them.)

If the first of three televised debates between the CDU/CSU, SPD and Green candidates on August 29th lacked spark, it is



partly because at least two of the three parties represented are likely to find themselves yoked together in government. The Economist's model finds a 60% chance that no two-way government will be possible after election day. And because a continuation of the current CDU/CSU-SPD "grand coalition" seems improbable, Germany seems highly likely to get its first threeparty coalition since the 1950s. Four such potential configurations may well emerge from the election result (see table).

The pre-coalition jostling itself influences campaign tactics. The liveliest moment of the debate came when Armin Laschet, the struggling CDU/CSU candidate, lambasted Olaf Scholz, his SPD rival, for failing to rule out a left-wing coalition. Angela Merkel, the outgoing CDU/CSU chancellor, repeated the charge two days later. It is barely conceivable that the moderateminded Mr Scholz, Germany's finance minister, would invite Die Linke, which seeks rapprochement with Russia and the dissolution of NATO, into government. But parties are loth to reject potential coalitions ex ante for fear of reducing their post-election leverage and sparking a domino effect of exclusions.

In the end, the choice may boil down to two plausible coalitions: the left-leaning SPD-led "traffic-light", or a more conservative "Jamaica" government of the CDU/CSU, Greens and FDP (the names derive from the parties' respective colours). If so, says an insider, that will trigger a "bazaar" of negotiations in which the CDU/CSU and FDP will try to seduce the Greens, who meanwhile will be working with the SPD to pull over the FDP. Ministerial jobs, government policy and even the identity of Germany's next president, who must be chosen by next February, would all be thrown into the mix. Some party bigwigs expect it could take six months to put a government together. "It's like 'Game of Thrones'," says Constantin Wurthmann of the University of Düsseldorf. "No one knows anything."

All the confusion may have the paradoxical effect of forcing a simpler choice on voters. With the final outcome impossible to predict, the wiser option may be simply to strengthen the hand of one's favoured party and hope for the best. Marijana is drifting in that direction. Now that the SPD has a real chance of nabbing the chancellery, she will probably give the party both of her votes. It might not feel as smart as splitting the vote, but at least her friendships will remain intact.

A tale of two pubs

Conservative Bavarians and left-wing Berliners agree on beer but little else

In the NARROW medieval alley outside the half-timbered Schlenkerla, raucous crowds drink the 600-year-old local speciality, dark smoked beer tapped from ancient oak barrels. The meaty menu is not for the faint-hearted. The pork comes as knuckle, stomach or shoulder. Voting patterns are just as traditional. Bamberg is a conservative heartland.

The drinkers are gregarious. But if you want to kill the mood, just mention the Greens. "They're a joke. They're crazy. I can't even talk about them," rages one drinker. He works for Bosch, an engineering company. It is Bamberg's largest employer, supplying parts for diesel cars, and has cut jobs of late. "The Greens just want to ban everything."

The conservative csu, the Bavarian sister party to Angela Merkel's CDU, wins around 40% in federal elections in Bamberg. The csu exists only in Bavaria, so regional patriotism is part of its success. "We have the copyright on fighting for Bavaria's interests," says the party's leader, Markus Söder, who grew up near Bamberg, in a new election video.

During the refugee crisis of 2015 Mr Söder saw the hard-right AfD as his main opponent, so he talked tough on migration. With the Green Party surging in the polls, he has been discovering his cuddly environmental side. In the video Mr Söder is portrayed cycling through Bavarian countryside, before wandering dreamily through a flowered meadow.

Some 400km to the north, in the Berlin district of Kreuzberg, the beer at Südblock is also Bavarian. But the sau-



Define "Jamaica coalition" after six litres

sage is vegan, the toilets "all-gender" and at the entrance a trans woman reminds guests of covid-19 regulations. Posters advertise an LGBTQ film night and a pro-refugee demo.

Alex, who works for an NGO, says he'll vote Green because it's the only party fielding a female candidate for chancellor. "I'm sick of seeing one old white man after another." His three friends favour the radical left-wing Die Linke, mainly because of the party's anti-military stance. "The Greens have become too conservative for me," says one. But somehow, the MPS that these two Germanies are about to elect will have to find a way to run the country.

Georgia

Too many boys

TBILISI

The rise and fall of sex-selective abortion in a post-Soviet state

THEN NILUFER KURBANOVA'S doctor told her she was going to have a boy, he expected a tip for delivering the good news. He did not get one.

Ms Kurbanova does not believe, as many older Georgians do, that sons are better than daughters. Some families feel they need a male child to carry on the bloodline; Ms Kurbanova thinks this is hokum. Traditional families expect sons to look after their parents in their old age, whereas a daughter would look after her husband's parents. Ms Kurbanova does not see why it has to be that way.

For centuries Georgians strongly preferred boys. When Georgia was part of the Soviet Union, from 1921 to 1991, its communist rulers suppressed some old sexist customs (such as kidnapping brides) and declared that women were equal, even if they did not always uphold the ideal. In any case, practically no one had access to sexdetecting ultrasound machines in those days. This was partly because they could not afford them, and partly because the West restricted exports since some of the machines' parts had military uses.

That changed when the Soviet Union imploded. Ultrasound became widely available. And patriarchal values made a comeback, perhaps because the collapse of a bossy state prompted Georgians to seek guidance elsewhere. Many turned to the church and to their families. Traditional values, combined with modern technology, led to a surge in the abortion of girl babies. Georgia's sex ratio swung wildly. In 🕨



Where are all the girls?

▶ 1991 there were roughly 105 boys born for every 100 girls. (This is the natural rate, since more boys die in childhood and the numbers even out by the time they reach reproductive age.) By 2004 there were 115 boys born for every 100 girls.

But since then the sex ratio at birth has returned closer to normal. For the past five years it has hovered around 107 (though in 2020 it reached 109). In neighbouring Azerbaijan, where sex-selective abortion is still rife, it is 114. In China, it is 112.

Several factors may explain why Georgians started valuing girl babies again. After the initial post-communist turmoil, women's wages rose, giving them more bargaining power at home. This made it easier for them to overrule husbands who wanted to abort a girl (son preference is more common among Georgian men than women). It also planted the idea in parental heads that a daughter may grow up to earn serious money, and therefore be able to support them in their old age.

Changes in the fertility rate made a difference, too. In 1990 the average Georgian woman had 2.2 children. That plummeted to 1.6 in 2001, as economic turbulence made couples nervous about the future. The patriarch of Georgia's Orthodox Church was so alarmed that in 2007 he vowed personally to baptise any couple's third or subsequent child. Whether that helped or not, the fertility rate rebounded to 2.1 in 2019, as the country grew more prosperous. If a family is going to have only one child, a father who passionately wants a son is more likely to insist that the child is a boy.

Even if attitudes grow less sexist, however, Georgians must still face the consequences of the biases of a generation ago. Some regions are already facing a shortage of brides. And next year, Georgians born in the most skewed birth cohort will turn 18. Men who wish to get married may find they need to emigrate.

Poland and Belarus

Stranded in no-man's-land

NOWY DWOR

A beefier barrier springs up on the EU's eastern frontier

It is the first sight of men with guns in the village since Poland's communist rulers declared martial law 40 years ago. But the villagers of Nowy Dwor, 5km (three miles) from the border with Belarus, say they feel protected by the makeshift barracks that have been set up on the school sports field. Soldiers are here to patrol a frontier that seldom required close supervision before the events of this summer. "When the migrants first started coming," says a retired health worker, "I was afraid to fetch potatoes from my field for dinner."

Fright at the thought of a new influx of migrants affects most of Europe's governments, too. But what is happening in Poland, Lithuania and Latvia is no ordinary migrant crisis. The people trying to cross into those countries are not victims of Alexander Lukashenko's dictatorship next door in Belarus, but its guests. Mr Lukashenko engineered their arrival, most of them on direct flights from Iraq. Then, to embarrass his neighbours, he sought to pass them on. His guards have been filmed directing them across the border and into the EU. In recent weeks Lithuania and Poland have each nabbed around 3,000 migrants entering from Belarus.

Mr Lukashenko's neighbours have responded by dispatching their armies, tightening asylum rules and walling off their borders. It is the latest big step towards militarising the EU's outer rim, a trend that was barely thinkable a decade ago. Poland's fence now comprises three large rings of razor wire. Alongside it is a row of newly drilled holes, ready for the installation of a sturdy fence 2.5 metres high. This reinforcement of the Polish border

Riga RUSSIA LATVIA LITHUANIA Kaliningrad Vilnius • (Russia) Minsk Nowy Dwor Tolcze BELARUS Usnarz Gorny Warsaw POLAND UKRAINE 150 km

was announced on August 23rd.

In Tolcze, another nearby Polish village, a farmer retraces his country's history by charting the changes on the border. After 1945, when the boundary of the Soviet Union jumped 200km to the west, a series of sticks in the ground turned up, twenty paces from his house, cutting his family off from its orchard. After the Soviet Union collapsed in 1991 a big fence was taken down. But in 2004, when Poland joined the EU, up went a smaller one, which kept the cows from running off. The arrival of razor wire suggests yet another chapter for Tolcze—and perhaps for Europe too.

Until now, surprise crossings of people were rare. The thought of trespassing into Soviet territory once made Poles tremble. That old fear still lingers. But animals do not care. One woman in Tolcze lifts up the wounded hind paw of her dog, Puszek ("Fluffy" in Polish), who strayed onto the razor wire. A woman in a nearby village says that every spring a herd of Belarusian bison wander into Poland in search of food, delighting the locals. She frets that she will never see them again.

Locals often seem more concerned for the plight of animals than they are about the migrants. Two women chatting in Nowy Dwor's main shop concur that the migrants do not look like real refugees because they are clean and well dressed. One describes a friend's photo of an Afghan migrant with a "lovely shaved beard and a little moustache" who looked "straight out of a *zhurnal* (a fashion magazine)". Others say the problem is not migrants in general but the risk of malefactors in their midst.

Few elsewhere in Europe begrudge Poland and its Baltic neighbours their hawkish response. The loudest opposition to the rougher treatment of migrants comes from local activists, many of whom have set up camp in Usnarz Gorny, a hamlet of ten houses. Nearby some 30 Afghans are stranded in no-man's-land on the border with Belarus, blocked by Polish guards and unable to move either way. Translators from Ocalenie (Rescue), a Polish NGO, shout inquiries in Dari to the migrants through a megaphone. Polish police rev their vans' engines to drown them out.

Such divisions will delight Mr Lukashenko, who seeks revenge on Europe for its sanctions against Belarus. War games scheduled this month with Russia in western Belarus will ratchet up the tension. But he would be deluded if he were to expect the EU to accept his invitation to negotiate a resolution to this migrant crisis. One other feeling that Europe's politicians and Polish villagers on the border with Belarus share is contempt for Mr Lukashenko, a thuggish, election-stealing despot. "He is very bad," says the retired health worker in Nowy Dwor. "Everyone here says thank God we were born on the Polish side."

Charlemagne | Après Afghanistan

Europeans must ponder the uncomfortable thought that Emmanuel Macron was right



THE ANNUAL ritual of Bastille Day is a moment for the French to f I put up bunting, down champagne and celebrate the republic's founding myths. On July 14th this year, however, when the French ambassador to Kabul, David Martinon, recorded a message to fellow citizens, gravity crushed festivity. "Mes chers compatriotes", he began, "the situation in Afghanistan is extremely concerning." The French embassy, he said, had completed its evacuation of Afghan employees. French nationals were told to leave on a special flight three days later. After that, given the "predictable evolution" of events in Afghanistan, he declared—a full month before the fall of Kabul—France could no longer guarantee them a safe exit.

When the French began to pull out Afghan staff and their families in May, even friends accused them of defeatism, and of hastening the regime's collapse. Their evacuation effort in August (of 2,834 people, on 42 flights) was imperfect, and left some vulnerable Afghans behind. As allies scrambled to get their Afghan employees out of Kabul, the French found themselves as dependent as anybody on American security. Yet there has been quiet satisfaction in Paris. Their plans showed "impressive foresight", says Lord Ricketts, a former British ambassador to France.

If the French acted early, making their own assessment of shared intelligence, this was due in part to a smaller footprint on the ground. France fought in Afghanistan alongside NATO allies from 2001. "We are all Americans," ran Le Monde's front page after 9/11. It then pulled out all troops by 2014, partly to concentrate on its own counter-insurgency effort in the Sahel. Yet the decision in Kabul was also easier to take because the French have fewer qualms about doing their own thing, even when this irks America. As Europeans think through the unsettling implications of the Afghan fiasco, and what it says about dependence on a unilateral America, the mood in Britain and Germany is one of shock and hurt. For the French, who drew from the Suez crisis in 1956 the lesson that they could never fully rely on America, a conclusion reinforced under the Obama and Trump presidencies, Afghanistan has served to confirm what they long suspected.

It is no secret that not all Europeans share France's view. When Emmanuel Macron took to the stage in the wood-panelled Sorbonne amphitheatre shortly after his election in 2017 and pleaded for "European sovereignty" and a "capacity to act autonomously" in security matters should Europe need to, his was a lone voice. In Germany and points east, Mr Macron's plea was regarded with irritation: yet another pesky Gaullist attempt to undermine NATO and supplant America as the guarantor of European security.

Minds have moved a bit since, as Mr Macron has sought to reassure friends that his idea is not to replace but to complement the transatlantic alliance. Even so, as recently as last year Annegret Kramp-Karrenbauer, Germany's defence minister, wrote bluntly that "illusions of European strategic autonomy must come to an end." In Britain, meanwhile, Mr Macron's calls were disregarded as irrelevant to an island nation freshly free to forge its own global role. The pooling of European sovereignty over defence was something Brexit was designed to avoid.

The debacle in Afghanistan has shifted the rhetoric. Tom Tugendhat, a Conservative MP who served in Afghanistan, urged Britain "to make sure that we are not dependent on a single ally", naming France and Germany as potential partners. Ben Wallace, Britain's defence secretary, suggested that his armed forces should be ready to "join different coalitions and not be dependent on one nation". He did not need to spell out which one. "We've all been equally humiliated by the Americans," says a British diplomat, who points to a common interest in making sure this does not happen again. For conflict-shy Germany, Afghanistan was a formative experience. The disappointment has been wounding. Armin Laschet, the conservative candidate for Germany's chancellorship, described the withdrawal as "the greatest debacle that NA-To has experienced since its foundation".

In short, Europe seems to realise that it will have to do more by itself. Whether the sceptics understand it or not, this is exactly what Mr Macron has been saying, and will say again in a speech ahead of France's rotating presidency of the EU Council in 2022. Nobody, but nobody, will say so aloud. But the implicit recognition is that, zut alors, Mr Macron was right.

Aux armes, Européens

Two big questions for Europeans flow from this disconcerting thought, however, and easy answers exist to neither. First, what does Europe really mean by "European sovereignty" or "strategic autonomy"? Most countries vow to spend more on defence, even though Germany (unlike Britain and France) still fails to meet the NATO benchmark of 2% of GDP. Beyond that, there is little clarity, and even less agreement, not least because Brexit has put Britain in no mood to work institutionally with the EU.

Should Europeans aspire merely to limited management of a regional conflict, such as the Sahel or Iraq? Or do they hope to take on collective defence of their continent? Realists argue for the former, and only up to a point. Enthusiasts hint at the latter. Yet even in the Sahel, France still needs the Americans for intelligence and logistics. Second, is Europe really prepared to do what it would take to get by on its own? The evidence is unconvincing. Europe is better at devising acronyms than building capabilities. "If we can't even look after the airport in Kabul, there is a big gap between our analysis and our capacity to act," says Claudia Major of the German Institute for International and Security Affairs.

The implied effort would be huge. "I am not sure the Europeans are psychologically ready to face the challenge," wrote Gérard Araud, a French former ambassador to America, for the Atlantic Council. Mr Macron, like his ambassador in Kabul, may have made the right call. But are Europeans ready to heed it?



→ Also in this section

- 45 Northern Ireland's Brexit tangle
- 46 Bagehot: Dominic Raab, the flailing foreign secretary
- Read more at: Economist.com/Britain

Britain's economy

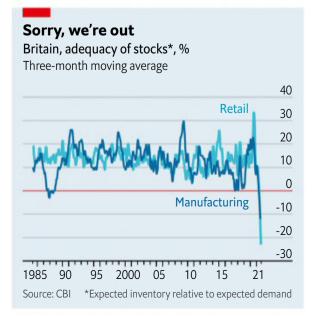
Out of stock

Demand in many sectors has recovered faster than supply. That is causing shortages and bottlenecks

The END of the summer feels too early to be thinking about Christmas, but retailers have little choice. The typical British household spends around a third more than usual in December, and stocking up for the most important trading weeks of the year usually begins around now. This year, however, rather than preparing for the coming rush, retailers are struggling to keep shelves full.

According to survey data from the Confederation of British Industry, a lobby group, retailers' and manufacturers' inventories have plunged in recent months (see chart). It has been asking members about stock levels for decades and has never recorded answers so low. In spring and early summer, shortages of construction materials and computer chips hampered builders and carmakers. In recent weeks the impact has become more visible on high streets. McDonald's, a burger chain, stopped serving milkshakes. Wetherspoons, a chain of pubs, is short of some brands of beer. Nando's, a chicken restaurant, temporarily closed around 50 branches because it cannot get the birds.

The main reason is straightforward. With pandemic restrictions almost entirely lifted and the economy reopened, demand has recovered faster than supply, leading to shortages and higher prices. Consumer-price inflation, which was running at under 1% annually at the start of the



year, hit 2.1% in July. The Bank of England expects annual inflation to rise to around 4% over the coming months.

But that is not the whole story. Some of the squeeze is caused by problems outside Britain's borders, for example the computer-chip shortage. And the pandemic is far from over: government estimates suggest that new infections are running at over 200,000 a week. Employers are having to do without both the infected and many of those who came near them. According to the most recent data available, in the week ending August 18th over 300,000 close contacts of people who tested positive were told to stay home.

The main additional factor, however, is Brexit. Britain's transitional membership of the European Single Market and Customs Union ended on December 31st 2020. The end of the frictionless border with Britain's main trading partner means further problems for supply-chain managers. Although the government has chosen to suspend most border checks until October, new rules on collecting value-added tax have convinced many smaller European businesses to sell less to Britain. Sanitary and phytosanitary rules, due to be imposed on imports this autumn, will make food supply chains more fragile. Employers in sectors such as food processing and hospitality, which relied heavily on European workers, say that many left the country last year. Some may not return.

Disentangling the effects of Brexit and the pandemic is tricky. Take, for example,

the shortage of heavy-goods vehicle (HGV) drivers. It has become severe enough that the government has extended the maximum time allowed behind the wheel. Drivers may stretch the daily maximum of nine hours to 11 hours twice a week between now and October. Around 40% of Britain's shortfall of drivers, estimated at around 100,000, can be blamed on the suspension of driving tests at the height of the pandemic, and HGV drivers are in short supply across the continent. But Britain is suffering particularly acutely.

As well as suppressing demand and disrupting supply, the pandemic has also twisted Britain's economy into a new shape. Over the past 18 months, consumer habits have undergone a dramatic shift. Between the end of 2019 and March 2021, their spending on services fell by around a fifth, while spending on goods mostly held up. The typical Briton went to the pub hardly at all and used Amazon a lot more. Such shifts have reshaped high streets. The Centre for Retail Research, a think-tank, calculates that almost 18,000 shops have closed since the end of 2019, and over 215,000 retail jobs have been lost. According to the Office for National Statistics, the share of retail sales made online has jumped from under 20% before the pandemic to approaching 30%, even as shops have reopened. Retailers think that shopping habits formed during the pandemic may well outlive it.

Many workers have responded to changing consumption patterns by following the money. Bosses in the hospitality sector have found themselves short of staff, probably because some former waiters and the like are now driving delivery vans or stacking supermarket shelves. Data from Indeed, an online recruitment firm, show a marked drop in interest from potential applicants in working in certain sectors. Clicks per online job advert for vacancies in food preparation and service roles have fallen by over 50% since February. In an effort to lure workers back to such jobs, employers are starting to raise pay. The median wage rate for hospitality jobs posted on Indeed rose by 3.7% between February and July, compared with an increase of 0.8% across all roles.

Some of these bottlenecks should ease over the coming 12 months. Global supply chains will be adjusted and strengthened, and the labour market will adapt to new spending patterns. The rules on when to isolate after coming in contact with a case of covid-19 were eased in mid-August. And higher wages will eventually draw workers back into hospitality, and encourage them to train as HGV drivers. But all this will take time, and as Brexit bites, trade with the EU will continue to become more difficult. The recovery from the pandemic will be far from smooth.

Trade after Brexit

Tied up in knots

BELFAST

For Northern Ireland, Brexit means red tape and government subsidies

MONG THE many claims made for Brex-Ait was that leaving the European Union would allow Britain to slash red tape and free private industry to flourish. Nowhere does that promise ring more hollow than in Northern Ireland. When the United Kingdom left the EU, it promised that the province would remain to all intents and purposes within the trade bloc, in order to keep the border with the Republic of Ireland near-invisible. The aim was to avoid disrupting Northern Ireland's fragile peace process by re-inscribing the island's partition, thus inflaming nationalist sentiment. But the result has been to create a fresh blizzard of red tape and large new costs for traders.

Under the Northern Ireland protocol, goods and services must continue to flow freely on the island of Ireland. Exports from Northern Ireland to mainland Britain are also uncomplicated, since Westminster is free to set the rules. But trade in the other direction crosses from Great Britain, which is fully outside the EU, to territory from which it can pass freely into the trade bloc, potentially circumventing its standards for everything from animal health to product labelling. So the price of an invisible border on the island of Ireland is one in the Irish Sea, with new and onerous customs and regulatory barriers. Late last month the British government released a dedicated form to cover the eventuality



Check the hold for hippopotami

that a hippopotamus might one day cross the Irish Sea.

One predictable result is that an increasing number of mainland firms are stopping selling to Northern Ireland. Another is large and rising government spending on mitigating the protocol's consequences. Boris Johnson, the prime minister, has authorised a plethora of costly schemes aimed, in effect, at maintaining historical trade patterns. More than £500m (\$690m) has already been budgeted until the end of 2022. Many border measures, for example those governing the import of medicines and chilled meats, have been delayed to allow time to adjust. When they come into force they are likely to cause disruption, public anger-and clamour for further intervention.

Esmond Birnie, an economist at Ulster University, has sought to quantify the costs in more expensive imports, new customs checks and extra red tape. The protocol benefits some businesses by allowing them to stay within the EU's free-trade area, he says, but not enough to offset such costs. Using early trade data from this year, he reckons the "protocol penalty" will be around 2% of Northern Ireland's GDP.

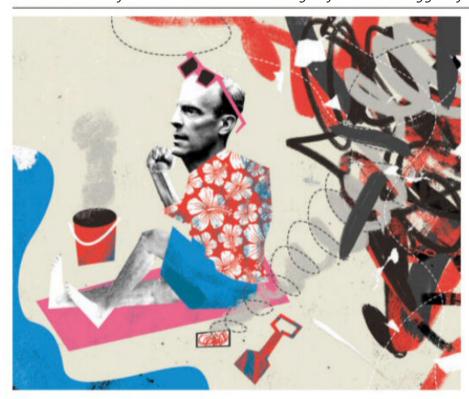
The British government is now seeking to renegotiate the protocol in order to lessen its impact. But the EU has said maintaining the integrity of the single market leaves room for at most minor changes, creating a dilemma for policymakers in Westminster. Should they withdraw support and allow trade to adjust, with considerable economic pain for Northern Irish businesses and consumers? Or should taxpayers bear the cost of expensive and inefficient schemes in which the government acts as trade facilitator in perpetuity?

There is little guiding precedent. Governments often subsidise regional economies, points out Alan Winters of the UK Trade Policy Observatory at Sussex University, for example by building infrastructure or beefing up transport links. They also commonly subsidise international trade—as in previous decades, when Northern Ireland and other parts of the UK saw lavish handouts to unprofitable shipyards and carmakers. But "paying to undo your own policies is unusual," he says, "and the politics are more difficult."

At some point, the choice may be taken out of the British government's hands. Under the protocol, the UK can offer subsidies to Northern Irish companies, but only if they satisfy EU law. The trading bloc is generally quite sympathetic to governments seeking to support isolated or disadvantaged regions, says George Peretz, a barrister and expert in state-aid law. But no one knows what is permissible when it comes to counteracting newly imposed trade barriers, he adds. The whole point of the EU is that within it, trade is able to flow freely.

Bagehot | Not up to it

Dominic Raab fails to rise to the challenge of Britain's biggest foreign-policy crisis in decades



I direction (Plato), or embracing the "ethic of responsibility" (Weber). Realists see it as the ability to seize the horse of history by the tail and lever yourself onto its back (Machiavelli), or to sell a coherent vision to a fickle public (Schumpeter). But whatever its nature, everyone can agree when it is absent.

As it has been from the Foreign Office during the past fortnight. Even as Afghanistan was falling to the Taliban, Dominic Raab, the foreign secretary, dawdled in Crete before cutting his holiday short. He delegated to a junior minister the job of calling his opposite number in Kabul to discuss the fate of Afghan interpreters working for British forces. His response to criticism in a television interview was risible: he had been focused on his job in Crete, he bristled, not paddle-boarding, because the "sea was closed".

The permanent secretaries of the Foreign Office, Home Office and Ministry of Defence, as well as the prime minister, Boris Johnson, also initially refused to let a little thing like the fall of Kabul interrupt their holidays. And Mr Raab made some reasonable points during a combative appearance before the foreign-affairs select committee on September 1st. There was a limit to how much Britain could have done to improve the situation in Afghanistan, given America's precipitous departure. Britain was not alone in underestimating the speed of the Taliban's advance. As foreign secretary he had to keep his eye on lots of pots that threaten to boil over, not on Afghanistan alone.

Moreover, Mr Raab inherited a Foreign Office that had been broken by decades of cuts and marginalisation. "Embassies have been sold off; a diplomat's career path has become arbitrary; the last Permanent Secretary prioritised diversity over diplomacy; and too much experienced advice has been ignored and subordinated to the whims and instructions of Downing Street," lamented Sir Alan Duncan, who served a spell as a foreign-office minister, in a recent article. Brexit has left Britain's diplomatic strategy in disarray, tearing up nearly five decades of patient work with the European Union and doubling down on the transatlantic relationship, at precisely the moment when America has decided to turn inward and towards the Pacific.

But leadership is about rising to challenges. A lesser man than

Ernest Bevin, foreign secretary from 1945 to 1951, might have surrendered to pressure from within the Labour Party to side with the Soviet Union rather than America, or to shift opportunistically between the two. Moreover, Mr Raab helped create the difficulties that now beset his department. He was among the hardest of the Brexiteers, helping to bring down Theresa May, the previous prime minister, when she tried to compromise with the EU, and running for party leadership in 2019 as the champion of the ultras.

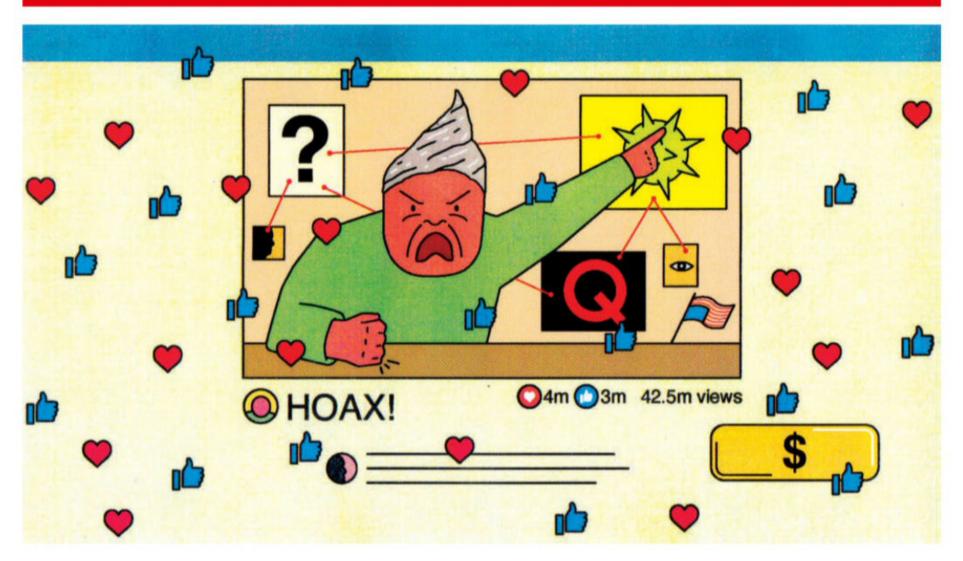
That Mr Raab's Foreign Office is not a happy place is hardly surprising, given his ideological leanings. But the atmosphere has been worsened by his personality, variously described as "tightly wound", "controlling" and "cold". Some officials have taken to calling him "five i's", a double reference to the "five eyes" arrangement that sees Britain share intelligence with America, Australia, Canada and New Zealand, and what they see as his attributes: insular, imperious, idle, irascible and ignorant. He has handled this hostile environment by sidelining ambassadors and surrounding himself with special advisers. But the cost has been high. He has built no close relationships with his counterparts around the world, failing to talk to foreign ministers in Afghanistan, Pakistan and several of the surrounding states in the six months leading up to the fall of Kabul. Important decisions have been shaped by callow youths who have seldom strayed outside the Westminster village, rather than by seasoned diplomats.

Nor does Mr Raab supply much in the way of intellectual leadership. The son of a Jewish Czech refugee, he has a fine record on standing up to Russia and China. He pressed for residents of Hong Kong to be welcomed in Britain as China tightened its grip on the territory. But on many difficult choices facing Britain, he has been reticent—so much so that some other Brexiteers are losing patience. Instead of buccaneering about the place, as they fondly imagined Britain doing once freed from the EU, he has got lost in pettifogging process, they complain. He is a strange combination of ideologue and technocrat, a hard-line Brexiteer by conviction but a human-rights lawyer by training and experience. Somehow, this mixture has left space for neither vision nor panache.

His dismal performance over Afghanistan has provoked another round of Westminster snakes and ladders. Will the prime minister sack him in the next reshuffle, or at least move him sideways? Who would take his place? (Michael Gove, the cabinet-office minister, and Liz Truss, the trade secretary, are early front-runners.) And might the manifest failings of one member of his cabinet inspire the prime minister to take a hard look at the others? Why does it contain so many people who mess up everything they do, like Gavin Williamson, the education secretary? Why have so many of the most impressive Tory politicians languished on the backbenches, like Tom Tugendhat, the chairman of the foreign-affairs select committee, or jumped ship, like Rory Stewart, a former soldier, diplomat and Conservative leadership candidate?

Holding on tight

When Mr Johnson took office, surrounding himself with Brexiteers was understandable, given the need to end his party's 30-year civil war. But sensible Remainers have reconciled themselves to a future outside the EU, and the cost of packing the cabinet with mediocrities is rising by the day. The prime minister would strike no one as a follower of Plato or Weber. The realist school of leadership seems a better fit. But having seized the horse of history by the tail when he backed Brexit, he is in danger of failing because he has assembled incompetent horsemen, rather than crack cavalry.



Conspiracy theories

It's all connected, man

KINSHASA

From Congo to the Capitol, covid-19 and the internet are feeding loony ideas

N LATE JULY, less than a week after the British government lifted most of its remaining covid-19 restrictions, several thousand people nonetheless gathered in London's Trafalgar Square to protest against "lockdowns". Among the speakers were Piers Corbyn (brother of a former Labour Party leader), a climate-change denier who thinks that covid-19 is a "hoax"; David Icke, an author who believes that the world's most powerful people are secretly lizards; and Gillian McKeith, an advocate of colonic irrigation who argues that a good diet is enough to stop the virus. A former nurse (struck off for spreading misinformation) compared medical staff who have been distributing vaccines to Nazis, and suggested they be hanged.

Such demonstrations have become common not just in Britain, but all over the world. The pandemic has produced a tsunami of misinformation. In France a documentary alleging that covid-19 was invented by political elites as part of a conspiracy to bring about a "new world order" was watched 2.5m times in three days. In America the notion that covid is a hoax has

spread alongside a collection of feverish theories known as "QAnon", which hold that the government is run by a secret cabal of paedophiles and that Donald Trump is a saviour destined to defeat them.

This is, in short, a golden age of conspiracy theories. The internet makes it easier than ever to spread them. They are at least as common in poor countries as in rich ones. In Nigeria many people believe that Muhammadu Buhari, the president since 2015, actually died in a hospital in London in 2017, and has ever since been impersonated by a Sudanese body double called "Jibril". In India Narendra Modi's government has alleged that Greta Thunberg, a teenage Swedish climate activist, is part of a global plot to defame his country's tea. The idea is widely held across the Middle East that the attacks of September 11th 2001 were "false-flag" operations plotted by Israel (or just some Jews).

Of course, many people hold beliefs that are ludicrous yet harmless, such as the idea that Elvis Presley is alive and living in Kalamazoo, Michigan. A conspiracy theory, however, is something more specific: a belief in a secret plan by a small number of powerful people to harm a larger group of ordinary folk. Such theories are, according to Quassim Cassam of Warwick University in Britain, "first and foremost forms of political propaganda". Their power lies in giving people an explanation of the world that blames their misfortunes on their enemies. But they are usually nonsense, and they tend to make rational politics impossible. Their ability to motivate people is what makes them dangerous.

Conspiracy theories have existed throughout history. Tinfoil-hatted Romans concocted the myth that emperor Nero had started the great fire of 64AD. After the printing press was invented in the 15th century, one of the first bestsellers was a guide to the evil plots of witches. For centuries Jews have been accused of scheming to murder Christian children; the "Protocols of the Elders of Zion", published in the 1900s by tsarist propagandists, broadened the charge to world domination. Freemasons, communists, the CIA and the European Union have all played starring roles in conspiracy theories.

To get a sense of how they infect politics today, a good place to start is the Democratic Republic of Congo. In few countries is creating and spreading conspiracy theories so deeply ingrained. Almost all politicians, including the president, have espoused them at one time or another. They "contribute to a narrative to mobilise people", says Kris Berwouts, a Belgian academic. By using a conspiracy theory to whip up

a mob in the streets (or, in the countryside, to attack a neighbouring tribe), a politician generates pressure he can use in negotiations with other leaders.

At his home in Kinshasa, the capital, Valentin Mubake, an ageing politician, lays out the country's most common conspiracy theory. In his telling, Congo's current problems began in the mid-1990s when Paul Kagame, now president of neighbouring Rwanda, organised a fake genocide of his own people, the Rwandan Tutsis. That gave him the political cover to take over Rwanda and then to invade Congo at its weakest moment. "A mafia was created for the balkanisation of Congo," he says. "Tony Blair and Bill Clinton, they worked with Kagame. The West prepared their war...and Kagame did the job." Everything, he says, was "organised by the United States". The UN, he alleges, commits massacres and spreads diseases such as Ebola to keep the

Mr Mubake's alternative history of Congo is widely believed. At a meeting of young middle-class poets in Goma, a big city in the east, your correspondent asked how many knew people who believed the theory. Everyone in the room raised a hand. Such ideas do tremendous damage. Hatred of Rwanda fuels ethnic violence, particularly against Congolese Tutsis. The belief that Ebola is a foreign plot has led militias to storm clinics and "liberate" patients, thus spreading the disease. People refuse to take covid-19 vaccines for fear they are part of the plan. Conspiracy theories "literally kill", says Rodriguez Katsuva, a Congolese journalist who co-founded Congo Check, a fact-checking website.

Why do people believe them? One reason is that some conspiracies turn out to be real. In Congo Patrice Lumumba, the country's first prime minister after independence from Belgium in 1960, was murdered by separatists with the support of the CIA and Belgium. Mr Kagame obviously did not fake the Rwandan genocide, but he did invade Congo using a local rebel boss as a front man. Nazi Germany staged a falseflag attack before invading Poland in 1939; in the 1960s the American government planned one as an excuse to invade Cuba.

Other conspiracy theories, while false, feed on real-world anxieties. There is no paedophile deep state, as QAnon adherents believe. But Jeffrey Epstein and Jimmy Savile, two paedophiles in America and Britain respectively with ties to politicians, lived untroubled by the law for years.

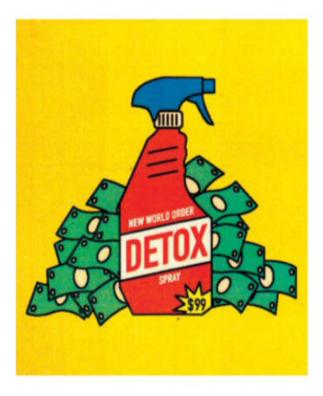
Such fears are tapped into by clever salesmen. William Coleshill, a young political entrepreneur, travels around London with a camera live-streaming footage from (usually tiny) protests to a YouTube channel called "Resistance GB". He argues that covid-19 is a plot to justify "communist" government. His channel has 48,000

subscribers and is growing fast. It gives him a modicum of fame and has a button for donations. Other political entrepreneurs sell crank goods. An online anti-vaccine network probed by the Bureau of Investigative Journalism, a watchdog, directs users to websites selling "heavy metal detox" spray for \$95 and "marine plasma drinkable sea water" for \$49.95.

The appeal of conspiracy theories is partly rooted in human psychology. Studies show that people consistently overestimate their ability to understand complicated systems. They think that "they can explain the world they live in fairly well" when in fact their information is quite limited, found Leonid Rozenblit and Frank Keil, two psychologists, in a paper published in 2002. Conspiracy theories help people to find meaning in a disturbingly random world, reassuring them that bad things result from the machinations of bad people rather than just bad luck (or their own mistakes).

To the extent that liberal democracies avoid the conspiratorial discourse that dominates places like Congo, it is because of social norms and institutions. Ideally, those who spread conspiracy theories lose the support of the media, parties and ultimately voters. In France Jean-Luc Mélenchon, a hard-left candidate for president, has been denounced by almost every major political figure for his belief that a global oligarchy is conspiring to keep Emmanuel Macron in power. In America Marjorie Taylor Greene, a QAnon supporter in Congress, was stripped of her committee appointments for claiming that several mass shootings were staged.

But these mechanisms seem not to be working very well of late. Poland's Law and Justice party won power in 2015 while propounding the baseless theory that Russia was behind a plane crash that killed the country's president in 2010. Donald Trump won the American presidency after ped-



dling the false accusation that Barack Obama's birth certificate was fake. Long before Mr Trump claimed that the 2020 election had been rigged, he made the same claim about primary elections he lost in 2016, winning the loyalty of Republicans who felt ignored by party power-brokers.

Indeed, Republican institutional elites are conspicuously failing to enforce norms against nuttiness. In February Mitch McConnell, the leader of the Republicans in the Senate, called conspiracy theories a "cancer" on his party. But he still voted to acquit Mr Trump of using them to incite the riot at the Capitol on January 6th. In 2016 Ted Cruz, a Republican senator, denounced Mr Trump for baselessly claiming that he was born abroad: in 2020 he backed Mr Trump's false accusation that the presidential election was stolen. That is probably because so many rank-and-file Republicans believe Mr Trump's version rather than reality. There are 45 believers in QAnon running for Congress in 2022.

You can't mandate the truth

How can conspiracy theories be discouraged? Many look to technology firms. Starting in 2019 Facebook limited to five the number of people to whom a user may simultaneously forward a message on Whatsapp (which it owns). The aim was to slow the spread of conspiracy theories on the platform—a big problem in India. On Facebook itself, 15,000 moderators work to take down disinformation. In January Twitter suspended 70,000 accounts linked to QAnon. Both platforms attempt to suspend posters who repeatedly disseminate harmful falsehoods, or at least to prevent them from profiting. In 2019 YouTube blocked people spreading misinformation about vaccines from being paid for adverts.

Another method is to debunk the theories, the approach taken by Mr Katsuva at Congo Check. He founded the organisation in 2018 with two other local journalists, at a time when massacres were being committed in north-eastern Congo amid widespread misinformation about an Ebola outbreak. The number of such fact-checking websites worldwide grew from 145 in 2016 to 341 this year, according to Duke University's Reporters' Lab, a journalism centre. Yet fact-checking sites tend to win fewer readers than the conspiracy bugs.

Ultimately, conspiracy theories are believed when authorities are not trusted. To combat them, politicians have few options other than to govern transparently and well. Three centuries ago Jonathan Swift wrote that "falsehood flies, and the truth comes limping after it; so that when men come to be undeceived, it is too late; the jest is over, and the tale has had its effect." Even the best of governments may not beat conspiracy theories. But they can give them a run for their money.



The future of meetings

Business

Update your calendar

How to get employees, clients and investors into a room

LOBBY CAN shape the first impressions $oldsymbol{A}$ of a business. Guests at the building housing the New York headquarters of Jefferies, an investment bank, were once greeted by a section of the Berlin Wall purchased from the East German government. In the London office of Slaughter and May, a law firm, water trickles down an atrium wall into a shallow pool made of natural stone. The San Francisco home of Salesforce, a software giant, welcomes visitors with a 106-foot (32-metre) video wall displaying anything from soothing waterfalls to Pac-Man clips.

As covid-19 shut offices around the world, those crucial first impressions were mediated by video calls. With workers stuck at home, corporate meetings—with underlings, fellow workers, clients and investors—turned almost entirely virtual. Anything that used to involve people

crowding into spaces, from performance reviews to shareholder jamborees, roadshows and initial public offerings, moved to cyberspace.

Since March 2020 the Nasdaq exchange in New York has held more than 150 virtual bell ceremonies. The Hong Kong Stock Exchange has conducted at least 140. The aggregate amount of time people spent on

→ Also in this section

- 50 Databricks' AI ambitions
- 52 Rivian's electric-car roadmap
- 53 China's video-gaming crackdown
- 53 Theranos on trial
- 54 Bartleby: The bad jobs myth
- 55 Schumpeter: Epic's battle royale

Microsoft's Teams video-conferencing platform tripled to 45m hours a day. Zoom went from being a moderately successful startup to a verb (and, for some people, a four-letter word).

Now that many companies are reopening their offices and reconfiguring their work arrangements into something hybrid, they are also rethinking their approach to meetings. Love them or (more often) loathe them, powwows are an integral part of modern commerce. Managers must therefore decide which parts of remote experience, if any, they want to keep. A poll of more than 7,000 people in ten countries by Zoom found that two-thirds would prefer a mix of virtual and in-person meetings in future. As with all work that is part remote and part not, in other words, the future of meetings looks messy.

Fully virtual meetings are not going anywhere. Zoom's shares fell sharply on August 30th but only in response to an announcement that its growth had slowed in the latest quarter. Lumi, a service which helps organise shareholder meetings, says that 90% of this year's gatherings will be fully remote, compared with 11% in 2019. OpenExchange, a firm that provides virtual and hybrid events for companies and investors, expects to run 200,000 of them in >>

> 2021, up from 4,000 in 2019.

The rampant Delta variant of covid-19, which is forcing firms to postpone their fuller return to the conference room, is one reason. But not the only one: virtual meetings allow more people to attend than if participants had to travel to distant locations. Online gatherings can also be more flexible. During the pandemic British workers scheduled meetings at times they would normally be commuting to and from work, according to research by Doodle, a scheduling service.

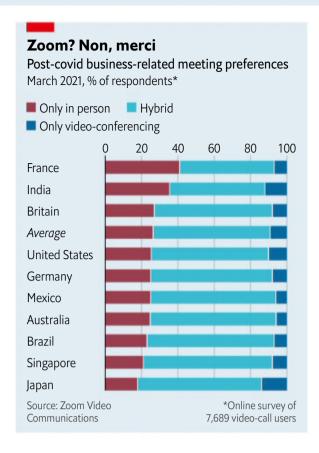
Video conferences also seem to work just fine for many purposes. Deloitte, a consultancy, surveyed 1,000 executives in America involved in private-equity transactions and mergers and acquisitions. It found that 87% of respondents said their firms were able to close deals in a purely virtual environment. More than half would prefer to maintain this after the pandemic.

But virtual get-togethers have drawbacks, too. More can be packed into a day, leading to Zoom fatigue (another phrase that has entered common parlance). They are also less likely to end on time. A study by Microsoft showed that the average meeting in Microsoft Teams lengthened from 35 to 45 minutes, compared with a year earlier (probably because they lack physical prompts such as people getting up to leave or the next group barging into the conference room for their own conclave).

Hybrid meetings where some people are present in person and others dial in present a particular challenge. Most organisations have underinvested in the audiovisual technology that ensures that those dialling in are seen, heard, and do not feel like second-class citizens. In most prepandemic meeting rooms such considerations were an afterthought. Poor lighting and ill-placed microphones are common.

Such technical niggles can be fixed with better technology and cleverer design of office space. Companies are experimenting with larger, higher-quality screens, voice-tracking cameras that follow the speaker and tools that limit background noise. Software that transcribes or records meetings is becoming standard, easing pressure on employees to attend every session. Silicon Valley giants such as Microsoft and Facebook want to take things a step further, developing an augmented-reality "metaverse", where users anywhere can interact with one another in real time (see Schumpeter).

Not everyone is convinced. Some companies are pushing back against the virtual culture. Many Wall Street bosses have taken a hardline position against remote work, including meetings. JPMorgan Chase called employees back to offices earlier than most. It is now urging its bankers to get back on planes to meet clients in person. JPMorgan's boss, Jamie Dimon, has



made the firm's fleet of private jets available to managing directors. This summer an informal contest kicked off at the bank, with employees awarded points for face-to-face client meetings. The reward was reportedly a meal with JPMorgan's top brass. Mr Dimon may be on to something: seven in ten respondents in Zoom's study thought that it was important to meet clients physically.

Fearful of forsaking good ideas that emerge from spur-of-the-moment meetings, many companies are reshaping their spaces to facilitate such serendipity whenever workers do deign to show up at the office. A poll of 400 international firms by Knight Frank, a property consultancy, found that more than half expect the share

of collaborative spaces in their portfolios to increase over the next three years. No-kia, a Finnish maker of telecoms equipment, says that from next year around 70% of its office space will be dedicated to collaboration and teamwork. Dropbox, a cloud-storage firm, has sold its headquarters in San Francisco. Its new sites, known internally as studios, will feature larger conference rooms with versatile layouts.

And whereas big majorities of people tell surveys they favour hybrid work, they clash over what this means for meetings specifically. With respect to large gatherings the clear preference seems to be for virtual settings, which 61% of Zoom's respondents favoured, compared with 39% opting for the physical conference room. But the preferences differed by gender, with around 44% of men preferring to attend large group meetings in person, compared with just 33% of women (whom studies show to be less likely to speak up in meetings and likelier to be interrupted by men). With respect to smaller team meetings, remote workers were split evenly between wanting to join in person and preferring to do so virtually. And some countries' work cultures look particularly averse to virtualisation: 41% of French workers insisted they would only meet in person (see chart).

Some decisions will be straightforward enough. Meetings where crucial calls are made or new clients introduced will almost certainly take place in-person. When it comes to less consequential yet still important confabs, the calculation will be more complicated. One thing is certain. A great many meetings will remain a pain for managers to schedule and, for many of their subordinates, a pain to attend.

Information technology

The Oracle of AI

SAN FRANCISCO

Flush with billions, Databricks has momentum and big plans

HI, JUST CHECKING in. Can I put in some more?" The bosses of promising startups are bombarded by such texts these days. Big funds in particular are falling over themselves to grab a piece of the tech pie (see chart on next page). Yet one founder seems to have received more than his fair share of pitches: Ali Ghodsi, the chief executive of Databricks. And he has said yes to many. On August 31st the company confirmed that, only six months after a \$1bn financing deal, it had raised another \$1.6bn, valuing it at \$38bn—\$10bn more than after the previous round. Among the

Silicon Valley cognoscenti, these numbers cement Databricks' status as the most hyped company of the hour.

The software-maker is soon likely to be known farther afield. Later this year it is expected to stage the largest-ever initial public offering (IPO) of a software firm—larger than that in late 2020 of Snowflake, its most serious rival. Alternatively, some predict, it could be snapped up by Microsoft in the largest ever software takeover. Whatever the outcome, there is substance to the hype. Databricks could become, in the age of artificial intelligence (AI), what

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Oracle and its databases once were in the world of conventional corporate software: the dominant platform on top of which applications are built and run.

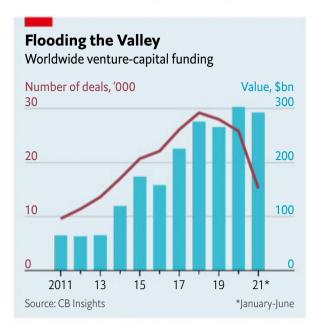
Databricks was founded in 2013 to commercialise Spark, a piece of open-source software that processes reams of data from different sources to train algorithms which then become the engines of AI applications. The firm added features, including code that makes it easier for developers to program the system as well as manage their workflow, and offered the package as a cloud-based subscription service.

Yet Databricks only really took off when it added another component called "lakehouse". It is a combination of two sorts of databases, a "data warehouse" and a "data lake" (hence the portmanteau). Both have historically been separate because of technical constraints and because they serve different purposes. Data warehouses are filled with well-defined corporate data that allow a firm to look into its past, for instance at how its sales have evolved, something called "business intelligence" (BI). Data lakes are essentially a dumping ground for all sorts of data that can reveal a firm's future, including whether sales are likely to go up or down. Yet this separation is increasingly inefficient and unnecessary, explains Max Schireson of Battery Ventures, an investor in Databricks. "Doing BI and AI in different systems today is kind of stupid," he notes.

Firms have jumped on what Databricks offers, in particular incumbents worried about being disrupted by an AI-driven startup. Comcast, an American broadband provider, uses it to allow its customers to use their voice to select movies; ABN Amro, a Dutch bank, to recommend services; and H&M, a fashion retailer, to optimise its supply chain. Databricks now claims more than 5,000 customers and annualised subscription revenue of \$600m—75% more than at the end of last year.

Throwing Databricks at Snowflake

Mr Ghodsi has set his sights even higher. "Ultimately, everything data should be on Databricks," he says. He is planning on investing the newly raised capital to keep growing and become the leader in lakehouse systems. Nobody should fault Mr Ghodsi, who once taught computer science at the University of California, Berkeley, for his ambitions. Yet realising them will not be easy. Other firms are already pushing into the territory. He will probably be able to fend off the three big cloud-computing providers: Amazon Web Services, Google Cloud Platform and Microsoft Azure. Although they have more than enough resources to compete and provide integrated AI packages, they share one big problem. Firms increasingly prefer not to store all their data in a single cloud, fearing



they will get stuck with one vendor. Instead, they opt for products, such as Databricks', that run across several clouds.

Snowflake is a different story. It, too, is building lakehouses. It is also taking a different approach. Whereas Databricks is adding BI to its AI platform, Snowflake, which has grown up in the data-warehouse world, is adding AI to its cloud-based BI package, meaning that their respective products will increasingly overlap. Whereas most of Databricks' code is open-source, Snowflake's is proprietary. And whereas Databricks has mostly stuck to a "land-and-expand" strategy, whereby small soft-

ware deals grow into bigger ones, Snow-flake practises a more conventional top-down sales model that focuses on big deals from the start.

All this will make for a battle over the next few years. But it could be rudely interrupted if Microsoft snaps up Databricks. The software firm is already one of Databricks' investors and co-operates closely with it. Among other things, Azure offers a version of Databricks' platform and Microsoft uses its name in presentations about its strategy, something it rarely does with other firms. It would be a good fit. At its core, Microsoft is still a company selling tools for developers to write applications and platforms to run them on. And Databricks represents both a complement and a strategic threat: it lets data, rather than people, write the code.

Databricks' IPO is not meant to take the firm public, according to some analysts, but to put a price on it, so that negotiations can start somewhere. But the hype surrounding the company could thwart such plans. Snowflake is now worth about \$90bn. If Databricks' IPO outdoes Snowflake's, its asking price may well be north of \$100bn. And like Pinterest, a social-media firm which Microsoft considered buying earlier this year, it may become too pricey even for a company as loaded as world's biggest software firm.

Rivia

Can it deliver?

Another electric-vehicle startup seeks a weighty valuation

Carmaking is sharply divided between the old and new. Recent electric-vehicle (EV) entrants, with Tesla at the forefront, command effervescent valuations largely based on being new and different. The share prices of established carmakers suggest that they will soon go out of business. Yet many of the former will probably fail and most of the latter survive. Rivian, one of the newcomers, filed paperwork for an initial public offering on August 27th and is reportedly seeking a valuation of at least \$70bn, roughly the same as General Motors. Do its plans match the fizz?

At first glance its billing as one of the most promising EV startups might seem justified. Rivian has raised over \$8bn from an impressive list of backers, including Amazon and Ford. The e-commerce giant has ordered 100,000 electric vans, the first 10,000 of which should be on the road in 2022. Rivian is looking for a location for another plant which together with its factory in Illinois could turn out 300,000 vehicles a year.

Commercial Evs are in huge demand as e-commerce flourishes, lifted further by the pandemic, and cities worldwide impose increasingly strict emissions rules. Rivian's skateboard chassis, on which a "top hat" of any body style can be plonked, allows it easily to customise delivery vehicles to customers' specific needs. It will also underpin the firm's forthcoming pickup and suv and could also be sold to other carmakers.

But established firms, which make fat profit margins on vans, will not give up their market lightly. Moreover, Rivian is not the only newcomer: America's Canoo and Britain's Arrival are also entering the EV van game. Canoo and REE, an Israeli startup, are among many making EV skateboards. A battery-powered version of Ford's popular F-150 pickup—the F-series is the source of most of its profits—goes on sale next year and GM has similar plans for the Chevrolet Silverado in 2023. Rivian has joined a business in which the fight to survive has never been more brutal.

Video gaming

Game over

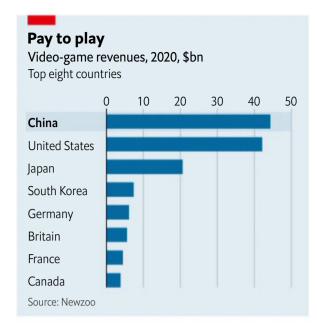
China's crackdown will hit foreign firms as well as domestic ones

It is hard work being a capitalist in a communist dictatorship. In the past few months China's authorities have gone after big technology firms for alleged abuse of monopolistic power and the misuse of data. In the name of social cohesion they have banned for-profit tutoring and hectored companies and billionaires about their wider social responsibilities. The crackdown is reckoned to have wiped more than \$1trn off the value of China's biggest tech firms.

On August 30th the country's videogaming industry—the world's largest with annual sales of \$44bn—became the latest target. New rules proclaimed that, in order to "effectively protect the physical and mental health of minors", children under 18 would be allowed to play online games only between 8pm and 9pm on Fridays, Saturdays, Sundays and public holidays.

The rules are the most restrictive in the world, and will affect tens of millions of people. Around two-thirds of Chinese children are thought to play online games regularly. But the idea is not new. China has worried about what it sees as the addictive and corrupting qualities of video games for more than a decade, says Daniel Ahmad, a senior analyst at Niko Partners, which follows Asian video-gaming markets. Censors frown on things like politics and gore, requiring changes to foreign games seeking a licence for sale in China. The new regulations are an update to ones passed in 2019 that limited children to 90 minutes per day of gaming, and imposed a curfew between 10pm and 8am. (On August 25th South Korea, which implemented a similar curfew in 2011, announced it would scrap

Those previous rules had loopholes. China's "anti-addiction system" requires gamers to use their real names, and a government-issued identity number, to play online, and boots them from the game when their allotted time has expired. But children could use adult credentials to log in, or play in internet cafés that turned a blind eye to long gaming sessions. This time, the authorities seem keen to block such workarounds. Alongside the new rules were promises of tougher policing and punishments for companies found to be dragging their feet. Tencent, China's biggest video-gaming company, has been experimenting with facial-recognition software to ensure that crafty players cannot



use other people's credentials.

Despite their draconian nature, the immediate impact of the new rules was muted. Shares in Tencent and NetEase, a rival firm, dipped slightly after the announcement. That is probably because the rules are unlikely to make much instant difference to the firms' bottom lines. Although there are thought to be around nom gamer kids in China, they have little money to splash on new characters or virtual items. In its most recent set of quarterly results, Tencent said that only 2.6% of gaming revenue came from players under 16.

The long-term consequences could be more painful. The impecunious teenage gamers of today are the young adult gamers, complete with disposable income, of tomorrow. If the crackdown is effective, says one observer, Chinese gaming giants could see their flow of new customers dry up. Western firms could suffer, too. Jefferies, a bank, flags Roblox, an American gaming platform that allows users to create their own mini-games and share them with friends, as particularly at risk. The game, which has over 40m daily users around the world, is aimed at younger players. It launched in China in July.

Another question is how far the crack-



The fun stops now

down will spread. For now, a thriving grey market links Chinese gamers to foreign firms that are unable, or unwilling, to seek an official licence to sell their products in the country's vast market. "PlayerUnknown's Battlegrounds", an online shooter, is reckoned to have sold around 20m copies in China despite lacking official approval. Around 50m Chinese gamers are thought to use Steam, an online shop for PC games run by Valve, an American firm, that remains curiously unblocked by China's Great Firewall. That gives them access to tens of thousands of unlicensed games, free from official nannying.

The signs are ominous. In February Apple removed tens of thousands of unlicensed games from the Chinese version of its app store and a stripped-down, censorship-compliant Chinese version of Steam was launched. It offers few games and has hardly any users. But if the crackdown continues, Chinese gamers may soon find the local version is all that is available.

Elizabeth Holmes and Theranos

Theatre of blood

The failure of a notorious health-care startup plays out in a California court

Acrowd of reporters, drawn by the drama and glamour of the event, jostled outside a courtroom in San Jose on August 31st to witness the opening of what may be the next, perilous, act for a woman once touted as the next Steve Jobs and the world's youngest self-made female billionaire. Jury selection was beginning for the fraud trial of Elizabeth Holmes, the former boss of Theranos, a startup which attempted to revolutionise the process of blood testing but failed spectacularly in 2016 after the press and regulators probed the company's inflated claims.

These sorts of cases usually hinge on subtle distinctions between exaggeration and outright deceit and whether such deceit was intentional. But legal intricacies may take second place to theatrics. Will Ms Holmes take the stand in her own defence and risk the spotlight of cross-examination? Will she claim "coercive control" by her second-in-command at Theranos, Ramesh "Sunny" Balwani? Mr Balwani will be tried separately in January; he has denied Ms Holmes's claims.

The story of Ms Holmes is an epic of Silicon Valley hubris. She brought charisma to the corporate world, adorning many magazine covers. She relentlessly promoted her firm to a valuation of \$9bn in 2015 before its demise. The attention lavished

Bartleby 'Twas ever thus

Why people are always so gloomy about the world of work

The notion that the modern economy lacks "good jobs" is as uncontroversial as saying that Lionel Messi is good at football. Pundits decry the disappearance of the steady positions of yesteryear, where people did a fair day's work for a fair day's pay. "Where have all the good jobs gone?", wonders one recent book, while another talks about "the rise of polarised and precarious employment systems". President Joe Biden takes after Donald Trump in promising to bring good jobs "back". But what if the whole debate rests on shaky foundations?

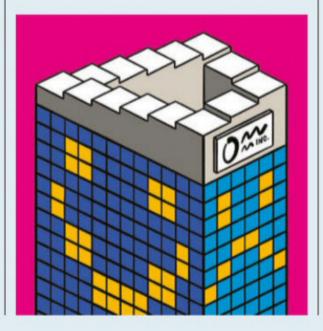
It certainly lacks historical awareness. Compare the current discussion with the one during America's postwar boom. Few people back then believed that they were living in a golden age of labour. Commentators were instead full of angst, worrying about the "blue-collar blues". They said that unionised factory jobs—the very sort that today's politicians yearn to restore—consisted of repetitive, dangerous work which involved all brawn and no brain. Others fretted over pay. Workers "are getting increasingly frustrated by a system they think is not giving them a satisfactory return for their labours", proclaimed a high-ranking official at America's Department of Labour in 1970.

In fact the notion that the world of work is in decay is as old as capitalism itself. Jean Charles Léonard de Sismondi, a Swiss writer who inspired Karl Marx, said that factories would turn people into drones. John Stuart Mill worried in the mid-19th century that the rise of capitalism would provoke social decay. People would focus on nothing other than earning money, he feared, turning them into dullards (just look at Americans, he warned). The rise of big business and white-collar work in America

provoked a new set of anxieties. It was soon predicted that the self-made men of yore would be replaced by effete company drones who did what they were told.

This is not the only reason to question today's pessimistic narrative. By any reasonable standard work is better today than it was. Pay is higher, working hours are shorter and industrial accidents rarer.

It is harder to tell whether workers enjoy their work more than they did. Gallup, a pollster, has kindly supplied Bartleby with a smattering of job-satisfaction surveys from the 1960s and 1970s. Certainly there is little to suggest that workers back then were any happier than they are today. More comparable data, also from Gallup, from the early 1990s onwards show gradually improving job satisfaction. Last year 56% of American employees said they were "completely" satisfied with their job, an all-time high. A growing "precariat" of insecure workers gets a lot of headlines. But 90% of American employees said in 2020 that they were completely or somewhat satisfied with their job security, up from 79% in 1993.



If the jobs-are-bad narrative falls down on the facts, why is it so pervasive—and so intuitive? Partly it is because no one has bothered to look at the evidence. Other observers just don't like the constant change and churn which has always been part and parcel of capitalism. More still may subscribe, perhaps subconsciously, to what Friedrich Hayek, a philosopher, called an "atavistic" view of markets. The very notion that people must sell their labour, for cash, in order to survive may violate some deeply held notion that humans are a fundamentally co-operative species, rather than a competitive one.

Yet perhaps the most important reason is that people dislike acknowledging trade-offs. Mill seemed unable to square his concern about the stultifying effects of capitalism with his argument that the division of labour had massively increased living standards. People often make similar errors today. The decline of trade unions may have hurt some workers' wages; but it is less commonly acknowledged that this has also made it easier for less "traditional" workers, such as ethnic minorities and women, to enter the labour market. Sedentary office jobs can make people fat; but people are far less likely to die on the job than they once were.

A relentless focus on the problems of labour markets still has its uses. It encourages people to think about how to make improvements. The evidence suggests that on average managers have got better in recent years but clearly some firms have a long way to go. Many people are still exploited by their employers. Today's world of work is far better than its critics would like to admit. But there is every reason to try to make it better still.

on Theranos seemed justified for a time. In 2015 Joe Biden, then America's vice-president, called it "the laboratory of the future". Its board included political, medical and legal bigwigs. Two huge firms, Safeway and Walgreens, agreed to distribute its products. Investors ignored flawed financial performance and the dubious quality of the device it was developing, drawn instead by the firm's idealistic goal of making testing cheap, easy and ubiquitous.

The awareness grew with the company's abrupt failure in 2016. Multiple books and television documentaries

shone more light on Ms Holmes. A TV mini-series and a film are now reportedly in the works. Such coverage is not justified by the facts of the case. Ms Holmes and Mr Balwani are accused of lying to investors, patients and doctors about the effectiveness of Theranos's tests. But Silicon Valley's venture capitalists are well used to over-hyped plans. Failure rates among tech startups are high, though most do not lose as much as the \$700m or so that had been invested in Theranos.

The buzz over Theranos stems from more than money. Because it was involved

in health care rather than, say, enterprise software or co-working facilities, any mistake could have had catastrophic consequences for a patient. The inability of Theranos to deliver on its promises was a disappointment to those who had seen it as a way for science to improve lives. The case also resonates because Ms Holmes looked like a woman succeeding in a male-dominated world. The issue will become more prominent if Ms Holmes is convicted and sentenced to jail as in July she gave birth to her first child. That could make for a miniseries with a heart-rending finale.

Schumpeter | Epic's battle royale

In the metaverse, will big gaming eventually become big tech?



N "READY PLAYER ONE", a science-fiction novel set in 2045, peolack L ple can escape a ghastly world of global warming and economic mayhem by teleporting themselves into the oasis, a parallel universe where they can change identity, hang out and forget the miseries of everyday life. In the book, published in 2011, the OASIS is the brainchild of a gaming tycoon who has everyone's best interests at heart. Lurking in the background, though, is Innovative Online Industries, an evil internet conglomerate that intends to take it all over and reap the rewards for itself.

There are echoes of this "good v greedy" narrative in the way Tim Sweeney, founder of Epic Games, creator of "Fortnite", an online-gaming phenomenon, talks about the metaverse. The idea is in vogue in Silicon Valley and is considered the next big thing in the internet. No one quite knows what the term means; at its most futuristic, the oasis is a pretty good analogy for what tech utopians have in mind. For now, suffice to say that if you think you have spent more than enough time online during the covid-19 pandemic, think again. Using virtual and augmented reality, avatars and lifelike computer imagery, the metaverse will further erase the boundaries between people's online and physical lives. Unsurprisingly, big tech is salivating at the prospect of yet more realms of human existence open to data extraction.

So is Mr Sweeney, who is creating a mini-metaverse for the 350m monthly users of "Fortnite", immersing them not just in fantasy games, but virtual pop concerts and the like. However, he is determined to stop today's Silicon Valley elite from creaming off all the rewards from this visionary future. His ambition is for vibrant competition, fair pay for creators and economic efficiency unlike anything on the web today. How realistic—or sincere—is it?

Epic, a privately held company partly owned by Tencent, a Chinese tech goliath, already depicts the creation of the metaverse as a giant-slaying contest. It is part of the backdrop for its recent courtroom battles against Apple (a verdict is expected soon) and against Google (a trial has not yet started). Primarily, the antitrust cases are about the iPhone's App Store and Google's Android Play Store, which Epic portrays as price-gouging fiefs, in particular taking a cut of up to 30% on in-app purchases and refusing to let developers use alternative payment-processing platforms. But in

court Mr Sweeney told the judge in the Apple case that the issue was also "existential" for the creation of the metaverse. Epic's aim, he said, was to turn "Fortnite" into a platform on which independent developers could distribute their games and other forms of entertainment online and earn more of the profits themselves. "With Apple taking 30% off the top, they make it hard, very hard for Epic and creators to exist in this future world," he said.

Both Apple and Google deny the allegations. In court, Apple countered that its commissions were an industry standard, and that it invested in creating a user-friendly environment. But it is being forced to give ground elsewhere. In a recent partial settlement of a class-action case in America Apple agreed to make it easier for app developers to contact customers about other payment methods. Then, on August 31st, South Korea passed a law allowing smartphone users to pay developers directly. Google calls Epic's allegations baseless. Where does this leave Mr Sweeney's vision of the new web? And how likely is it to materialise?

The vision certainly looks appealing. No "mega corporation" would be dominant. Instead, the metaverse will be built by millions of creators, programmers and designers, earning a bigger share of the rewards than the tech giants currently allow. Instead of the siloed state of today's internet, he says there should be free movement of play between gaming networks, such as Microsoft's Xbox and Sony's PlayStation. The cutting-edge "engines" that the gaming industry uses to make real-world simulations should be based on common standards so that they, too, are interoperable. Adding to the economic efficiency could be decentralised tools such as the blockchain and cryptocurrencies.

Mr Sweeney makes no bones about contrasting such open competition with the current situation. That won't deter Silicon Valley giants from seeking a big future role. Gaming firms such as Epic, Roblox and Minecraft are furthest advanced in bringing metaverse-like aspects to their platforms; Minecraft has a virtual library of censored press articles to encourage freedom of thought in autocratic regimes. But the tech giants are hard on their heels. Mark Zuckerberg, Facebook's boss, believes its Oculus Quest headsets will be part of a virtual- and augmented-reality future that could supersede the smartphone. In August Facebook introduced Horizon Workrooms to its headsets, enabling workers to attend virtual meetings as avatars. Satya Nadella, Microsoft's CEO, talks of building an "enterprise metaverse". Doubtless they want to make the metaverse more of a walled garden than Mr Sweeney does.

Load of old Roblox?

As for Mr Sweeney's apparent altruism, it is probably wise not to take it at face value. Epic and other gaming firms could plausibly one day pursue dominance of a three-dimensional internet similar to that big tech has in the two-dimensional one. As Daniel Newman of Futurum Research, a consultancy, puts it, from Microsoft in the 1980s to Apple, Google, Facebook and Amazon in the 2010s, all tech giants have started out offering unique services that consumers loved, and fought for more open competition against incumbents. Over time, as their leadership positions strengthened, their missionary zeal waned. It is hard to imagine a world, no matter how futuristic, in which this pattern does not persist.

For now, the big gaming firms cannot conceive of themselves as cartoon villains. And the metaverse may indeed be too vast to be dominated by any one firm. But whatever parallel universes they build, the desire to create not just fantasy dystopias but also moats against competition is quintessentially the capitalist way.

Finance & economics



→ Also in this section

- 57 Wanted: more housebuilders
- 58 Bitcoin as legal tender
- 59 Climate change and financial crises
- 60 Buttonwood: Virtuous investing
- 61 Free exchange: Jackson Hole

Vietnam's growth model

The special sauce

Trade and foreign investment helped Vietnam emerge from extreme poverty. Can they make the country rich?

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m H}^{
m AVING\,IMPRESSED}$ the world by taming the virus last year, Vietnam is now in the middle of its worst outbreak of covid-19 by far. Parts of the country are in strict lockdown and a swathe of factories, from those making shoes for Nike to those producing smartphones for Samsung, have either slowed or shut down, disrupting global supply chains. Yet integration with global manufacturing has kept Vietnam's economy humming during the pandemic. In 2020 GDP rose by 2.9% even as most countries recorded deep recessions. Despite the latest outbreak, this year could see even faster growth. The World Bank's latest forecasts, published on August 24th, point to an expansion of 4.8% in 2021.

This performance hints at the real reason to be impressed by Vietnam. Its openness to trade and investment has made the country, with GDP per capita of a mere \$2,800, an important link in supply chains. And that in turn has powered a remarkable expansion. It has been one of the five fastest-growing countries in the world over the past 30 years, beating its neigh-

bours hands down (see chart 1 on next page). Its record has been characterised not by the fits and starts of many other frontier markets, but by steady growth. The government is even more ambitious, wanting Vietnam to become a high-income country by 2045, a task that requires growing at 7% a year. What is the secret to Vietnam's success—and can it be sustained?

Vietnam is often compared to China in the 1990s or early 2000s, and not without reason. Both are communist countries that, led by a one-party political system, turned capitalist and focused on exportled growth. But there are big differences, too. For a start, even describing Vietnam as export-intensive does not do justice to just how much it sells abroad. Its goods trade exceeds 200% of GDP. Few economies, except the most resource-rich countries or

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city states dominated by maritime trade, are or have ever been so trade-intensive.

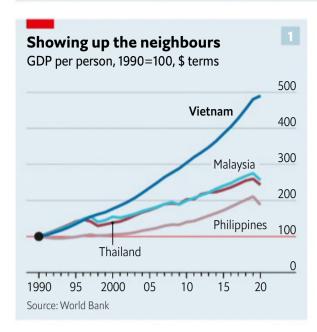
It is not just the level of exports but the nature of the exporters that makes Vietnam different from China. Indeed, its deep connection to global supply chains and high levels of foreign investment make it seem more like Singapore. Since 1990 Vietnam has received average foreign-direct-investment inflows worth 6% of GDP each year, more than twice the global level—and far more than China or South Korea have ever recorded over a sustained period.

As the rest of East Asia developed and wages there rose, global manufacturers were lured by Vietnam's low labour costs and stable exchange rate. That fuelled an export boom. In the past decade, exports by domestic firms have risen by 137%, while those by foreign-owned companies have surged by 422% (see chart 2 on next page).

But the widening gap between foreign and domestic firms now poses a threat to Vietnam's expansion. It has become overwhelmingly dependent on investment and exports by foreign companies, whereas domestic firms have underperformed.

Foreign firms can continue to grow, providing more employment and output. Yet there are limits to how far they can drive Vietnam's development. The country will need a productive services sector. As living standards rise it may become less attractive to foreign manufacturers, and workers will need other opportunities.

Part of the drag on domestic enterprise >>



comes from state-owned firms. Their importance in overall activity and employment has shrunk. But they still have an outsize effect on the economy through their preferential position in the banking system, which lets them borrow cheaply. Banks make up for that unproductive lending by charging other domestic firms higher rates. Whereas foreign companies can easily access funding overseas, the average interest rate on a medium- or long-term bank loan in Vietnamese dong ran to 10.25% last year. Research by academics for the Centre for Economic Performance at the London School of Economics also suggests that productivity gains in the five years after Vietnam joined the World Trade Organisation in 2007 would have been 40% higher without state-owned firms.

To fire up the private sector, the government wants to nurture the equivalent of South Korea's *chaebol* or Japan's *keiretsu*, sprawling corporate groups that operate in a variety of sectors. The government is "trying to create national champions", says Le Hong Hiep, a senior fellow at the ISEAS-Yusof Ishak Institute in Singapore, and a former Vietnamese civil servant.

Vingroup, a dominant conglomerate, is the most obvious candidate. In VinPearl, VinSchool and VinMec, it has operations that spread across tourism, education and health. VinHomes, its property arm, is Vietnam's largest listed private firm by market capitalisation.

The group's efforts to break into finished automotive production through Vin-Fast, its carmaker, may become important for the economic development of a country that is usually known for intermediate manufacturing. In July the company's Fadil car, which is based on the design for Opel's Karl make, became Vietnam's best-selling model, beating Toyota's Vios. Vin-Fast has grand ambitions abroad, too. In July it announced that it had opened offices in America and Europe and intended to sell electric vehicles there by March 2022.

Fostering national champions while staying open to investment is not easy, however. VinFast benefits from a bevy of tax reductions, including a large cut in corporation tax for its first 15 years of operation. In August, state media also reported that the government was considering reinstating a 50% reduction in registration fees for locally built cars that expired last year.

But the country's membership of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, and a range of other trade and investment deals, means that it cannot offer preferential treatment to domestic producers. It must extend support to foreign firms that make cars in Vietnam, too. (By contrast, China's trade policy, which prefers broad but shallow deals, does not constrain domestic policy in quite the same way.)

Vietnam may also hope to rely on another source of growth. The economic boom has encouraged its enormous diaspora to invest, or even to return home. "There aren't a lot of economies that are experiencing the sort of thing that Vietnam is," says Andy Ho of VinaCapital, an investment firm with \$3.7bn in assets. His family moved to America in 1977, where he was educated and worked in consulting and finance. He returned to Vietnam with his own family in 2004. "If I were Korean, I might have gone back in the 1980s, if I were Chinese I might have gone back in 2000."

Its successful diaspora makes Vietnam one of the largest recipients of remittances in the world; \$17bn flowed in last year, equivalent to 6% of GDP.

The setback from covid-19 aside, it might seem hard not to be rosy about a country that appears to be in the early stages of emulating an East Asian economic miracle. But no country has become rich through remittances alone. As Vietnam develops, sustaining rapid growth from exports of foreign companies will become increasingly difficult, and the tension between staying open to foreign investment and promoting national champions will become more acute. All of that makes reforming the domestic private sector and the financial system paramount. Without it, the government's lofty goal of getting rich quick may prove beyond its reach.

Labour shortages

Help wanted

Houses are in high demand. So too are the people who build them

ON HORTON, founder of America's larg-Dest housebuilder, never thought he would have to turn away business in Texas. Until recently he could not build homes in the state fast enough. Now his firm is restricting sales as industry-wide shortages of labour and building materials such as timber slow construction and inflate costs. The combination of these constraints and surging demand for housing has led to staggering rises in house prices. According to figures published on August 31st the Case-Shiller national house-price index was 18.6% higher in June than a year earlier—the third record-breaking rise in as many months (see chart on next page). But although the shortages of materials are expected to ease next year, skilled labour will be harder to find.

As covid-19 spread and countries locked down, the construction workforce took a big hit. In America it shrank by nearly 15% in 2020, wiping out four years of job gains. But it has yet to recover fully, even as demand for housing has been turbo-charged by low interest rates and enthusiasm for bigger homes. Around 88% of American contractors say they are struggling to find workers, leaving nearly 300,000 roles vacant. Having decelerated in 2020, wage growth is now picking up. Britain has the most vacancies in two decades, with twothirds of construction firms finding it difficult to hire bricklayers and carpenters. Half of all French construction firms report facing difficulties with recruitment, >>>



making it the country's worst-affected sector, and a fifth of German building and civil-engineering companies say they lack skilled workers.

The industry's hiring struggles in part mirror the wider labour shortages affecting much of the rich world. As in other sectors, a fear of the virus and an ability to fall back on benefits and savings might explain why the unemployed have been slow to return to work. Travel restrictions across national and provincial borders to curb the pandemic have hit the construction sector, which relies heavily on migrants, especially hard. (That has been starkest in China and India, where migrants account for four-fifths and one-third of construction workers, respectively.)

Long-standing factors are also contributing to the construction labour shortages. Homebuilders have struggled to maintain a consistent labour force since the global financial crisis of 2007-09. That in part reflects deeper changes to immigration laws, which have stemmed a once-steady stream of labour. Inflows of foreign workers into America, for instance, have been in decline since the introduction of anti-immigration policies by President Donald Trump. Just over 44,000 foreign-born workers entered the construction industry in 2017, a sharp drop compared with nearer 70,000 in the previous year. Similarly, the Office for National Statistics reckons that Britain has lost 42% of its European construction workers since its vote to leave the European Union, which signalled an end to the free movement of migrants from the EU into the country.

Skills shortages are also compounded by an ageing workforce. Around 41% of construction workers in America are expected to retire within the next decade. One in five British workers is over the age of 55. Recruiters seeking talent, meanwhile, find slim pickings. High-school graduates of all income backgrounds avoid



construction jobs, perceiving them to be dirty, dangerous and difficult. Less than one in ten young people in Britain would consider a career in construction, shunning even white-collar jobs in areas such as engineering, quantity surveying and town planning.

Automation might have been one way to avert shortages of workers. But the industry has been slow to embrace it. Around half of construction businesses use robots, compared with 84% of automotive firms and 79% of manufacturing companies.

Meanwhile, the shortages seem set only to intensify. Demand for workers looks likely to rise further, as governments promise both to build more houses and to help prepare the existing stock for a changing climate. Britain already requires 217,000 extra workers by 2025 to meet the government's target of 300,000 new homes per year. Even more labour will be needed to retrofit 29m existing homes to meet netzero carbon targets by 2050. Governments' plans to spend on infrastructure in America and Europe could suck in workers and leave fewer to build houses. Job vacancies, construction delays, bosses' headachesall may go through the roof. ■



Structural problems

Bitcoin as legal tender

Satoshis for cervezas

SAN SALVADOR

Is El Salvador's move a costly gimmick or a worthwhile experiment?

7 HEN ASKED if anyone has tried to use bitcoin to pay her, a woman selling coffee and pastries in San Salvador, the capital city of El Salvador, replies "thank God, no", and rebuffs an attempt to do so. A man selling soup for lunch brushes off the idea with laughter. By dinnertime, low on phone battery and morale, your correspondent is pointed to a bar called Levendas where the logo for Strike, a digital bitcoin wallet, adorns the walls. But the attempt to pay with bitcoin is met with confusion. The bar's owner, who controls the wallet, is missing. A few frantic texts later he sends his wallet address. At last, 26,618 Satoshis (one hundred millionth of a bitcoin), \$12.50-worth, are swapped for beers.

On September 7th bitcoin will become legal tender in El Salvador, alongside the dollar. The Central American country of 6.5m people is the first to attempt such a feat. A week before the big day those who had put plans in place to use bitcoin were the exception, rather than the norm. Three-quarters of Salvadoreans surveyed in July by Disruptiva, a polling firm, were sceptical of the plan to adopt bitcoin. Twothirds were not willing to be paid in it and just under half knew nothing about it. Both the World Bank and the IMF have warned against adoption, citing the potential impact on macroeconomic stability and bitcoin's environmental costs.

Legal tender is ordinarily defined as the money that courts of law must accept to settle debts. But El Salvador's bitcoin law goes further, saying that businesses must accept the cryptocurrency as payment for goods or services. It has also come into effect very quickly. Nayib Bukele, the country's president, who controls a large majority in the legislative assembly, announced his plan to make bitcoin legal tender at a cryptocurrency conference on June 5th. The law was approved just three days later.

Sceptics have posited that the move is just a stunt: a sop to Ibrajim and Yusef Bukele, the president's brothers, who are crypto-enthusiasts. But the president claims the move will help El Salvador win foreign investment and reduce the cost of remittances. He may not be entirely

Correction In "Bright SPARC" in last week's issue we said that Pershing Square Tontine Holdings planned to buy shares in Universal Music Group after the group listed. In fact the SPAC planned to buy the shares beforehand and distribute them to its shareholders after the listing. Sorry.

wrong. The gambit might lure in deeppocketed crypto-investors (though it may deter more conventional ones). And its experience may provide a case study in whether one of the long-touted benefits of bitcoin works for regular people. A diaspora of some 2m Salvadoreans sends remittances worth 20% of GDP home each year. But cross-border bank and wire transfers are slow and expensive. Wallet-to-wallet bitcoin transfers are quick and free.

The attempt will probably reveal bitcoin's limitations, too. Many locals understandably fear its volatility, which makes it ill-suited for payments and debt. Those accepting it, like Leyendas, do not quote prices in it, but convert from dollars at the point of sale. And there can be unexpected fees, which might stymie its use. There are 200 bitcoin cash machines being installed across the country to enable cash dollars to be converted into bitcoin in digital wallets. The one used by *The Economist* took a 5% fee. "I am not going to use it," says Irma Gómez, who runs a diner near one such ATM in Santa Tecla, a town just outside San Salvador. But she is also intrigued. "Let the people try it."

Climate risk

Hot take

Could climate change trigger a financial crisis?

'N RECENT YEARS regulators have begun $oldsymbol{1}$ warning about the threat that climate change poses to the stability of the financial system. Following its strategy review in July, the European Central Bank (ECB) will assemble a "climate change action plan". Mark Carney, the former governor of the Bank of England, warned of financial risks from climate change as long ago as 2015. In America the Commodity Futures Trading Commission last year published a 200-page report beginning "Climate change poses a major risk to the stability of the us financial system." But progressive Democratic politicians are calling on President Joe Biden not to reappoint Jerome Powell as the chairman of the Federal Reserve, partly because they think he has done too little to eliminate climate risk.

Just how damaging does climate risk stand to be, though? Early stress tests by central banks and disclosures of companies are starting to shed light on the question. For the most part, the evidence that it could bring down the financial system is underwhelming. But a lot hangs on whether governments set out a clear path for reducing emissions, such as through carbon taxes and energy-efficiency standards, giving banks enough time to prepare.

Climate change can affect the financial system in three ways. The first is through what regulators describe as "transition risks". These are most likely to arise if governments pursue tougher climate policies. If they do, the economy restructures: capital moves away from dirty sectors and towards cleaner ones. Companies in polluting industries may default on loans or bonds; their share prices may collapse.

The second channel is financial firms' exposure to the hazards of rising tempera-



Underwater assets

tures. Attributing individual natural disasters to climate change is tricky, but the Financial Stability Board, a group of regulators, estimates that global economic losses resulting from weather-related catastrophes went from \$214bn in the 1980s, in 2019 prices, to \$1.62trn in the 2010s, roughly trebling as a share of global GDP. These losses are often borne by insurers (though over time the costs should be passed on to customers through higher premiums).

The financial system could also be exposed to any wider economic damage caused by climate change, say if it triggered



Sign up to our weekly newsletter, Money Talks, for more analysis of the biggest stories in economics, business and finance www.economist.com/moneytalks swings in asset prices. This third channel is harder to quantify. Academic estimates of the effect of 3°C of warming (relative to pre-industrial temperatures) veer from financial losses of around 2% to 25% of world GDP, according to the Network for Greening the Financial System, a group of supervisors. Even the gloomiest estimate might prove too rosy if climate change triggers conflicts or mass migrations.

Perhaps the worst-case scenario for the financial system is where transition risks crystallise very suddenly and cause wider economic damage. In 2015 Mr Carney described a possible "Minsky moment", named after Hyman Minsky, an economist, in which investors' expectations about future climate policies adjust sharply, causing fire sales of assets and a widespread repricing of risk. That could spill over into higher borrowing costs.

The value of financial assets exposed to transition risk is potentially very large. According to Carbon Tracker, a climate thinktank, around \$18trn of global equities, \$8trn of bonds and perhaps \$30trn of unlisted debt are linked to high-emitting sectors of the economy. That compares with the \$1trn market for collateralised debt obligations (CDOS) in 2007, which were at the heart of the global financial crisis. The impact of losses, however, would depend on who owns the assets. Regulators might be especially concerned about the exposures of large, "systemically important" banks and insurers, for instance.

Preliminary stress tests conducted by central banks suggest that the impact of climate change on these sorts of institutions might be manageable. In April the Banque de France (BdF) released the results from such an exercise. It found that French banks' exposures to transition risks were low. Claims on insurers, though, did rise as a result of worse droughts and flooding, by more than five times in some regions.

In a recent paper the ECB and the European Systemic Risk Board found similar results. The exposures of euro-area banks and insurers to the highest-emitting sectors were "limited", although losses in a "hot-house world" scenario where temperatures rise by 3.5°C compared with preindustrial times were more severe. Still, in both cases, banks' losses on their corporate loan books were only around half the level of those in the regular stress tests of euroarea lenders, which they were deemed to be well-capitalised enough to pass.

Those findings are consistent with an exercise by the Dutch central bank (DNB) in 2018, which found that the impact on Dutch financial firms from transition risks was "manageable". In its most severe scenario there was a sudden change in climate policy alongside rapid progress in renewable energy development, causing a "double shock" for companies and a severe re-

cession. Even then, banks' capital ratios fell by about four percentage points. That is sizeable, but still less than what the banks experienced in this year's regular stress tests by the European Banking Authority, which they were deemed to pass.

To what extent are these stress tests realistic? Mark Campanale of Carbon Tracker is sceptical, pointing out that most firms are using out-of-date models. If auditors were ever to stress companies' assets against a much lower oil price, the associated write-downs could trigger a collapse in investor sentiment of the sort regulators

fear, he claims. Nor do the stress tests include a full-blown Minsky crisis.

Yet in other respects they are conservative. Most of the tests used an accelerated time frame—five years in the DNB and BdF cases—in effect assuming that firms are stuck with the balance-sheets they have today. But it seems reasonable to think that banks and insurers will change their business models as the climate transition progresses, curbing the impact on the financial system. The BdF ran a second exercise where firms were allowed to make realistic changes to their business models over 30

years. Unsurprisingly, that allowed banks to sharply reduce lending to fossil-fuel sectors, and insurers to raise premiums.

Nonetheless, the stress tests reveal the importance of giving firms time to adapt. And that makes a predictable path for government policy important. The BdF found that credit losses were highest when policy was delayed and there was a sudden transition. Perhaps the most plausible scenario in which climate change affects financial stability is one in which governments dawdle, and then have no choice but to take drastic action in the future.

Buttonwood Profit and dross

Ever keen to hold companies to account, virtuous investing faces its own backlash

SINCE TIME immemorial the investment industry has sought to turn money into more money. This is not a simple trick to pull off—hence the rewards proffered to those who do it well. The complexity of picking which assets to own—rich-world equities or poorcountry bonds, office blocks or orange-juice futures—contrasts with the simplicity of judging the success of those investments. The winner, put crudely, is whoever snags the most marbles while taking the fewest risks. That the money in question has helped build companies or kept governments ticking over seems almost incidental to the exercise.

This approach is starting to feel oldhat. More savers want a better idea of what their money gets up to. What if their cash could be used both to generate a pension, and improve the state of the world? "Sustainable" investment funds in the broadest sense managed \$35trn of assets in 2020, reckons the Global Sustainable Investment Alliance, an industry group, up from \$23trn in 2016. No issuer of shares or bonds can ignore virtuous investing. Banks increasingly refuse to lend to firms with insufficiently impressive environmental, social or governance (ESG) credentials. Consultancies assessing whether bosses are doing their bit to combat climate change or social inequality have proliferated.

Savers may bask in the feeling that their money is nudging capitalism in the right direction—while still generating returns. But the new approach is prompting the first signs of a backlash. The answers to two uncomfortable questions remain elusive. Are supposedly virtuous funds investing in appropriately virtuous companies? And is what these financial do-gooders are trying to pull off even such a good idea?

Start with whether money purportedly chasing ESG-friendly investment is reaching the right targets. Regulators have their doubts. America's Securities and Exchange Commission (SEC) has said it wants to crack down on "greenwashing" funds that flaunt their virtuous credentials but cannot prove that they have done the needed legwork when picking investments.

On August 25th reports emerged that the SEC and its German counterpart were investigating whether DWS, a large German asset manager that has boasted of its sustainable edge, had misled customers about how much it used ESG metrics to place money. This came after its former head of sustainability questioned claims that half of the fund's assets were invested in ways that looked beyond mere profit.

The firm denies wrongdoing. But industry practitioners admit there are so many variants of sustainable investing that savers may well be confused. Selecting firms to invest in often involves little more than a box-ticking exercise confirming that the right grade of recycled paper was used to publish the annual report. A





Kinks around metrics may iron themselves out as the industry matures. But that will not help with the second, deeper critique: that investors chasing virtuousness are, at best, deluding themselves and, at worst, doing more harm than good. That is the argument made by Tariq Fancy, a former sustainable-investing bigwig at BlackRock, in a blog post published on August 20th. ESG investing, he says, merely "answers inconvenient truths with convenient fantasies".

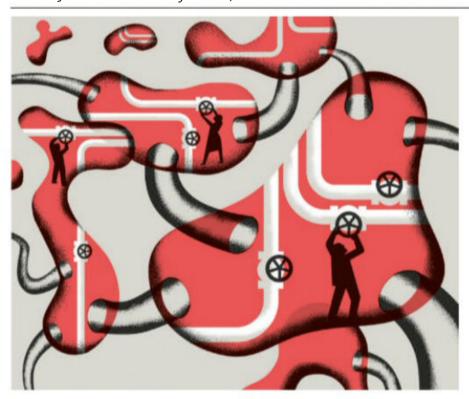
Mr Fancy points out that for all its trumpeting of virtue, the investment industry is self-interested: keeping tabs on companies' pledges to be better corporate citizens gives asset managers an opportunity to charge fatter fees. And for every disgruntled investor selling a company's stock, he argues, there is another to buy it.

Even if the new approach does tweak firms' cost of capital (by funnelling more investment to solar firms, say, and less to oil giants) this merely promotes the dangerous illusion that business can lead the way on fighting, say, climate change or racism. And if anything, Mr Fancy thinks, that pushes back the day when government action will actually take care of such problems.

What does all this mean for savers and their pots of cash? Keeping tabs on what a company is up to is no bad thing, but funds might need monitoring too. Prioritising a CEO's statements on Black Lives Matter over the viability of her investment plans is a recipe for poor returns and a flabby corporate sector. And that would not so much nudge the capitalist model as derail it.

Free exchange | All tied up

At the Jackson Hole conference, central bankers considered how to steer an uneven recovery



Business cycles are never perfectly symmetric across time and space. Yet they have rarely been as uneven as the rebound from covid-19. Some parts of the global economy are straining to meet roaring demand even as others limp along, battered by the spread of the virus. It is enough to take the fun out of monetary policy. Indeed, the Delta variant kept attendees of an annual symposium for central bankers from meeting in Jackson Hole, Wyoming, in the shadow of the majestic Teton mountains, on August 27th. Instead, they peered at their computer screens as they discussed how to shepherd an unbalanced economy through uncertain times.

A pressing question loomed over the proceedings: just how and when to tighten policy given high inflation and lingering unemployment. Tweaks to the Federal Reserve's framework in recent years are meant to give it room to manage such difficult circumstances. It now aims to hit its 2% inflation target on average and will court high inflation to make up for past shortfalls. But surging prices are testing this approach. Data released as the conference began showed that the Fed's preferred measure of inflation had risen to 4.2% in July, the highest in 30 years. Jerome Powell, the Fed's chairman, made no suggestion to his fellow participants that he would drastically change course, and confirmed that the Fed might begin to taper asset purchases later in the year. But policy, he cautioned, would have to change as new data come in.

Research presented at the symposium offered guidance on how to cope with a lopsided recovery. Veronica Guerrieri of the University of Chicago and her co-authors, for instance, considered how policymakers should respond when demand surges in some sectors and lags in others. If there is little scope for workers to shift from unfavoured industries to the up-and-comers, they write, then the shift in demand acts like a "cost-push shock" (similar to a spike in oil prices). In such cases, central banks typically accept some pain in the form of above-normal inflation and some in above-normal unemployment. But if workers can move, then there are benefits to central banks' facilitating this shift.

Easy money is not obviously the right answer. If loose monetary policy raises demand for both booming and busting sectors, then it might slow reallocation by propping up firms that ought really to close. But the authors argue that, in a world in which it is

easy to adjust wages upward but tricky to cut them, inflation may in fact hasten reallocation. Because nominal wages in lagging industries cannot easily fall, workers face little incentive to move to promising sectors. Inflation, though, enables the real wage in lagging sectors to fall relative to that in booming ones, encouraging workers to move. Thus it makes sense, in theory, for monetary policy to have an inflationary bias during an uneven recovery.

Mr Powell would probably welcome that argument. But if American firms continue to hire at the recent pace, the unemployment rate may fall back to its pre-pandemic level of 3.5% by the end of 2022. That presents the Fed with a new dilemma. While the unemployment rate has recovered quickly, labour-force participation has not: of the drop experienced in early 2020, just under half has been clawed back; the unemployment rate, by contrast, is more than 80% of the way back. Part of Mr Powell's justification for the change in framework was the beneficial effects of tight labour markets, which he reckoned would eventually draw workers from disadvantaged groups back into the labour force. But the patience needed to allow such effects to unfold could vanish amid high inflation and low unemployment.

Work presented by Bart Hobijn of Arizona State University and Aysegul Sahin of the University of Texas at Austin on the "participation cycle" affirms the benefits of patience. It is not the case that workers from disadvantaged groups are more likely to drop out of the labour force during downturns and are only enticed back after sufficiently long recoveries. Rather, the probability that a worker drops out is much higher for unemployed workers than employed ones, whatever their background. It is thus the higher unemployment rates that disadvantaged groups tend to face that are responsible for their leaving the labour force. And this effect begins reversing as soon as labour markets begin to recover. Greater job stability—that is, a higher chance of finding work and a lower chance of losing a job—reduces the flow of workers into unemployment and out of the labour force, raising the participation rate.

The effect is powerful; the authors estimate that a one-percentage-point decline in the unemployment rate tends to raise the participation rate by 0.65 percentage points, other things equal. The beneficial effect continues even after unemployment reaches a trough, with the participation rate typically reaching a peak nine months later. The upshot for policy is therefore broadly similar to where Mr Powell has ended up: a low unemployment rate need not imply that labour-market slack has run out, or that patience on the part of the central bank will not eventually be rewarded.

When the odds are against you

Other research reinforced the doveish mood, pointing out the adverse effects on emerging markets of premature monetary tightening in the rich world. But outside the conference, Mr Powell has been bombarded by criticism of loose money. Inflation has now more than made up its shortfall since 2015, let alone the start of the pandemic. Some heads of regional Fed banks, such as Raphael Bostic of Atlanta, are eager to reverse quantitative easing soon. Prominent economists, such as Raghuram Rajan of the University of Chicago and Larry Summers of Harvard, have highlighted the dangers of prolonging asset purchases.

Academia lags reality, and there is little doubt that during the recovery from the global financial crisis the Fed overestimated the danger of inflation and undercounted the long-term benefits of driving unemployment lower. The critics' worry is that the central bank may now be overcompensating for that error.

Biology brief Planets



Finding living planets

Worlds enough, and time

Life evolves on planets. And planets with life evolve

Most pieces in this series of briefs have stayed within the realm of the biological, examining life at the levels of the species, the individual, the organ and the cell. But the first dealt with a subject central to biology but not inherently of it: molecules. No molecule can be said to be truly alive, and not all molecules are biological. But some are, and they are biological in distinctive, illuminating ways, revealing how life gets things done and passes information down the generations.

This last brief takes on a similar, though far vaster subject. Like molecules, planets do not have to be biological. But at least one is, and in a distinctive, illuminating way that reveals how life has consequences far beyond the organisms embodying it. Earth's past, present and future cannot be understood without appreciating the planet's biological aspects. And that appreciation is, in turn, crucial to finding other planets on which biology plays a role.

The idea that Earth is in some way alive, or can be treated as if it were, is common to many mythologies and sensibilities, and has been a theme in science for centuries. Its modern form, though, dates from the 1960s and the insights of James Lovelock, a British scientist then working at JPL, a laboratory in California that is responsible for most of America's planetary science.

In thinking about the detection of life on other planets Dr Lovelock turned to a

→ In this series on the levels of life

- 1 Biology's big molecules
- 2 Cells and how to power them
- 3 Making organs
- 4 The story of a life
- 5 What is a species, anyway?
- 6 Finding living planets

broad definition of the phenomenon: one offered by physicists and based on thermodynamics, the science of heat, work and order. This is that life uses, or creates, flows of matter and energy that allow it to increase and maintain complexity within itself. In doing so it deals with the universe's natural tendency to break down complexity, thus creating disorder (known in thermodynamics as entropy), by actively increasing the entropy of the rest of the universe while reducing its own—exporting disorder, as it were.

Armed with this definition, Dr Lovelock proposed detecting life elsewhere by looking for signs of order, particularly in the form of chemical disequilibria—namely, intrinsically unlikely mixtures of chemicals that would have to be maintained by the persistent export of entropy. He concluded that the most detectable such order, at a planetary level, would be found in the composition of the atmosphere.

On Earth, a variable amount of water vapour aside, 99% of the atmosphere is nitrogen and oxygen. Most of the last 1% consists of argon, helium and neon ("noble" gases that demonstrate their nobility by being inert and fundamentally pointless), and other trace gases such as carbon dioxide and methane.

As Dr Lovelock pointed out, this mixture is way out of equilibrium. Oxygen and methane react with each other. Such reactions take place constantly in the atmosphere. For these gases to be present simultaneously requires active sources of one or both. On Earth, life provides these. Plants, algae and some photosynthetic bacteria produce oxygen. Single-celled archaea called methanogens produce methane.

What is more, with energetic encouragement (as offered, for example, by bolts of lightning), oxygen and nitrogen will react with each other too, creating nitrogen oxides. Again, it turns out that life provides a countervailing process which lets the levels of both gases stay constant, despite the lightning. De-nitrifying bacteria produce the energy they need by turning nitrogenbearing compounds like those oxides back into gaseous nitrogen, thus continuously topping up the level in the atmosphere.

The atmospheres of Earth's neighbours, Mars and Venus, provided a stark contrast to this picture of biologically driven instability. They contained no pairs of gases that, at concentrations observed, would be likely to react. They were in equilibrium. This led Dr Lovelock to two conclusions: that there was no life on Mars and Venus; and that Earth's atmosphere was, to a certain degree or in a certain sense, alive. It was not made of cells or enclosed in a membrane. Nor could it reproduce. But the flow of energy and matter through the living bits of the planet kept the atmosphere

in disequilibrium and held entropy at bay. Life's imposition of order and disequilibrium thus operated beyond the boundaries of cells, individuals and species.

The first of these conclusions was not popular. Many scientists wanted to send robots to Mars to look for life. To be told from the off that such searches would be fruitless served no one's interests. But fruitless they have proved so far to be.

The second conclusion led Dr Lovelock to hypothesise that Earth behaves, to some extent, as a living organism, in that biology-based processes provide it with a degree of self-regulation which the system as a whole uses in order to keep itself to life's liking. This "Gaia hypothesis" was highly controversial in the 1970s and 1980s. The views of Dr Lovelock, his followers and his opponents have since evolved. The idea that life actively seeks to keep the environment to its liking, a crucial feature of the hypothesis in its early days, is not now widely held. It is, however, universally agreed that the composition of Earth's atmosphere depends on biological activity and that various feedback mechanisms which maintain the planet's habitability have biological components.

The idea of Earth's environment being a creation of its evolving inhabitants, rather than a background against which they evolve, seems on the face of things quite unlikely. Earth's living organisms are esti-

mated to contain about 550bn tonnes of carbon. Add in the other elements and remember that living things are, by weight, mostly water, and you might get up to 2trn tonnes all told. The atmosphere weighs 5,000trn tonnes. How could a thin green smear of life which weighs less than 0.1% of that be calling the shots?

The answer is that life is peculiarly energetic stuff. Expressed in terms of power (the amount of energy used per second), life on Earth runs at about 130trn watts. That is roughly ten times the power used by human beings, and three times the flow of energy from Earth's interior—a flow which drives all the planet's volcanism, earthquakes and plate tectonics.

Most of what life does with this energy is chemical: building molecules up, breaking them down and dumping some of the eventual waste products into the environment. And this chemical activity is persistent. The cycling which moves carbon from the atmosphere into living things (through photosynthesis) and back to the atmosphere (through respiration) has been fundamental to the planet's workings for billions of years. The same goes for the cycling of nitrogen. The great biogeochemical cycles are older than any mountain range, ocean or continent. Their work mostly done by bacteria and archaea, they predate the dawn of animals and plants.

The composition of Earth's atmosphere

before the prokaryotes got their membranes on it is a subject on which there are few data. But the geological record makes one thing clear: it contained almost no oxygen. Significant amounts of free oxygen entered the air only after the relevant form of photosynthesis had evolved. At that point the level of bacterially produced methane—which, in the absence of oxygen, could be quite high—crashed. Because methane is a greenhouse gas, so did the temperature. Roughly 2.5bn years ago the "great oxidation event", as it is known, plunged Earth into an ice age that saw ice sheets spread to the equator.

The subsequent history of the atmosphere, during which oxygen levels have increased episodically, is coupled to life in various ways. There seems to be a link between oxygen reaching a threshold level about 700m years ago and the evolution of the first animals—it is hard, perhaps impossible, to lead an energetically profligate animal lifestyle without the extra power that oxygen provides to a metabolism.

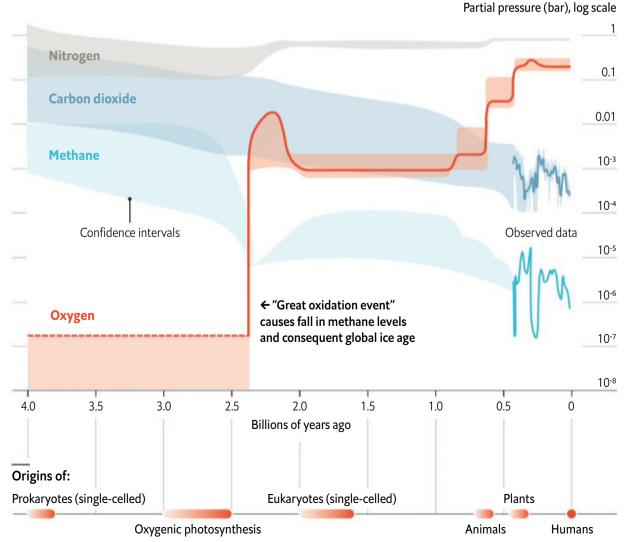
Vaster than empires, and more slow

The advent of trees, which were able to store carbon both in greater quantities than previous photosynthesisers and in forms that were hard for other organisms to break down, saw carbon-dioxide levels in the atmosphere fall far enough to trigger another global ice age. The recovery and utilisation of some of that hard-to-get-at carbon, now transformed to coal, is seeing life alter the atmosphere in yet another way a few hundred million years on—again with climatic consequences.

Over the decades which saw this new understanding of the role life had played in Earth history develop, Dr Lovelock's associated insights about atmospheres as signals of life elsewhere made little progress. This was partly because of a lack of atmospheres. Aside from Earth's, the solar system contains only seven thick enough to count. There have been reports of out-of-equilibrium trace gases on Mars (methane) and Venus (phosphine), but in both cases the evidence is shaky. The most recent orbital survey found no evidence at all for methane in the Martian atmosphere.

Happily, the past two decades have revealed thousands of planets orbiting other stars. Telescopes that can examine the atmospheres of some of these which look promisingly habitable should be available soon. One, the much delayed James Webb Space Telescope, is supposed to launch this Hallowe'en. If any of the orbs it studies suggest Gaia has been working her magic there, too, then the ideas these briefs discuss may one day undergo an intriguing examination. Some will probably turn out to be universal biological truths. Others, though, may just be chance properties of life on one particular planet.

→ Levels of gases in Earth's atmosphere





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Science & technology



Al for vehicles

Is it smarter than a seven-month-old?

How to improve the intelligence of self-driving cars

BY THE AGE of seven months, most children have learned that objects still exist even when they are out of sight. Put a toy under a blanket and a child that old will know it is still there, and that he can reach underneath the blanket to get it back. This understanding, of "object permanence", is a normal developmental milestone, as well as a basic tenet of reality.

It is also something that self-driving cars do not have. And that is a problem. Autonomous vehicles are getting better, but they still don't understand the world in the way that a human being does. For a self-driving car, a bicycle that is momentarily hidden by a passing van is a bicycle that has ceased to exist.

This failing is basic to the now-wide-spread computing discipline that has arrogated to itself the slightly misleading moniker of artificial intelligence (AI). Current AI works by building up complex statistical models of the world, but it lacks a deeper understanding of reality. How to give AI at least some semblance of that understanding—the reasoning ability of a seven-

month-old child, perhaps—is now a matter of active research.

Modern AI is based on the idea of machine learning. If an engineer wants a computer to recognise a stop sign, he does not try to write thousands of lines of code that describe every pattern of pixels which could possibly indicate such a sign. Instead, he writes a program that can learn for itself, and then shows that program thousands of pictures of stop signs. Over many repetitions, the program gradually works out what features all of these pictures have in common.

Similar techniques are used to train self-driving cars to operate in traffic. Cars thus learn how to obey lane markings, avoid other vehicles, hit the brakes at a red light and so on. But they do not understand many things a human driver takes for

→ Also in this section

66 Cross-dressing hummingbirds

67 Gene names and autocorrection

granted—that other cars on the road have engines and four wheels, or that they obey traffic regulations (usually) and the laws of physics (always). And they do not understand object permanence.

In a recent paper in Artificial Intelligence, Mehul Bhatt of Orebro University, in Sweden, who is also the founder of a firm called CoDesign Lab which is developing his ideas commercially, describes a different approach. He and his colleagues took some existing AI programs which are used by self-driving cars and bolted onto them a piece of software called a symbolic-reasoning engine.

The heart has its reasons...

Instead of approaching the world probabilistically, as machine learning does, this software was programmed to apply basic physical concepts to the output of the programs that process signals from an autonomous vehicle's sensors. This modified output was then fed to the software which drives the vehicle. The concepts involved included the ideas that discrete objects continue to exist over time, that they have spatial relationships with one another—such as "in-front-of" and "behind"—and that they can be fully or partly visible, or completely hidden by another object.

And it worked. In tests, if one car momentarily blocked the sight of another, the reasoning-enhanced software could keep track of the blocked car, predict where and when it would reappear, and take steps to

avoid it if necessary. The improvement was not huge. On standard tests Dr Bhatt's system scored about 5% better than existing software. But it proved the principle. And it also yielded something else. For, unlike a machine-learning algorithm, a reasoning engine can tell you the reason why it did what it did.

You could, for instance, ask a car fitted with a reasoning engine why it had hit the brakes, and it would be able to tell you that it thought a bicycle hidden by a van was about to enter the intersection ahead. A machine-learning program cannot do that. Besides helping improve program design, such information will, Dr Bhatt reckons, help regulators and insurance companies. It may thus speed up public acceptance of autonomous vehicles.

Dr Bhatt's work is part of a long-standing debate in the field of artificial intelligence. Early AI researchers, working in the 1950s, chalked up some successes using this sort of preprogrammed reasoning. But, beginning in the 1990s, machine learning improved dramatically, thanks to better programming techniques combined with more powerful computers and the availability of more data. Today almost all AI is based on it.

Dr Bhatt is not, though, alone in his scepticism. Gary Marcus, who studies psychology and neural science at New York University and is also the boss of an AI and robotics company called Robust.AI, agrees. To support his point of view, Dr Marcus cites a much-publicised result, albeit from eight years ago. This was when engineers at DeepMind (then an independent company, now part of Google) wrote a program that could learn, without being given any hints about the rules, how to play Breakout, a video game which involves hitting a moving virtual ball with a virtual paddle.

DeepMind's program was a great player. But when another group of researchers tinkered with Breakout's code—shifting the location of the paddles by just a few pixels—its abilities plummeted. It was not able to generalise what it had learned from a specific situation even to a situation that was only slightly different.

Back to the future

For Dr Marcus, this example highlights the fragility of machine-learning. But others think it is symbolic reasoning which is brittle, and that machine learning still has a lot of mileage left in it. Among them is Jeff Hawke, vice-president of technology at Wayve, a self-driving-car firm in London. Wayve's approach is to train the software elements running a car's various components simultaneously, rather than separately. In demonstrations, Wayve's cars make good decisions while navigating narrow, heavily trafficked London streets—a task that challenges many humans.

As Dr Hawke puts it, "the complexity of most real-world tasks is greater than is possible to solve with handcrafted rules, and it's well known that expert systems built with rules tend to struggle with complexity. This is true regardless of how well thought out or structured the formal logic is." Such a system might, for instance, craft a rule that a car should stop at a red light. But lights are designed differently in different countries, and some are intended for pedestrians rather than cars. There are also situations in which you might need to jump a red light, such as to make way for a fire engine. "The beauty of machine learning", Dr Hawke says, "is that all these factors and concepts can be automatically uncovered and learned from data. And with more data, it continues to learn and become more intelligent."

Nicholas Rhinehart, who studies robotics and AI at the University of California, Berkeley, also backs machine learning. He says Dr Bhatt's approach does indeed show you can combine the two approaches. But

he is not sure it is necessary. In his work, and also that of others, machine-learning systems alone can already predict probabilities a few seconds into the future—such as whether another car is likely to give way or not—and make contingency plans based on those predictions.

Dr Bhatt responds that you can train a car with data accumulated over millions of kilometres of driving, and still not be sure you have covered all the necessary situations. In many cases, it might be simpler and more effective to program some of the rules in from the start.

For champions of both strategies, the question goes beyond self-driving cars to the future of AI itself. "I don't think we're taking the right approach right now," Dr Marcus says. "[Machine learning] has proven useful for some things like speech recognition, but it's not actually the answer to AI. We haven't really solved the intelligence problem." One way or another, then, it seems seven-month-olds still have a lot to teach machines.

Evolution

Cross-dressing hummingbirds

Some female hummingbirds have evolved to look like males

Male BIRDs are often colourful and ornate. These embellishments demonstrate the wearer is a suitable candidate for fatherhood and is not to be trifled with by other males. Why females are sometimes colourful too is more of a mystery.

One idea is that if the sexes co-operate to raise their young—which birds often do—males as well as females must be choosy about their mates. But Jay Falk of

the University of Washington has another explanation. In a paper in *Current Biology* he suggests it is a way for females to avoid being harassed when they are feeding.

Plumage transvestism, known technically as female-limited polymorphism, is especially common in hummingbirds. Earlier work involving Dr Falk, who was then a PhD student at Cornell University, showed that it has evolved independently.



Birds of a feather?

In all nine big groups of these birds and is found in nearly a quarter of hummingbird species. This makes them ideal for studying it. But that work was done on museum specimens. Mr Falk, as he then was, wished to take the question into the field.

His reason for doubting sexual selection as the explanation for female-limited polymorphism in hummingbirds was that males of this group do not help raise the young. He therefore tested an alternative—that male-like plumage in females confuses real males. To do so, he decamped to Panama, and spent four years studying a species called the white-necked jacobin.

He started by collecting and recording the details of a lot of birds, eventually fitting some with tiny transponders so that he could follow and identify individuals. Over the course of the study, he captured 436 jacobins, of which he managed to recapture 135 in at least one subsequent year.

Sexing hummingbirds is hard. As with most avians, the males have no penis. To work out a bird's sex, he took a blood sample. This showed that nearly 30% of females had male-like colouration. A jacobin's age, though, is easy to estimate from its beak. Younger birds' beaks have more serrations. On this basis, he discovered that all young jacobins, regardless of sex, sport male-like plumage. Only later in life do some females develop distinctive muted colouration—a fact confirmed by some of the recaptures, which had changed plumage in the intervening period.

This is the reverse of normal for sexual selection, in which there is no point in immature individuals pretending they are mature, nor mature females pretending to be males. So he carried out experiments at hummingbird feeding stations filled with sugarwater to try to find out what benefits adult-male-like plumage brings.

First, he put pairs of stuffed humming-birds by these stations—mixing males, females with male plumage, and females with female plumage—and recorded how they were treated. A clear pattern emerged. As might be expected, stuffed females in female plumage received a lot of sexual attention from males, whilst those in male plumage were spared. More surprisingly, they were also on the receiving end of more aggression, perhaps because males see females as easier to drive away from contested food sources. Both courtship and hostility, though, distract from the serious business of feeding, and are therefore harmful.

He then started varying the amount of sugar in the sugarwater, while measuring the frequency and length of visits to feeders. Female birds with male-like plumage, he discovered, fed more frequently and for longer than those with muted colours. At feeders with higher sugar concentrations, the difference was yet more pronounced—probably because, the stakes being higher,

birds with muted colours were experiencing more harassment.

And that, perhaps, explains why hummingbirds as a group have evolved female-limited polymorphism so often—for, of all known vertebrates, they have the highest metabolic demand per gram of body weight. Anything detracting from feeding will get short shrift from natural selection. If looking like an adult male while actually being juvenile, female or both gets the job done, such plumage will evolve.

The remaining puzzle is why some adult females, having adopted the disguise

as juveniles, then go on to abandon it. Perhaps the muted female colours make them less conspicuous to predators, especially at their nests. But polymorphisms of this sort are normally maintained because each option is advantageous when rare in a population, and disadvantageous when common. The details of how such a trade-off—between access to food and protection from predators—would work in this case remain unclear. Dr Falk has therefore only half-answered the question he set out to investigate. Answering the other half might require another trip to Panama.

Scientific errors

Autoincorrect

Software is subbing mistakes into scientific papers

M ICROSOFT EXCEL'S zeal for autocorrection has long irritated casual users. Lists of numbers preceded by dashes are misread as instructions to subtract. Phone numbers lose their leading zeroes. Credit-card numbers get re-expressed in scientific notation.

Geneticists struggle with a particular version of this problem. A gene called Membrane Associated Ring-CH-type finger 1, commonly known as MARCH1, is, for instance, frequently re-encoded as the date March 1. Something similar happens to genes in the Septin family, of which SEPT1 is a member, and to Basic Helix-Loop-Helix Family Member E41, often known as DEC2.

This problem was first noticed in 2004, but was brought to wider attention in 2016 by Mark Ziemann of Deakin University, in Australia. In July Dr Ziemann followed up with a paper in *PLOS Computational Biology* entitled "Gene name errors: Lessons not learned". By surveying 166,000 genomics-related papers published between 2014 and 2020, he and his co-authors showed that the number of papers using Excel has steadily increased, and the proportion plagued with autocorrect errors continues to hover at around 30%.

Errors have also been flagged by researchers in other languages. In Portuguese, for instance, AGO2 (Argonaute RISC Catalytic Component 2) rebrands itself as Agosto 2. Dutch users experience problems with MEI1 (Meiotic Double-Stranded Break Formation Protein 1), "Mei" being the Dutch for "May". And geneticists in Finland, where the first month of the year is called Tammikuu, find TAMM41 (Mitochondrial Translocator Assembly And Maintenance Protein) encoding itself as the 41st of January.

This continuing state of affairs is



surprising. In August 2020, aware they were playing David to Microsoft's Goliath, the committee which standardises gene names renamed those beginning MARC, MARCH and SEPT to begin MTARC, MARCHF and SEPTIN, and rebranded DEC1 as DELEC1. Other problematic gene names remained, but this was widely seen as a step in the right direction. Dr Ziemann's latest paper, though, suggests that few researchers have taken it.

Such errors often seem amusing rather than dangerous. But they reflect a deeper problem, which is that spreadsheets allow such silent errors, too well camouflaged for authors or their editors to spot, to go undetected for years. To stop this, Dr Ziemann recommends researchers abandon software like Excel in favour of bespoke code written with scientific applications in mind. Such programs are less susceptible to erroneous autocorrections and easier to audit. Whether his advice will be heeded this time round remains to be seen.



Cuban history

An American tragedy

Cuba's giant neighbour has played a large and often destructive role in its past

In 1853 WILLIAM KING was sworn in as vice-president of the United States on a sugar plantation in Matanzas, near Cuba's northern coast. King, who had hoped that spending his afternoons amid the fumes of boiling sugar would cure the tuberculosis from which he was dying, asked Congress for permission to take office as deputy to President Franklin Pierce on foreign soil. He lasted only 45 days in the job, returning to his own plantation in Alabama just before he died.

His is one of many stories told by Ada Ferrer in "Cuba: An American History" to show how intertwined the two countries have been. King's presence on the island was telling. The slave-owning deputy of a northern president who sought to placate the restive American South, he took the oath in a place where slaves harvested the crop that made Cuba one of Spain's most profitable colonies. King and Pierce had campaigned to make Cuba an American possession; their supporters carried banners reading "Pierce and Cuba". The off-site inauguration "exemplified the power of a

Cuba: An American History. By Ada Ferrer. *Scribner; 576 pages;* \$32

system that linked planters, slave-traders and investors from New York to Charleston to the African coast to Havana, Matanzas and the green cane fields of the island's interior", Ms Ferrer writes.

The idea of putting the United States at the centre of Cuba's history is not surprising. But Ms Ferrer reveals a relationship that is deeper and more troubled than it may appear to readers who remember the *Maine*, an American battleship that blew up in Havana harbour in 1898, triggering the Spanish-American war. Her book is

→ Also in this section

69 Liberalism and the truth

70 Johnson: Pronouns and gender

71 David Grossman's new novel

71 The index, a book about

timely, too. This summer the biggest protests in decades confronted Cuba's repressive (and anti-American) regime. Ms Ferrer invites readers to consider the context in which the country's next change of regime could happen.

America was domineering from the start, and more often a foe than a friend of Cuban nationalists. Thomas Jefferson thought Cuba should be his country's "southernmost limit". Ships owned by Americans from northern states trafficked slaves from Africa to Cuba in the middle of the 19th century, even after the United States had made the trade illegal. American-made machines, maintained by American engineers, refined Cuban sugar. After America helped Cuban rebels boot out the Spanish it eventually conceded Cuban independence, but not without imposing the Platt amendment, which limited the new state's ability to sign treaties and gave America the right to send in its army. In the 1920s Cuba had around 80 American settlements and nearly two-thirds of its sugar was produced by American-owned mills.

The heroes in Ms Ferrer's saga of collaboration between rich white Americans and Cuba's upper classes, some of whom during slavery favoured annexation by the United States, are the nationalists and reformers who repeatedly rebelled against Cuba's rulers, whether Spanish, American or Cuban. Many were black, and much of her book is about these lesser-known fighters for independence and equality.

Her tales are revealing and moving. José Martí, the intellectual father of Cuban independence, was against racism, insisting that people "have no special rights simply because they belong to one race or another". General Quintín Bandera, a black man, helped lead three wars against Spain. After independence, failing to find employment commensurate with his stature, he collected rubbish, defiantly wearing his uniform.

Heroes and villains

Cuba's submissiveness to the United States ended abruptly with the victory of Fidel Castro's revolution in 1959. America still tried to get its way, through invasion, attempted assassination and an economic embargo. As well as fomenting the Bay of Pigs fiasco, the CIA contemplated spraying a derivative of LSD on Castro before a speech to make him look crazy. But he and his revolution survived everything the Americans threw at them. Even now Castro's defiance of the superpower, along with such social successes as a low infantmortality rate, excuse his repression and economic malpractice in the eyes of many leftists. Ms Ferrer, whose family fled Cuba in the early 1960s, is not so indulgent.

Castro did not need psychedelics to govern irrationally. During the 1960s his regime nationalised almost every productive activity. Starting in 1969 it dragooned city folk, including children as young as 14, to cut sugar cane in a bid to raise cash for industrialisation, postponing Christmas and new-year celebrations until the summer in pursuit of a doomed target. In its quest to mould Cubans into dutiful socialists the regime sent 85% of high-school students to rural boarding schools. Within a few years of the revolution, in the first of several waves of emigration, some 250,000 Cubans left, mostly for Miami. They included half of Cuba's doctors and two-thirds of the faculty of the University of Havana.

Could relations with America over the past 62 years have been less barbed, and Cubans' lives better as a result? Castro's personality, America's preconceptions and the cold war all made that unlikely. It is unclear just when Castro decided he was a communist but he was never going to be a democrat; even before the revolution he proclaimed that Cuba "needs more Robespierres". The Eisenhower administration saw Castro's relatively moderate early land reform, which did not fully compensate American firms, and a visit by a Soviet official as signs that Cuba was going communist. With America in a global power struggle against the nuclear-armed Soviet Union, that was intolerable.

Cubans are still suffering. Food is scarce—the result of socialist policies that have been only partly reformed, the tourism-crushing pandemic, the woes of Venezuela (which replaced the Soviets as

Cuba's economic backer) and the American embargo. In July Cubans protested in dozens of cities and towns. The regime, led today by Miguel Díaz-Canel, an apparatchik with none of Castro's charisma, responded with tear gas and arrests.

Yet readers will close Ms Ferrer's fascinating book with a sense of hope. The cold war is over. The yearning of many Cubans for political and economic freedom is one that any American government can endorse. If they finally achieve it, Cuba's overbearing neighbour might at last prove a friend to the island's progress. ■

Liberalism and the truth

The faculty of useful knowledge

The Constitution of Knowledge. By Jonathan Rauch. *Brookings Institution Press;* 280 pages; \$27.99 and £22.50

If this review contains errors, they will probably be spotted by the first editor who reads it. If a mistake sneaks past him then other editors, who pride themselves on being able to find bloopers, will probably intervene. If they are all asleep at the keyboard, *The Economist's* fact-checking team will embarrass them by flagging the mistake. And if all these safety features fail, then a reader will write to point out the error, which will then be corrected with a slightly sheepish apology.

This system, which has corollaries in science, law, academia, finance and everywhere that facts still matter, forms one node in an enormous decentralised, deper-



Is that bit on the record?

sonalised network. Jonathan Rauch, a former journalist at *The Economist* and now at the Brookings Institution, a think-tank, calls the rules that govern it the "constitution of knowledge".

Unlike America's constitution, this one has no identifiable authors. Instead, the rules were discovered by trial and error over the course of centuries. In Mr Rauch's telling, the constitution of knowledge draws on the same inspiration as the Founding Fathers: a mash-up of 17th-century ideas about liberty with the French and Scottish enlightenments. But it took more than a hundred years to perfect. In the mid-19th century American journalists still invented stories to boost their readership. In 1844, for example, the New York Sun published a fake story about a transatlantic hot-air balloon journey, written by Edgar Allan Poe.

The 20th century brought codes of ethics, professional bodies and unwritten rules that were passed on through institutions. In journalism, a field Mr Rauch knows well—and to which he pays particular attention because of its role in politics—these rules include seeking multiple sources, preferring information that is on the record, questioning received wisdom, affording subjects a right of reply and correcting mistakes. Karl Popper's philosophy of science gave the constitution of knowledge an epistemological basis. The truth might be unattainable, but by excluding enough falsehoods it was possible to get close to it.

Like science, what Mr Rauch describes is a social activity. He sets out the house rules. Nobody has the final say on anything. Authority on a subject is not personal: "if an experiment works for Yale's Sterling Professor of Social and Natural Science, it should also work for the lowly undergraduate who replicates it." Knowledge advances through disconfirmation, which means that when one person advances an idea, everybody else can try to knock it down. People must be accountable for mistakes, though if the punishment for being wrong is too severe it becomes counterproductive. Civility matters, as do earned credentials and reputation. Institutions are vital. Last, no bullshitting is allowed.

It will not come as news to *Economist* readers that the system Mr Rauch evokes so fondly is under threat, from three sources. News as entertainment, in the form of talk radio and cable-news outrage, was around decades before the birth of Twitter and Facebook. Yet social media have given the phenomenon extra oomph—and so far the big social platforms have proved better at undermining the authority of institutions that make knowledge than at strengthening them, or at creating new ones. Wikipedia is a lonely exception that illustrates what might be possible with a

In different set of incentives.

Then there is the threat from the populist right, which seemed to reach its apogee in 2016. The knowledge-making that Mr Rauch describes is complex and questioning. One reason populism is popular is that it makes everything seem simple and certain. The sabotage from the right has also been deliberate. When Donald Trump was president-elect, Lesley Stahl of CBs asked why he spent so much time attacking the press. "You know why I do it?" Ms Stahl later recalled him saying. "I do it to discredit you all and demean you all, so when you

write negative stories about me no one will believe you."

Third comes the threat from the left, in the form of cancelling and self-censorship. Liberal knowledge-makers are more worried about this now, because to some the peril of Trumpism seems to be receding. The Yale students who were upset by a professor's reluctance to police Halloween costumes, or those at Smith College who protested against Christine Lagarde giving a speech, are suspicious of the liberty on which knowledge-making depends. There is evidence that this preference for confor-

mity is gaining ground. Two-thirds of college students who answered a poll run by the Knight Foundation in 2019 admitted that the climate on campus stopped them expressing their views because classmates might find them offensive.

"That so few now dare to be eccentric marks the chief danger of the time," wrote J.S. Mill of Victorian England. Mr Rauch's book is a manifesto for liberals and eccentrics, which explains how carefully the great, distributed knowledge-making network has been assembled, how enduring it has proved—yet how fragile it seems.

Johnson He, she, hizzer

In trying to tackle linguistic sexism, some languages are luckier than others

Egling over its lack of a gender-neutral pronoun. For centuries the orthodox view was simply that "he" includes "she". But in the 19th century, when suffragettes in Britain and America argued that they were entitled to vote, they were told that the "he" used to describe voters in laws referred only to men. More recently some (including this columnist) have argued for a generic singular "they", which has been employed in this way for centuries. But conservatives insist that it is illogical.

As the dispute rumbles on, people have invented pronouns to fit the bill: hesh, hizzer, herm and others. Many aim to combine he, she, him and her in some way. But English is unfortunate in that these words simply don't blend into one that feels entirely natural.

Activists trying to take default maleness out of other languages have banged their heads against the same wall. In German, the current solution is the "Gendersternchen" (gender asterisk). The feminine ending (often -innen) is added after the masculine base plus an asterisk, as in Student*innen, a genderless plural of "students". A few bodies, such as the Green Party, have adopted the practice. But it is tricky to pronounce (to keep it from sounding identical to Studentinnen, "female students", speakers use a brief pause). And, not surprisingly, it is unpopular with traditionalists.

French feminists have sought a similar fix, setting off feminine endings (like -e) with full stops, as in étudiant.e. Naturally the (almost always conservative)
Académie Française has rejected the innovation. But so have public figures who otherwise trumpet their feminist credentials; Édouard Philippe, the prime minister until last year, called for

feminising official job titles—so a female *chef de cabinet* could be a *cheffe*—but rejected the interposed dots.

Linguistic engineering need not be so awkward. In this regard, some languages are luckier than others. Swedish is one. It does not distinguish masculine from feminine in adjectives and articles; they merged into a "common" gender long ago. So Swedes had mainly just the pronoun problem to solve: how to refer to a generic person without using han (he) or hon (she). Activists have embraced hen, which is neatly close to both, and easy to pronounce. In contrast to the German and French equivalents, it has enjoyed some formal approval. Sweden's biggest teachers' union issues guidance for educators on using it in the classroom.

More intriguing perhaps are the solutions found by Spanish-speakers. A few people in America have adopted the term "Latinx" to avoid the masculine "Latino" (it is pronounced "la-teen-eks"). This has crept into English but is used rarely by Latinos themselves. It does not really solve the problem in Spanish, where -x



cannot replace the masculine -o and feminine -a in a way that feels native.

Another solution fits neatly into Spain's spelling and sound system: -e, as is in one latine or multiple latines. It also dovetails with the detail that many Spanish nouns and adjectives (those that end in a consonant) already take the plural form -es. This makes new words like alumnes (students) look less alien: they resemble traditional Spanish words like españoles. The -e ending also yields a pronoun, elle, sitting between él (he) and ella (she), with none of the weirdness that nobbles hizzer or hesh in English

Whether such innovations will be taken up by the broad community of speakers remains to be seen. Many people mocked the creation of Ms as an alternative to Mrs and Miss. Perhaps against the odds, it is now ubiquitous. But the fact that sex-neutral pronouns can also be used by those who claim neither of the traditional genders will embroil them in yet another culture war.

In the end, languages do allow for pronoun engineering in the name of social goals, if not always the planned, top-down kind of reform. You was once the object form of ye, English's old second-person plural pronoun. Later it became the subject form, but still plural only. Then it became a polite way to refer to a single person (in contrast to thou, for intimates and inferiors). Over centuries, speakers gradually decided that everyone deserved the polite "you", and the days of "thou" were numbered. In the midst of the change, many decried singular "you" (the Quakers were longtime holdouts). They lost the debate.

It is often said that the personal is political, and the same goes for personal pronouns. When politics change, they eventually do, too.



Israeli fiction

The long road back

More Than I Love My Life. By David Grossman. Translated by Jessica Cohen. *Knopf*; 288 pages; \$27. *Jonathan Cape*; £18.99

Nan's new novel, Gili, a young Israeli film-maker, is celebrating the 90th birthday of Vera, the grandmother who helped bring her up after her mother vanished. It is 2008. Vera is a survivor of the barbarity inflicted on Yugoslavia during the second world war. Her parents were sent to Auschwitz; Milosz, her first husband and great love, committed suicide after being arrested and tortured in Belgrade.

Vera—"my generous, warm, endlessly devoted, fanatical, tough, cruel grand-mother", Gili calls her—eventually emigrated to Israel, married a widower and looked after her daughter, Nina, and a new stepson, Rafi, mostly trying to put the past behind her. Her care for her second husband, even as she maintained her devotion to Milosz, and the warm relationships she forged with her extended Israeli stepfamily, have made her the matriarch of a sprawling and tight-knit clan.

The party is interrupted by the return of flinty Nina, the prodigal daughter who had conceived Gili with Rafi, only to abandon the baby. Nina's entrance unleashes a family crisis. And it precipitates an epic journey from Israel to the desolate island of Goli Otok, off the coast of what is now Croatia. In the 1950s Vera had been held there as a political prisoner. How she faced up to her torturers—and the terrible moral dilemma they imposed—would haunt the family for ever.

Mr Grossman's is not the first novel to dramatise the decisions that war and dictatorship can demand; William Styron's "Sophie's Choice" is probably the most famous. What differentiates his story is the way he tells it. A devoted, if inconspicuous, experimentalist, Mr Grossman chose a long walk across Israel as a template in "To the End of the Land"; in "A Horse Walked into a Bar", which won the International Booker prize, stand-up comedy provided an unexpected way of exploring the past.

In "More Than I Love My Life", Gili and her father use the journey to Goli Otok to film documentary footage about Vera and Nina. Partly narrated by Gili and brilliantly translated from Hebrew by Jessica Cohen, the novel leaps back and forth in time—and sometimes from the first person to the



Terror island

third—giving vivid voice to each of the characters as they navigate their pain, both present and past. Pages of expository dialogue, which might have become clumsy and obstructive, are seamlessly included as interviews conducted for the film, enhancing the overall subtlety.

Mr Grossman's 12 previous novels and five volumes of non-fiction have brought him renown on both sides of the Atlantic. This book will earn him more.

The history of books

Keys to all knowledge

Index, A History of the. By Dennis Duncan. Allen Lane; 352 pages; £20. To be published in America by W.W. Norton in February; \$30

Producing an index is like squeezing "a grape in a winepress", wrote a 19th-century French scholar, "so that not even the tiniest drop of precious juice has been allowed to escape". Reading an index is more like wine-tasting. Take the smallest sip and you can guess the vintage.

Try this one: "gluttony/God/grief/heaven/hell/humanity/Seneca/sex/sin". It's a heady combination: ambrosial and intellectual; sensual with a bitter aftertaste. It is from St Augustine's "Confessions". Or try a slug of this: "shame/shameless/shamrock/shit/shite/shithouse". That earthy flavour is from James Joyce. How about "pie/poverty/power/prison/pudding (see 'Christmas Dinner')/ pugilist"? Full-bodied, with a hint of festive spice: Dickens, naturally.

Indexes are to books as menus are to meals: often the best bit. The index should

be prosaic—it is, after all, a mere tool—but it can read like poetry. Even John Betjeman, a bard of Englishness, might struggle to match "Abingdon/al-Qaeda/Angola/Ascot/Asda". Indexes are a solution, but they are also a puzzle. Take that last one. It is from a biography of John le Carré—and who wouldn't wonder, Smiley-like, how those entries all join up?

As Dennis Duncan's charming book shows, though today they suggest fusty libraries, indexes were once a novelty. A book seems such a simple structure that it feels less invented than self-evident, the innovations behind it hard to see. Yet every chapter in its progress was slow, bound on either side by centuries of sluggishness. Turnable pages didn't really arrive until the first century BC; the book form didn't take off properly until the fourth century AD. The separating of words with spaces didn't get going until the seventh—verylateforsomethingsouseful. Finally things accelerated: first came the index, in the 13th century, then Gutenberg, then, in 1470, the first printed page number. You can still see it in a book in the Bodleian Library.

People have struggled with the speed of literary production ever since. "Is there anywhere on Earth exempt from these swarms of new books?" grumbled Erasmus. The index was both an aid and a problem of its own. "Many people read only them," tutted the hard-to-please Erasmus. An anxiety has always hung about them—that, while they enhance convenience, they threaten serendipity. To claim to have read a book when you have only read the index is, said Jonathan Swift, like a traveller claiming to describe a palace when "he had seen nothing but the Privy".

But indexes could and can be fun. Brevity is the soul of wit, and what is briefer than an index? Consider this takedown of a British politician: "Aitken, Jonathan: admires risk-takers, 59; goes to jail, 60". At times they were astonishingly ambitious: the Victorians strove to produce a "key to all knowledge". Like railways, an author rhapsodised, indexes have "cleared the way; they have levelled mountains and straightened the most tortuous paths ...What a timesaver!...this is electricity!"

They are still saving time. Where Victorian keys to everything failed, Google has succeeded, says Mr Duncan. For what is the search engine but a giant, electronic index? Type in the word, and everything appears instantly—gluttony/God/shame/shite/Angola/Ascot/Aitken and all the rest. What a timesaver! What electricity! And yet it is hard not to feel, like Erasmus, that something has been lost. The mountains have been levelled, the paths straightened. The serendipity has gone.



Economic & financial indicators

Economic data

	% char		omestic p		% chan		prices	rate	ployment	balanc		Budge	ce	10-yr go	est rates ov't bonds	change on	per\$	cy units % change
	latest	_	quarter*		latest		2021†	%		% of GD	P, 2021 [†]		P, 2021 [†]	latest,%	6	year ago, bp	Sep 1st	on year ago
United States	12.2			6.0	5.4		3.6	5.4		-3.0		-12.6		1.3		63.0	-	
China	7.9			8.5		Jul	1.3		Jul ^{‡§}	2.8		-4.9		2.6	§§	-32.0	6.47	5.4
Japan	7.5		1.3	2.3		Jul	-0.1	2.8		3.4		-8.9		nil		-8.0	110	-3.6
Britain	22.2	Q2	20.7	5.8	2.0	Jul	2.9		May ^{††}	-4.5		-10.9		0.7		28.0	0.73	1.4
Canada	12.7	_		5.4		Jul	2.6	7.5		-2.0		-8.8		1.2		60.0	1.26	3.2
Euro area	13.6		8.2	4.6	3.0	Aug	1.9	7.6		3.4		-7.2		-0.4		5.0	0.84	nil
Austria	-5.5	Q1	-12.6	3.8	3.2	Aug	2.4	6.2		2.8		-7.9		-0.1		9.0	0.84	nil
Belgium	14.9	Q2	7.0	4.8	2.7	Aug	2.2	5.9	Jul	-0.7		-7.5		-0.1		7.0	0.84	nil
France	18.7	Q2	4.5	5.5	1.9	Aug	1.6	7.9	Jul	-1.4		-8.7		-0.1		3.0	0.84	nil
Germany	9.4	Q2	6.7	2.9	3.9	Aug	2.5	3.6	Jul	7.1		-5.7		-0.4		5.0	0.84	nil
Greece	-1.4	Q1	18.9	5.4	1.4	Jul	0.1	14.6	Jul	-3.8		-5.7		0.8		-39.0	0.84	nil
Italy	17.3	Q2	11.2	6.0	2.1	Aug	1.3	9.3	Jul	3.8		-11.5		0.7		-40.0	0.84	nil
Netherlands	9.7	Q2	13.1	3.8	1.4	Jul	2.1	3.1	Jul	9.5		-1.7		-0.4		-6.0	0.84	nil
Spain	19.8	Q2	11.5	6.1	3.3	Aug	2.0	14.3	Jul	0.9		-8.6		0.3		-12.0	0.84	nil
Czech Republic	8.9	Q2	4.2	3.5	3.4	Jul	2.7	2.8	Jul [‡]	3.2		-8.5		1.8		72.0	21.4	2.4
Denmark	8.7	Q2	9.3	2.8	1.6	Jul	1.4	3.8	Jul	7.8		-0.5		-0.1		26.0	6.27	-0.8
Norway	6.1		4.4	2.6	3.0	Jul	2.9		Jun ^{‡‡}	2.5		-1.0		1.4		76.0	8.69	0.5
Poland	11.2		8.7	4.5	5.4	Aug	4.1	5.8		2.4		-6.9		1.9		50.0	3.80	-3.4
Russia	10.3			3.5		Jul	5.8	4.5		4.4		-1.8		7.1		87.0	73.0	0.6
Sweden	9.5			3.9		Jul	1.9	8.0		4.8		-2.2		0.2		13.0	8.60	0.7
Switzerland	-0.5		-2.0	3.4		Jul	0.3	3.0		7.0		-3.8		-0.3		8.0	0.91	nil
Turkey	21.7			6.1	19.0	Jul	17.1	10.4		-3.1		-2.6		16.4		331	8.30	-11.4
Australia	9.6			4.3		Q2	2.5	4.6		1.9		-6.1		1.2		24.0	1.36	nil
Hong Kong	7.6			5.4		Jul	1.6		Jul ^{‡‡}	2.5		-4.2		1.1		49.0	7.78	-0.4
India	20.1			10.4		Jul	5.4		Aug	-1.0		-7.2		6.2		26.0	73.1	-0.3
Indonesia	7.1			3.0	1.6		2.0	6.3	-	0.3		-6.0		6.0		-82.0	14,283	2.0
Malaysia	16.1			4.4	2.2		2.4	4.8		3.1		-5.9		3.2		56.0	4.15	-0.2
Pakistan	4.7			3.8		Aug	9.2		2018	-1.8		-7.2		9.8	†††	43.0	167	-0.6
Philippines	11.8			4.3	4.0	Jul	4.1	8.7		-0.9		-7.5		4.2		129	50.1	-3.1
Singapore	14.7			5.4		Jul	1.8	2.7		17.3		-4.4		1.4		42.0	1.34	1.5
South Korea	6.0		3.1	3.8	2.6		2.2	3.2		4.9		-3.7		1.9		35.0	1,157	2.2
Taiwan	7.4			5.7		Jul	1.8	4.4		15.5		-0.8		0.4		nil	27.7	5.8
Thailand	7.5			1.5		Jul	1.3		Dec§	3.0		-6.5		1.4		19.0	32.4	-4.0
Argentina	2.5		11.0	7.8	_	Jul	47.5	10.2		1.3		-5.5		na		na	97.8	-24.1
Brazil	12.4			5.5		Jul	7.5		Jun§‡‡	0.1		-5.9		10.5		373	5.16	3.9
Chile	18.1			7.5	4.5		3.6		Jul§##	-0.4		-7.1		4.7		234	767	0.3
Colombia	17.0			7.8	4.0		3.1	14.3		-3.4		-8.5		6.9		195	3,743	-1.6
Mexico	19.6			6.4	5.8		5.1	4.1	-	1.6		-2.8		7.0		117	19.9	9.0
																270		
Peru	41.9			10.8	5.0		3.5	9.7		-0.5		-5.7		6.1			4.08	-13.7
Egypt	2.9			2.8	5.5		5.8	7.3		-4.4		-8.0		na 1.0		na 22.0	15.7	1.1
Israel	17.0			4.2	1.9		1.8	5.0		3.9		-7.6		1.0		32.0	3.21	4.7
Saudi Arabia	-4.1			2.2	0.4		3.2	6.5		4.3		-2.0		na		na	3.75	nil
South Africa	-2.4	Q1	2.0	3.0	4.7	Jul	4.0	34.4	Q2 [§]	1.8		-9.4		8.8		-36.0	14.4	15.6

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. ‡3-month moving average. §§5-year yield. †††Dollar-denominated bonds.

Markets		9/6	change on:
			0
In local currency	Index Sep 1st	one week	Dec 31st 2020
United States S&P 500	4,524.1	0.6	20.4
United States NAScomp	15,309.4	1.8	18.8
China Shanghai Comp	3,567.1	0.8	2.7
China Shenzhen Comp	2,417.9	-2.3	3.8
Japan Nikkei 225	28,451.0	2.6	3.7
Japan Topix	1,980.8	2.3	9.8
Britain FTSE 100	7,149.8	nil	10.7
Canada S&P TSX	20,689.6	0.5	18.7
Euro area EURO STOXX 50	4,227.3	1.1	19.0
France CAC 40	6,758.7	1.2	21.7
Germany DAX*	15,824.3	-0.2	15.3
Italy FTSE/MIB	26,181.7	0.5	17.8
Netherlands AEX	790.0	1.0	26.5
Spain IBEX 35	8,991.5	0.2	11.4
Poland WIG	70,995.7	1.8	24.5
Russia RTS, \$ terms	1,715.1	3.7	23.6
Switzerland SMI	12,432.8	0.6	16.2
Turkey BIST	1,474.1	1.4	-0.2
Australia All Ord.	7,813.0	nil	14.0
Hong Kong Hang Seng	26,028.3	1.3	-4.4
India BSE	57,338.2	2.5	20.1
Indonesia IDX	6,090.9	-0.4	1.9
Malaysia KLSE	1,586.9	1.1	-2.5

		2/	
		%	change on:
	index Sep 1st	one week	Dec 31st 2020
Pakistan KSE	47,413.5	-0.5	8.4
Singapore STI	3,087.8	-0.6	8.6
South Korea KOSPI	3,207.0	1.9	11.6
Taiwan TWI	17,474.0	2.5	18.6
Thailand SET	1,634.5	2.1	12.8
Argentina MERV	75,232.6	4.5	46.9
Brazil BVSP	119,395.6	-1.2	0.3
Mexico IPC	52,215.5	-0.2	18.5
Egypt EGX 30	11,283.7	2.0	4.0
Israel TA-125	1,827.3	nil	16.5
Saudi Arabia Tadawul	11,310.5	1.4	30.2
South Africa JSE AS	66,976.1	-0.7	12.7
World, dev'd MSCI	3,151.7	0.8	17.2
Emerging markets MSCI	1,312.4	2.9	1.6

US corporate bonds, spread over Treasu	uries	
Dania walinta	lataat	Dec 31st
Basis points	latest	2020
Investment grade	118	136
High-yield	342	429

Sources: Refinitiv Datastream; Standard & Poor's Global Fixed Income Research. *Total return index.

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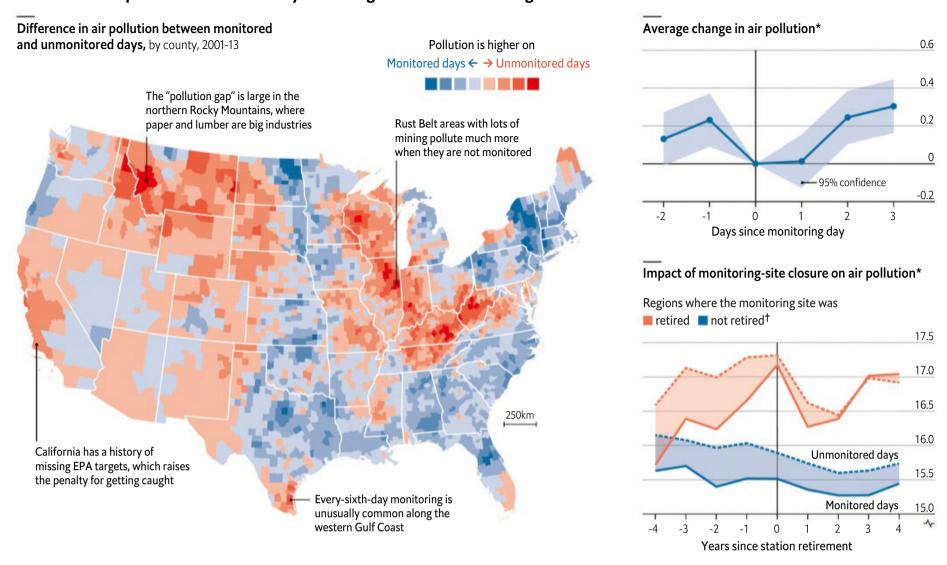
			% change on			
.015=100 A	ug 24th	Aug 31st*	month		year	
Dollar Index						
All Items	161.7	164.2	-5.4		28.5	
Food	130.8	129.9	0.9		31.1	
Industrials						
All	190.5	196.2	-8.8		26.9	
Non-food agriculturals	140.3	140.5	-2.1		24.4	
Metals	205.4	212.8	-10.1		27.4	
Sterling Index						
All items	179.7	182.1	-4.4		25.5	
Euro Index						
All items	152.5	154.3	-4.9		30.2	
Gold						
\$ per oz	1,805.7	1,806.3	-0.1		-8.6	
Brent						
\$ per barrel	71.1	73.0	0.7		60.0	

Sources: Bloomberg; CME Group; Cotlook; Refinitiv Datastream; Fastmarkets; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For more countries and additional data, visit **Economist.com/indicators**

Graphic detail Environmental regulation

→ American air pollution is worse on days when regulators are not looking



*An index where 0=lowest and 100=highest and 12 is the average for the US †Within the same state as the retired site and over the same period Source: "Unwatched pollution: the effect of intermittent monitoring on air quality", by Eric Yongchen Zou, 2021

We were expecting you

Poorly devised regulation lets firms pollute with abandon

THLETES DON'T get advance warning of \Lambda drug tests. Police don't share schedules of planned raids. Yet America's Environmental Protection Agency (EPA) does not seem convinced of the value of surprise in deterring bad behaviour. Every year it publishes a list of dates, spaced at six-day intervals, on which it will require state and local agencies to provide data on concentrations of harmful fine particulate matter (PM, 5), such as soot or cement dust.

In theory, such a policy should enable polluters to spew as much filth into the air as they like 83% of the time, and clean up their act every sixth day. However, this illadvised approach does offer one silver lining: it lets economists measure how much businesses change their behaviour when the proverbial parents are out of town.

A new paper by Eric Zou of the University of Oregon makes use of satellite images to spy on polluters at times when they think no one is watching. NASA, America's space agency, publishes data on the concentration of aerosol particles-ranging from natural dust to man-made toxins—all around the world, as seen from space. For every day in 2001-13, Mr Zou compiled these readings in the vicinity of each of America's 1,200 air-monitoring sites.

Although some stations provided data continuously, 30-50% of them sent reports only once every six days. For these sites, Mr Zou studied how aerosol levels varied based on whether data would be reported.

Sure enough, the air was consistently cleaner in these areas on monitoring days than it was the rest of the time, by a margin of 1.6%. Reporting schedules were almost certainly the cause: in areas where stations were retired, average pollution levels on monitoring days promptly rose to match the readings on non-monitoring days.

The size of this "pollution gap" differed by region. It was biggest in parts of Appala-

Difference in air pollution* between monitored and unmonitored days

By pollution level in previous month



chia and the Midwest with lots of mining, and in the northern Mountain West, where paper and lumber mills are common.

The magnitude of the gap also depended on the cost of being caught. Every year, the EPA produces a list of counties whose average air quality falls below minimum standards. The punishments for inclusion are costly: factories become subject to burdensome clean-technology requirements, and local governments can be fined.

When firms risked facing sanctions. they seemed to game the system more aggressively. In counties that exceeded the PM_{2.5} limit in a given month, the pollution gap in the following month swelled to 7%. In all other cases, it was just 1.2%.

The end of the one-in-six schedule is in sight. Thanks in part to a cash-incentive scheme for continuous-measurement systems, just 10% of stations now report every sixth day. However, PM_{2.5} are so dangerous that even this small share causes severe harm. If switching these stations to continuous reporting were to cause pollution on non-monitoring days to fall to the level seen on monitoring days, it would yield a 1.3% reduction in $PM_{2.5}$ exposure for 10% of America's population. Using a standard academic estimate of the impact of such particles on life expectancy, this amounts to just over one extra day of life per affected resident, for a total of 105,000 life-years.



Blood and roses

Gino Strada, war surgeon and hospital-builder, died on August 13th, aged 73

 ${
m P}^{
m EOPLE}$ OFTEN wondered why Gino Strada led the life he did. With his skills as a heart-and-lung surgeon, trained not only in his native Milan but at Stanford and Groote Schuur, in South Africa, he could have settled in a pleasant villa somewhere beyond the city, working at an easy pace and growing the roses he loved. Instead he seemed to live in operating theatres in desperate places, draining, cleaning, cutting and suturing the worst wounds imaginable. They were vast wounds, the result of landmines and bomb blasts that tore bodies to rags. Between patients he would stand outside in his bloodied scrubs, a raddled-looking man with a messy beard, chain-smoking.

The worst of it was that his patients were rarely combatants. If they had been he would have treated them all alike, as human beings whose faith or affiliation made no difference to him. But wherever he worked, in Iraq, Pakistan, Rwanda, Yemen and especially Afghanistan, where he spent seven years, the war-wounded were almost all civilians. They were women fetching water, farmers digging, shoppers in the market. What had they to do with war? Almost half the injured, quite young enough to cry and yet stoically not crying, were children. In Afghanistan many had picked up one of the little "green parrots", dropped from Soviet helicopters, strange pretty things, which then burst in their hands.

The reality of war for ordinary people, the fact that they bore the brunt of it, shocked him deeply. So did the fact that health care in war-prone places scarcely existed. Yet this was surely a basic human right, an extension of the right to live. It was also, he believed, an equal right: not a matter of sophisticated high-tech treatment for the few, and a couple of aspirins and shots for the rest. The poor, as well as the rich, should get the best medical care the world could provide. And, for the poor, it should be free.

He had worked after his training for the International Red Cross, but soon wanted to forge his own path. His charity Emergency, set up with his wife Teresa Sarti and about 20 friends in 1994, had equality of care as its first principle. So while its job was often to replace the Red Cross as it pulled back from combat zones, it also provided free centres of medical excellence in benighted and unexpected places. In Sudan he built a centre for heart surgery, one of the best in Africa, where he often worked himself. Paediatric centres were set up in the Central African Republic and in Uganda, where his friend Renzo Piano designed it. In Iraq 300 craft co-operatives were set up for amputees in his trauma hospital, so that they could start businesses when they left. These hospitals were spotless, filled with the latest equipment and staffed by international and local teams. They were also oases of calm, surrounded by orchards and gardens. In Italy, where Teresa raised most of their funds, some folk grumbled about palaces in deserts. This made him all the more determined. His hospital in Sudan, in a mango grove on the Blue Nile, would, he promised, be "scandalously beautiful". It was.

In Afghanistan, where his heart lay, a trauma hospital was built in the Panjshir Valley, as well as the best maternity centre in the country; in 2018 more than 7,500 babies were born there. In Kabul in 2001 he opened another emergency hospital, the first in the city, as well as a network of first-aid posts. It was a struggle. To build in the Panjshir Valley he had to soften up the Tajik leader, Ahmed Shah Masoud, over much late-night tea-drinking, but in Kabul he had to talk to Mullah Omar, then-leader of the Taliban, to get permission and a site. He persuaded both men that he was neutral in the war, as he truly was, seeing the American invasion as a disaster and knowing all too clearly how it would end. At least as the Westerners left Emergency was still there, though pleading in Lashkar-Gah to be left alone, moving patients away from the windows and displaying a "hospital" banner prominently on its roof: doing what it could to provide the only health-care system Afghanistan had, or has.

Not everywhere was receptive to him. In Somalia and Chechnya there was nothing doing; the insurgents put up walls. In Libya he closed Emergency's hospital because the wounded were just local criminals shooting at each other. Meanwhile, the sheer persistence of conflict seemed to mock his efforts. Rather than constantly treating the wounded, he wanted the wounding itself to stop. No more landmines or green parrots and, decidedly, no more war. It had to be abolished, for humanity's sake.

Was this just another crazy Utopian dream, a Gino fantasy? He refused to think so. Emergency had already managed, in 1997, to get the production of anti-personnel landmines banned in Italy, once the world's third-largest manufacturer. Negotiation worked; it had worked for him even with the Taliban, when NATO thought it was impossible. He could foresee a time when talking would replace fighting, and when war would seem as unthinkable as slavery. He might not live to see it, but then people believed in all manner of things they couldn't see. Talking of which, he thought Pope Francis might give his views on war a sympathetic ear.

Meanwhile, he laboured on. His work seemed a drop in the ocean, but he was a surgical animal, interested as well as horrified when some new atrocity confronted him. He felt weary, and his voice rasped with all those cigarettes, but in theatre he was alert and calm, fixing what had to be fixed. Compensations came in a damaged heart starting to pump again, or a smile returning to the face of a child; or in a visit from Soran, a boy whose leg he had removed in Iraq, now a confident lawyer.

The landmines remained, many lurking millions of them. Men continued to fight each other. But in the midst of it all he was determined to establish beauty, not just for itself, but because it showed respect for the patients he cared for. Their lives had been reckoned as worthless by enemies they barely knew; now they were given value. In his hospital garden in Kabul there were 200 varieties of roses. One day they might fill his wards, where the war-wounded used to be.



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