The Economist

Inside Assad's new Syria

America's Supreme Court swings right

Bog-roll Boris, the busted flush

How to make meetings less dreadful

JUNE 30TH–JULY 6TH 2018

The tech giant everyone is watching

Contents

Politics this week

Print edition | The world this week Jun 28th 2018

Turkey's president, Recep Tayyip Erdogan, defied the pundits by winning an outright re-election victory in the first round of voting. His Justice and Development (AK) party, together with its allies, also triumphed in simultaneous elections to parliament. The elections marked a rise in nationalist sentiment. In his victory speech Mr Erdogan said the country had "voted for a decisive fight against the PKK", an outlawed Kurdish group. See article .

The EU launched a new **defence co-operation** arrangement, dubbed EI2. Unlike other non-NATO schemes, it will focus on deployment in conflict zones. See article .

A European mini-summit on immigration made little progress. **Italy** demanded an end to the system whereby migrants must be processed in their first country of arrival. See article .

The British government's plan for a third runway at **Heathrow** was passed by the House of Commons by 415 to 119 votes. Boris Johnson, the foreign secretary, was widely ridiculed for missing the vote, having previously said he would lie down in front of bulldozers to stop the runway. Other opponents of the runway vowed to continue their fight to prevent further noise and air pollution. See article .

A heterosexual couple opposed to the "patriarchal nature" of marriage won the legal right to have a **civil partnership**, after appealing to Britain's Supreme Court. The law states that civil partners must be two people of the same sex, but the court found that this breaches the European Convention on Human Rights. Those who advocate broadening civil partnerships to all people urged the government to change the law.

Lucky escapes

An explosion at a campaign rally in **Zimbabwe** attended by Emmerson Mnangagwa, the president, killed two people and injured dozens. The government claimed that Mr Mnangagwa was the target of the attack. He was unharmed and said a general election, scheduled for July 30th, would go ahead. See article .

A similar attack in **Ethiopia** killed two people and injured over 150. This one targeted a political rally for Abiy Ahmed, the new prime minister, who is pursuing political and economic reforms and has reached out to the opposition.

The warring sides in **South Sudan's** civil war signed a permanent ceasefire, which calls for a transitional government to be created within four months and to govern for three years. If it holds, the deal will secure the flow of aid into the country.

A long-standing ban on women driving was lifted in **Saudi Arabia**. The mood was celebratory as women took to the road. So far relatively few have been granted licences, though many thousands have applied.

Big protests erupted in **Iran**. Thousands of people marched towards the parliament building in Tehran, angered by rising prices and a sinking currency. Some clashed with the police, who eventually dispersed the crowd with tear gas. See article .

The **Syrian** army stepped up its assault on the rebel-held part of Deraa, a province in the south-west. The fighting has displaced 45,000 people, according to the UN. See article .

A moderate climate

Centrists did well in provincial elections in **Indonesia**. But in the governor's race in North Sumatra, in which the two candidates resembled the likely contenders in next year's presidential election, the moderate whose views are closest to those of the president, Joko Widodo, was beaten by a general backed by religious and nationalist parties. See article .

Rodrigo Duterte, the president of the **Philippines**, called God a "son of a whore". "Who is this stupid God?" he asked in a speech, prompting predictable outrage. See article .

Malaysian authorities announced that they had seized cash, jewellery, designer handbags and other luxury goods worth $273m from properties belonging to Najib Razak, a former prime minister, as part of a corruption investigation.

A bad week for liberals

America's **Supreme Court** issued some blockbuster rulings. It decided that Donald Trump's travel ban on people from several Muslim countries is constitutional; let stand a congressional map drawn to favour Republicans in North Carolina; overturned a law from 1977 that required non-unionised public-sector workers to contribute fees towards collective bargaining; and found that religiously oriented pregnancy clinics are not compelled to provide information on abortion on free-speech grounds. See article .

Anthony Kennedy announced his retirement from the Supreme Court. He often delivered the swing vote between the court's ideological wings and wrote the opinion legalising gay marriage. Mr Trump now has the chance to nominate a judge with a more decisively conservative bent and reshape the court. See article .

A federal judge issued an order to reunite families who have been separated at the **Mexican border** when trying to cross it illegally. More than 2,000 children separated from their parents in the recent crackdown remain in custody; in some cases their parents have already been deported. The House, meanwhile, rejected an **immigration** reform bill when over 100 Republicans ignored their party's leaders and voted against it. See article .

In this week's **primaries**, Mitt Romney won his bid to become the Republican candidate for a Senate seat in Utah. He is all but assured of winning the seat in November; in his victory speech Mr Romney vowed to tackle immigration reform. There was a big upset in a primary for a congressional seat in New York City, where Joseph Crowley, one of the Democrats' leaders in the House, was defeated by Alexandria Ocasio-Cortez, a 28-year-old socialist.

Slapping a helping hand

A 24-hour strike to protest against **Argentina's** $50bn standby-loan agreement with the IMF brought much of the country to a standstill. The General Confederation of Workers, the largest trade union, which called the strike, also demanded pay rises to match the annual-inflation rate, which is 26%.

The EU imposed sanctions on 11 **Venezuelan** officials, including the vice-president, Delcy Rodríguez. The EU said that the re-election in May of the president, Nicolás Maduro, was "neither free nor fair". The sanctions freeze the officials' assets in the EU and ban them from travelling there.

Business this week

Print edition | The world this week Jun 30th 2018

General Electric announced that it will spin off its health-care business and sell its 62.5% stake in Baker Hughes, which supplies gear to the oil industry. It was the biggest milestone yet in GE's rolling plan to shrink itself and focus on three core areas: jet engines, power generation and wind turbines, businesses that account for 60% of its revenues. Shedding its assets will take time. GE expects to take up to 18 months to sell its health division and up to three years to exit Baker Hughes. See article .

Born to be riled

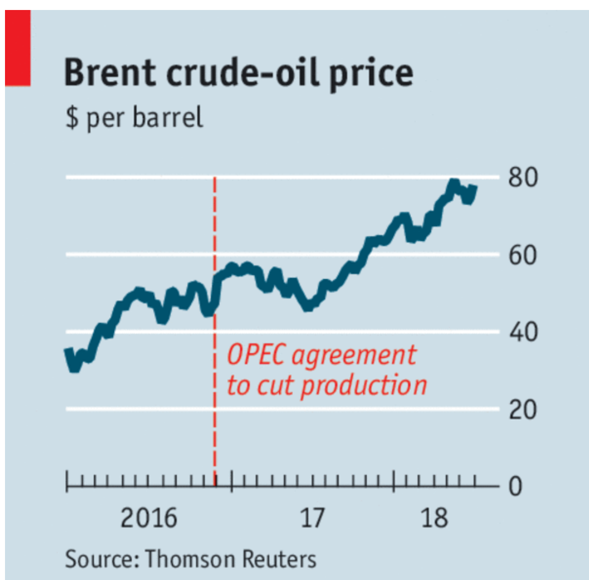
Donald Trump reacted angrily to **Harley-Davidson's** decision to relocate the production of motorbikes for sale to Europe outside the United States. The EU recently imposed levies on a range of American imports in retaliation for America's higher duties on steel and aluminium, pushing up the tariff on Harley-Davidson products. The company sells a sixth of its bikes in Europe. Mr Trump accused it of using tariffs as an excuse to move jobs outside America. See article .

The Trump administration backed away from a proposal to create a new body to scrutinise **Chinese investment** in American technology. Instead, a beefed-up Committee on Foreign Investment in the United States, which screens foreign investors for potential threats to national security, will have additional powers to block Chinese acquisitions. See article .

Weighed down in part by worries about the trade rift between America and China, the **Shanghai Composite**, China's leading stockmarket index, hit a 25-month low. The central bank's half-a-percentage-point cut to the amount of cash some banks must set aside as reserves did little to improve sentiment. See article .

Mark Carney criticised the EU for dragging its heels in preparing the **financial-services industry** for a post-Brexit world. The governor of the Bank of England said that Britain has tackled the potential disruption to derivatives and insurance contracts, but that the EU had yet to offer solutions to these "fundamental issues".

Apple and **Samsung** settled their seven-year war over patents, according to court documents that did not disclose the terms. Apple originally sued Samsung for copying some of the iPhone's features, leading to legal challenges and appeals. Apple is still preparing to do battle with Qualcomm in the courts over what it claims are excessive royalties for chips.



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OPEC and Russia reached a deal to raise **oil production** from July 1st, ending a 18-month cut in output designed to push up oil prices. During that time OPEC's output fell by more than had been expected, mostly because of the chaos in Venezuela's oil industry; oil prices almost doubled. Worried about the economic effect of higher prices, America, China and India had put pressure on OPEC, and specifically Saudi Arabia, to act.

That won't lower oil prices

Oil prices leapt, however, after the State Department said that America would apply sanctions, without exception, on importers of **Iranian oil** from early November. Iran is OPEC's third-biggest producer.

In a first, America's Food and Drug Administration approved a **medicine derived from marijuana**. Epidiolex is an oral solution to treat two severe forms of epilepsy in children. It contains cannabidiol, a chemical component of the cannabis plant that does not induce a high. Epidiolex is made by a company based in Britain, where the recent case of a boy with acute epilepsy whose cannabis-oil treatment was confiscated prompted the government to rethink the medical use of cannabis.

American consumers may soon pay more for goods bought online, following the Supreme Court's decision to overturn a 26-year-old law through which **online retailers** avoided charging sales tax. The court found that states were losing up to $33bn in tax revenue each year because of the loophole, and that bricks-and-mortar retailers were at a competitive disadvantage because they were obliged to charge a sales tax.

In a deal that augments its takeover of Time Warner, **AT&T** said it was buying AppNexus, a digital platform that helps advertisers buy ads across websites, apps and streaming video.

On probation

A court in London granted **Uber** a provisional 15-month licence to operate in the city, its biggest market in Europe. Transport for London, a regulator, had claimed that the firm's operations were not "fit and proper", primarily because of concerns about Uber's lapses in reporting crimes committed by its drivers. London's mayor, Sadiq Khan, said awarding Uber a probationary licence "vindicated" TfL's decision to refuse it a new five-year permit. See article .

KAL's cartoon

Print edition | The world this week Jun 28th 2018

Netflixonomics
The tech giant everyone is watching

Hollywood ending

Can Netflix please investors and still avoid the techlash?

Its content consumes 20% of the world's downstream bandwidth

Print edition | Leaders Jun 28th 2018

BIG technology firms elicit extreme and conflicting reactions. Investors love them for their stellar growth and vast ambition: the FAANG group of technology stocks, comprising Facebook, Amazon, Apple, Netflix and Alphabet (Google's parent), is worth more than the whole of the FTSE 100. Without them to power its growth, America's stockmarket would have fallen this year. Yet the techlash has also entangled the digital giants in all manner of controversies, from data abuse and anti-competitive behaviour to tax avoidance and smartphone addiction. They have become the firms politicians love to hate.

All but one. Alone among the giants, Netflix is a clear exception to this mix of soaring share prices and suspicion. Since its founding in 1997, the company has morphed from a DVD-rental service to a streaming-video upstart to the world's first global TV powerhouse (see briefing). This year its entertainment output will far exceed that of any TV network; its production of over 80 feature films is far larger than any Hollywood studio's. Netflix will spend $12bn-13bn on content this year, $3bn-4bn more than last year. That extra spending alone would be enough to pay for all of HBO's programming—or the BBC's.

The 125m households the company serves, twice as many as it had in 2014, watch Netflix for more than two hours a day on average, eating up a fifth of the world's downstream internet bandwidth. (China is the one big market where it is not allowed to operate.) Its ascent has mirrored the decline of traditional television viewing: Americans between the ages of 12 and 24 watch half as much pay-TV today as they did in 2010.

Uniquely among tech upstarts that have reshaped industries in recent years, Netflix has wrought its transformation without triggering a public or regulatory backlash. With a share price that has more than doubled since the start of the year, it is as popular with investors as it is with consumers. All of which raises three questions. What are Netflix's lessons for other media firms? What can the rest of the FAANGs learn from its success? And can it go on keeping everyone happy?

Hollywood ending

Start with other media firms. Moguls who once happily handed their content to Netflix as a source of extra revenue are now scrambling to compete with it. The result is a dealmaking frenzy, with AT&T buying Time Warner, and Disney and Comcast fighting over bits of 21st Century Fox. Consolidation is only part of the answer for conventional entertainment firms, however. They must also follow Netflix's lead and use the internet to offer consumers lower prices and more choice. Netflix now has more subscribers outside America than inside it. From Mexico to India people stream "Narcos" and "Stranger Things" in a planet-wide community of binge-watchers. It makes expert use of data, categorising individual users' preferences into about 2,000 "taste clusters", to serve up different shows to different users, including within the same family, via targeted recommendations. This combination of scale and data science has long been a hallmark of tech firms. Amazon, Disney and others are refining their own direct-to-consumer video services. But most media firms have a lot of catching up to do.

Other tech giants can also learn from Netflix. Compared with the other FAANGs, the firm is distinctive in several ways. Unlike Facebook and Google, Netflix has steered clear of news and mostly stuck to entertainment. That has protected it from scandals over fake news, electoral manipulation and political tribalism. And unlike those two ad-based platforms, its subscription-based business model means that the firm does not rely on selling users' data or attention to outsiders. Instead, it offers customers a simple exchange: a monthly fee in return for television they want to watch. Unlike all the other FAANGs, which are global but unmistakably American, Netflix is becoming truly international: it makes TV shows in 21 countries, dubbing and subtitling them into multiple languages. The other tech firms are not about to rip up their business models; they work too well. But they can still learn from Netflix: to use data with greater care, to be clearer about the terms of trade with their customers and to be more respectful of local markets.

Next up: house of cards

If such traits help to explain why the firm has avoided the techlash, they do not ensure it can keep everyone happy. The short-term danger is financial. Frothy valuations are commonplace at the moment, but Netflix still stands out. To justify its current valuation, Netflix's gross operating profits in a decade's time would have to be equivalent to about half of all the profits made by American entertainment firms this year. "If Jesus were a stock, he'd be Netflix," one savvy investor is said to have observed. "You either believe or you don't."

There are plenty of reasons to doubt. The company has amassed $8.5bn of debt. Reed Hastings, its chief executive, has said it will continue borrowing billions "for many years"; free cashflow is expected to remain negative for some time. That strategy will pay off if Netflix can raise prices while continuing to add subscribers—26m in the 12 months to March 31st. But competition is becoming more intense. And in countries without "net neutrality" protections, owners of wireless or broadband infrastructure that also control content-makers may use their distribution clout to favour their own material.

The long-term risk for Netflix, paradoxically, is if today's dizzying valuation proves not to be too high, but accurate. The techlash has been driven partly by fears that centralised digital platforms will end up throttling competition (see our special report). Some suspect that Netflix harbours ambitions to monopolise TV. Such a move would concentrate enormous amounts of cultural power in the hands of a few content commissioners and algorithms. It would hollow out support for public-service broadcasters, by reducing their audience, and risk leaving poorer users with fewer affordable entertainment options. And it would inevitably find it much harder to avoid the attention of regulators. Here, then, is a final lesson that applies to Netflix, and all tech firms. To keep consumers, regulators and politicians happy over the long term, there is no substitute for competition.

This article appeared in the Leaders section of the print edition under the headline "The tech giant everyone is watching"

The future of the Supreme Court

Anthony Kennedy’s retirement comes at a worrying time

The swing vote is lost just as the constitution is under strain from a norm-breaking president

Print edition | Leaders Jun 30th 2018

FOR 12 years, Anthony Kennedy has been the Supreme Court’s swing vote. The court’s liberal and conservative quartets voted predictably. He did not—which is why those who want the Supreme Court to float above America’s partisan divide reacted with such dismay to his retirement, announced on June 27th. Justice Kennedy’s departure from the bench might sound like a minor detail set against everything else that is going on with America’s government at the moment. It is not. President Donald Trump now has the opportunity to appoint a second Supreme Court justice and with it to cement a 5-4 conservative, one might even say Republican, majority at a time when the constitution is under strain from a norm-breaking Republican president.

The high stakes herald a gigantic fight in the Senate. Democrats are still smarting from the way that Senate Republicans in 2016 ignored Barack Obama’s Supreme Court nominee for 293 days. The Republicans’ failure to give Merrick Garland a hearing before the election allowed Mr Trump to pick a judge. Democrats will bend every remaining Senate convention rather than be bested again. This will poison a polarised polity even further. But it is hard to blame them. The legislative branch has become so gridlocked that no president can expect to sign more than one or two significant laws. Far more lawmaking is therefore done by the Supreme Court, through its decisions to overturn or uphold state laws or presidential decrees. A reliable 5-4 majority will give conservatives immense power to reshape America by doing just that.

For a sense of what a court with a stable conservative majority might look like, consider the term just past. Its 63 rulings marked the most decisive shift to the right in years (see article). The court upheld Mr Trump’s ban on travel from several mostly Muslim countries. It dealt a blow to public-sector unions by overturning a 41-year-old precedent that allows them to charge non-members for collective bargaining. And, most consequentially, it issued a series of decisions on voting laws that found in favour of entrenched (Republican) majorities.

The court declined to condemn gerrymandering. It upheld congressional and state legislative maps in Texas that, according to lower courts, discriminated against black and Latino voters. And it rejected a challenge to an Ohio law that takes voters off the rolls who stayed at home for several elections and neglected to return a postcard (voters who, by some extraordinary coincidence, were predominantly Democrats). Most of those decisions were 5-4, with Justice Kennedy, contrary to his usual pattern, voting each time with the conservative bloc.

Root and third branch

Once a 5-4 majority becomes their worst outcome, Republicans will have an incentive to push for more radical change. Republicans have long wanted to overturn *Roe v Wade,* the ruling in 1973 that decided federal abortion law. Justice Kennedy's departure will give them that chance. His was the swing vote that decided that the federal government could regulate carbon-dioxide emission. That, too, could go. Another sally against Obamacare is inevitable. So are attempts to roll back socially liberal rulings of recent terms, such as expansions of gay rights and limits on capital punishment.

Even in normal times, activist judicial partisanship is dangerous. All the more so with a president so contemptuous of institutions. In the "Federalist Papers", Alexander Hamilton called the judiciary the "least dangerous" branch of government, because instead of "force" and "will", it has only "judgment". That looks like cold comfort today.

This article appeared in the Leaders section of the print edition under the headline "The final swing"

Bashar al-Assad's grim victory

Syrian refugees could turn into the new Palestinians

Unless millions of refugees can be sent home safely, they could destabilise the Middle East for decades to come

Print edition | Leaders Jun 28th 2018

AFP

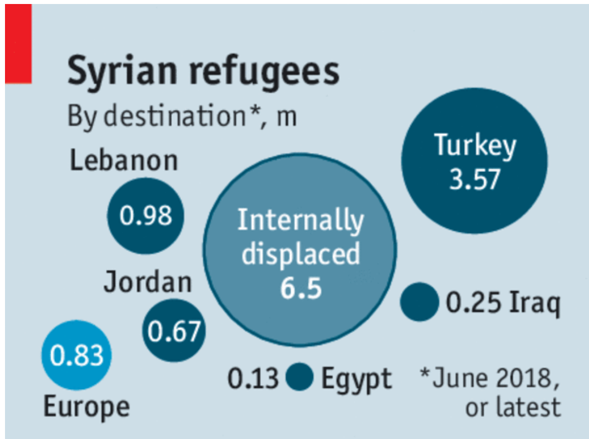
THE monstrous dictator has won. Bashar al-Assad has bombed, gassed and starved his enemies out of the biggest cities. He has made fools of Barack Obama and David Cameron, who said he should go but did nothing to bring his departure about. He has shrugged off the missiles that President Donald Trump fired at his bases.

Half a million people have died. Six million people are displaced within Syria; a similar number have fled abroad. Most of the refugees are Sunni Arabs, who made up most of Syria's pre-war population of around 22m. Still more may be pushed out as Mr Assad moves to retake mostly Sunni rebel areas in the north and south-west of Syria. His state, meanwhile, is becoming more arrowly sectarian as Alawite (his sect), Shia and Christian minorities start to take over property abandoned by the fleeing Sunnis (see article).

Syrians could thus turn into another dispossessed, festering, violent diaspora. Like the Palestinians before them, they could become a destabilising presence across the Middle East. The world has every interest in stopping that from happening.

Mr Assad's survival is a lesson in the use of butchery, the rivalries of his foes and the emptiness of Western pronouncements. By shooting peaceful protesters, Mr Assad provoked them into violence. By releasing jihadists from prison, he turned many into fighters for al-Qaeda and the even more gruesome Islamic State (IS). Thus he persuaded terrified Syrian minorities to rally behind him, deterred the West from giving the rebels meaningful help, even when he used chemical weapons, and provided the cover for Iran and Russia to save him in the name of fighting terrorism.

This newspaper has long advocated Mr Assad's removal as the best way to end Syria's nightmare. That opportunity has gone. So what now? Mr Trump says he has no interest in Syria; once his troops have smashed IS they will get out of the country's east. It is tempting to give up on Syria. Talking to Mr Assad would legitimise his atrocities. Giving him any money to rebuild his country would be doubly repulsive. Let Russia and Iran fix the devastation they have caused.



Economist.com

Yet that would be shortsighted. Apart from the moral obligation the world has to help the brutalised Syrian people, the West—particularly Europe—has hard-nosed reasons to stay engaged. One is the need to stem the flow of refugees who, along with other migrants, have fuelled populism in Europe. Another is the danger that a large population of Syrian refugees could act as a lingering poison in the Middle East.

The experience of stateless Palestinians is sobering. Those who fled or were pushed out by a nascent Israel in 1947-48 fomented much violence. Their raids helped ignite the ArabIsraeli war of 1967. Their fighters lost a civil war in Jordan in 1970; in Lebanon, they helped precipitate the 15-year civil war in 1975 and the Israeli invasion of 1982. Some also turned to international terrorism and helped radicals in Europe.

It would be no surprise if Syrian refugees—many times more numerous than the 750,000 Palestinians uprooted during the birth of Israel—became similarly radicalised. They would be easy prey for jihadists. Right now, even without violence, refugees are straining host countries, such as Lebanon, Jordan and Turkey. A lesson from the Palestinians is that the longer refugees stay out, the less likely they are to return. Many Syrians flinch at the idea of going back, fearful that they will be killed, forced into camps or dragooned into the army.

Quid pro quick return

The first step to getting refugees home is some form of lasting ceasefire, and preferably a broader political deal. This should involve power-sharing in Damascus, and the devolution of power to the provinces. Mr Assad accepted little of this when he was losing. Would he do so now that he is winning? He is already reconfiguring the country in favour of those who stayed loyal. The West, and Arab states, have only weak levers. Still, he might want better ties with them to avoid becoming entirely dependent on Russia and Iran, to help him recover control of his borders and, above all, to find the billions of dollars he needs to reconstruct his shattered country.

America, Europe and Arab states could test his intentions by offering Syria limited humanitarian funds to help bring refugees home, on condition that he grants local autonomy. A good place to start would be rebuilding ghost-towns such as Daraya or Douma. Having missed the moment to push Mr Assad out, the world must hold its nose, and try to limit the consequences of the devastation it has allowed him to wreak.

This article appeared in the Leaders section of the print edition under the headline "The new Palestinians"

Free the rails

Why Europe’s train network needs more, not less, competition

But don’t do it like Britain

Print edition | Leaders Jun 30th 2018

Alamy

TRAINS are not quite the third rail of European politics. But they are still causing lots of angst. France has already endured three months of strikes, as railway workers protest against a planned liberalisation. In Britain, meanwhile, nostalgia for state ownership is on the rise. Around 60% of Britons support renationalisation of the railways, according to a poll published in January by Sky, a broadcaster. A botched timetable change in May, resulting in up to 43% of trains being delayed or cancelled each day by one operator, will not have improved commuters’ mood. The strikes and surveys show that rail competition is controversial. It is to be embraced nonetheless.

Governments will soon have their chance to do just that. By June next year, new EU rules called the “fourth railway package” will force state rail firms to open their tracks to private operators. Some countries, such as Britain and Sweden, have done this already. Others, like Germany and Italy, are in the process of doing so; Belgium, France and Spain have hardly got started. Many countries want to do the minimum necessary to meet the rules, by putting a “Chinese wall” between the train and track divisions of state firms rather than separating them completely. The case for national governments to go further when they implement the reforms—and at the least, to separate these areas into two different businesses—is strong.

First, the broader case for competition. It is possible to have good rail services without liberalisation. But those that do, in Switzerland and France, consume some of the highest levels of subsidies in Europe. Eliminating state rail monopolies cuts costs. Take Sweden, the first European country fully to separate track and train, in 1988. As research from the University of Gothenburg has found, the costs of operating trains fell by 10% in the decade after deregulation due to competing firms battling it out. Passengers benefit from cheaper tickets. On lines in Austria, the Czech Republic and Italy where there is genuine competition between operators, fare wars have broken out. The average ticket price from Prague to Ostrava has fallen by 61% since the state rail firm lost its monopoly in 2011.

Platform capitalism

By nudging firms to use innovative marketing and pricing systems, competition helps boost train use. In 2007-12 passenger numbers on Britain’s East Coast main line, which runs from London to Edinburgh, grew by 15 percentage points more and fares by six percentage points less at stations with competition compared with those without, reckons AECOM, a consultancy. Between 1996 and 2016, rail passenger-kilometres grew fastest in European countries with the most liberalisation.

Nor does liberalisation in rail lead to corner-cutting on safety, as many trade unionists have argued. Between 2004 and 2015 deaths due to accidents on Britain's railways fell by 74%, compared with a 36% fall in the EU as a whole. Fear of losing out on contracts is a genuine spur to taking safety seriously.

The full benefits of competition are less likely to materialise, however, without a complete separation of track and trains. A state-owned track company that also runs trains will have a clear incentive to cheat in order to best its private train-operating rivals. In 2017 NS, the Dutch state rail firm, was fined €41m ($46m) for using information it had as a track owner to win a rail contract unfairly. Lithuanian Railways was fined €28m for removing a section of track on a cross-border link with Latvia in order to hobble a rival operator.

It is clearly possible to do liberalisation the wrong way. In Britain, where higher passenger numbers often mean sardine-like commutes, the mistake was to give rail franchises to firms which then have a near-monopoly for the duration of their contract. The vast majority of passengers have no meaningful choice between operators, meaning most have nowhere to go when service quality declines. What's more, the rail franchises are run by the Department for Transport, resulting in more day-to-day political fiddling than ever occurred under British Rail.

A better model is to be found in Sweden. There, the system is run by a quasi-autonomous government agency, which reduces political meddling. Half of the trains are run by "open access" operators that can compete against government franchisees for passengers, keeping them on their toes.

The gains to be had from competition on the railways are real. But only if governments get the implementation right.

This article appeared in the Leaders section of the print edition under the headline "Free the rails"

Gaokao gruel

The world's most important exam is flawed

China needs to find a fairer and less pressured way of selecting university students

Print edition | Leaders Jun 30th 2018

IN THE past few days nearly 10m young Chinese have received their results from the world's largest and most important academic exam, commonly known as the *gaokao*. In some places the news has been sent to them by text message—an innovation that has done nothing to compensate for the horrors of what they have endured: years of cramming at the expense of any other activity in the hope of a *gaokao* score that will qualify them for admission to a leading university. In China even more than elsewhere, achievement in education is judged not by how well you perform at university, but by which one you attend. Everything, therefore, depends on the *gaokao*.

The exam is both cherished and despised. It is praised by many as being a relatively corruption-free method of ensuring advancement for those who study hard. The nation rejoiced when the *gaokao* was restored in 1977 after the death of Mao, who had scrapped it and filled colleges with ill-educated devotees of his cult. But many people resent the huge stress it imposes on adolescents. In recent years, along with the rapid growth of China's middle class, the numbers seeking education abroad, mainly in the West, have soared. Last year more than 600,000 did so, four times as many as a decade earlier. Escaping the *gaokao* ordeal is often cited as a reason.

The *gaokao* is flawed, however, not only because so many young people's lives are so profoundly affected by the results of one exam. Both the test and the schooling that prepares students for it are unfair and ill-suited to the needs of a country that wants its workers to be more innovative. A common complaint about the *gaokao* is that it requires so much rote-learning, at least for those parts that do not involve solving mathematical puzzles and the like. That is a problem common to many exams, but the supreme importance of the *gaokao* means that schools usually focus only on cramming students for it during their three years of senior high school. Other skills that are needed for the creation of the "knowledge economy" that President Xi Jinping says he wants to build, such as teamwork and creativity, are neglected.

The government accepts that this must change. But parents complain whenever schools encourage students to do things other than learn *gaokao*-required facts. That is understandable: they want their children to get into one of China's handful of globally respected colleges. The answer lies in reforming the *gaokao* and, over time, for the government to focus more on turning China's many bad universities into better ones.

Another worry is that the supposed meritocratic virtues of the *gaokao* are not what they seem. For sure, those who get into the best universities are chosen for their scores, not their political connections. But those who have the best chance of scoring well are rich city-dwellers. Poorer people in many countries suffer disadvantages in education, but in China such problems are magnified by government spending on schools that is heavily skewed in favour of cities. Free education ends after junior high school. The crucial part that prepares students for *gaokao* can involve crippling expenses for poorer families. In big cities such as Beijing, the children of rural migrants are often barred from entry to schools as a result of the pernicious *hukou* system of household registration that gives greater benefits and privileges to long-established urban families.

There is also a problem with the exam questions themselves. Students have to tailor their answers to suit the Communist Party's views. This year candidates were required to write essays about the thoughts of Mr Xi. Arguing against them was not an option. Sun Chunlan, a deputy prime minister, recently said the *gaokao* system was "tasked with the important mission to educate and pick talent for the state". It certainly does a good job of encouraging toadyism.

One Chinese export the world can do without

The *gaokao* system badly needs reform. In the West, however, a growing number of universities are admitting Chinese students on the strength of *gaokao* scores, rather than results from internationally recognised entrance exams (see article). They should think twice. No institution that purports to uphold free thinking should endorse an exam that forces applicants to conform with political orthodoxy.

This article appeared in the Leaders section of the print edition under the headline "The gaokao grind"

On trade, surveillance technology, Xinjiang, football, Brexit
Letters to the editor

Letters

Letters to the editor

On trade, surveillance technology, Xinjiang, Ethiopia, football, Brexit

Print edition | Letters Jun 28th 2018

Letters are welcome and should be addressed to the Editor at letters@economist.com

A new trading order

A new trading order

Your recommendation of retaliatory tariffs against America is the perfect prescription for ensuring a destructive trade war (" Rules of war", June 9th). You strongly defended the status quo in global trade rules. Although America's steel and aluminium tariffs are, at best, dubious on their merits and represent a threat to the trading system, there is a reasonable chance that they could withstand a legal challenge. Unilateral retaliatory tariffs are, on the other hand, clearly prohibited under the rules of the World Trade Organisation and would never withstand legal challenges. Your support for illegal retaliation under the pretence of preserving a rule-based order is bizarre. The reality is that such retaliation is driven by local political imperatives and for preserving trade surpluses, not by a faux respect for the rules.

Anyone who believes that retaliatory tariffs have the slightest chance of stopping American policy in its tracks is living in some fantasy world. The reality is that the post-war world order that was steered by a hegemonic United States is no longer fit for purpose in a 21st-century world where trade issues are much more complex and are coalescing around three competing blocs led by America, China and the European Union. In such a world, competition is more likely than co-operation. If an all-out trade war is to be avoided, we must rethink the basis of our global trading system rather than sticking doggedly to an unsustainable status quo.

Europe and Canada should tread with caution. Should a fierce trade war break out, they stand to lose much more than anyone else and risk being squeezed between America and China. A severe transatlantic rift would also jeopardise the future of a European project that is still heavily dependent on America's security umbrella.

JOE ZAMMIT-LUCIA
Co-founder
Radix
London

Retaliation is never a good option to save a multilateral order based on facilitating trade and the most-favoured nation principle (MFN). The better option for America's trading partners would be to lower their applied tariffs unilaterally below what has been negotiated on a MFN basis, thus against all trading partners. This would strengthen the system, signal a shift in leadership from America to other WTO members and help consumers. As tariffs would be no longer the most important barrier to trade, short-term adjustment costs would be manageable to the benefit of the competitiveness of the economies in the longer run because of balancing incentives of production between imports and exports. Donald Trump's aggressive bilateralism could be sidestepped if the MFN principle re-emerged as the trade-policy yardstick of America's trading partners.

ROLF J. LANGHAMMER
Kiel Institute for the World Economy
Kiel, Germany

Unlocking criminals' phones

Unlocking criminals' phones

Your leader on technology and surveillance compares an encrypted mobile phone to a filing cabinet, stating that just "as filing cabinets can be locked, encryption should not be curtailed" (" Perfected in China, a threat in the West ", June 2nd). Yet a filing cabinet cannot be used instantaneously to organise a large-scale drug deal, procure firearms or orchestrate a murder. Moreover, assuming probable cause to believe there is evidence of an offence, the police can obtain a warrant for a filing cabinet and easily enter a place to retrieve the evidence.

As a prosecutor dealing with organised crime I have encountered many instances where the police, with more than ample grounds, have obtained warrants for mobile devices, but have been foiled by encryption. You are right that computer technology has facilitated the surveillance state in countries lacking constitutional privacy protections. But that should not mean that, when a judicial officer has issued a warrant, the mobile phones of suspected criminals or terrorists are inaccessible in an investigation.

MICHAEL BARRENGER

North Vancouver, Canada

There are indeed many advantages to using ankle bracelets to keep those accused of less serious crimes under house arrest. Unfortunately, many jurisdictions (including Ontario) stifle these technological advances by making the accused pay for their own ankle bracelet at a cost of $600 a month. If they can't afford to pay, the state throws them in jail for ten times the cost at taxpayers' expense. Artificial intelligence is one thing but we need more of the organic kind.

STEPHEN AYLWARD

Toronto

China's actions in Xinjiang

China's actions in Xinjiang

Despite what you say, the Chinese government attaches great importance to the stability and development of Xinjiang (" Apartheid with Chinese characteristics ", June 2nd). The economic, social and security measures that have been implemented in the region are based in law and aimed at ensuring stability, harmony and economic prosperity. These measures have been effective in safeguarding the safety of life and property of people from all ethnic groups in Xinjiang and enjoy extensive public support.

Xinjiang's development has been notable in recent years. Its gross economic output increased from 753bn yuan ($119bn) in 2012 to 1,092bn yuan in 2017. Disposable income per head during the same period grew by 10% on average each year. The local government has allocated 70% of the public budget to improving lives, and has successfully resolved a large number of difficult issues that matter to people's everyday lives.

Local ethnic culture and the freedom of religious belief are fully protected. Your mention of the "control" of religious belief in Xinjiang and description of "apartheid with Chinese characteristics" are totally unfounded. Xinjiang has been battling separatism, terrorism and religious extremism, the latter of which is a distortion of and disrespect for religion and undermines public security. The local government has taken measures to prevent and combat religious extremism and protect normal religious activities. These measures are lawful and have curbed the spread of extremism. They are a positive contribution to international deradicalisation and counter-terrorism efforts.

ZENG RONG

Spokesperson of the Chinese embassy

London

Reform in Ethiopia

Reform in Ethiopia

*** Given the boldness of the changes we have seen so far in Ethiopia, the political and economic reforms that Abiy Ahmed, the new prime minister, has embarked on will transform this country (" Reformer-in-chief ", June 9th). But privatisation is the wrong way to start. What Ethiopia needs is competition and openness, especially in telecoms. As the experience of**

some Latin American countries has shown, privatisation before competition (and a robust regulatory framework in place) is a recipe for monopoly and rent-seeking behaviour.

TIGLUN MANAYE MANDEFRO

Addis Ababa

Football crazy, football mad

Football crazy, football mad

Out of curiosity, I was moved to watch those World Cup moments you depicted so poignantly in " A beautiful game " (June 9th). Seeing Diego Maradona's glory and the unravelling of Zinedine Zidane as an expression of heroic genius is just as exquisite as a day at the Louvre.

KELLY MORGAN

Los Gatos, California

Tissue of lies

Tissue of lies

Brexit on a loo-roll (Cover , June 16th)? A picture is worth a thousand words, and it was not a strain to flush out your meaning.

ALEC BURNSIDE

Wezembeek-Oppem, Belgium

*** Letters appear online only**

Netflixonomics
The television will be revolutionised

The television will be revolutionised

Netflix is moving television beyond time-slots and national markets

It may make screen-based entertainment a winner-takes-most business

Print edition | Briefing Jun 30th 2018


Stephanie Scholz

IN THE heyday of the talkie, Louis B. Mayer, head of the biggest studio, was Hollywood's lion king. In the 1980s, with the studio system on the wane, "superagent" Michael Ovitz was often described as the most powerful man in town. Now the honour falls to someone who used to run a video store in Phoenix, Arizona.

Ted Sarandos joined Netflix, a DVD-rental firm, in 2000. In 2011, when Netflix was first moving into streaming video, he bought "House of Cards", a television drama starring Kevin Spacey and Robin Wright and produced by, among others, the film director David Fincher, for $100m. The nine-figure statement of intent was widely derided as profligate, showing that Netflix might be a source of cash but scarcely offered serious competition. A mail-order video store could hardly be expected to take on networks and studios which took decades to build and were notoriously difficult to run.

Instead it has become an industry in and of itself. Mr Sarandos, Netflix's chief content officer, and his colleagues will spend $12bn-13bn this year—more than any studio spends on films, or any television company lays out on stuff that isn't sport. Their viewers will get 82 feature films in a year when Warner Brothers, the Hollywood studio with the biggest slate, will send cinemas only 23. (Disney, the most profitable studio, is putting out just ten.) Netflix is producing or procuring 700 new or exclusively licensed television shows, including more than 100 scripted dramas and comedies, dozens of documentaries and children's shows, stand-up comedy specials and unscripted reality and talk shows. And its ambitions go far beyond Hollywood. It is currently making programmes in 21 countries, including Brazil, Germany, India and South Korea.

Mr Sarandos buys quality as well as quantity with his billions. From Mr Fincher on, he has hired directors both famous and interesting, including Spike Lee, the Wachowski siblings and the Coen brothers. He is building a bench of established television hit-makers: Ryan Murphy (creator of "Glee" and "American Horror Story") and Shonda Rhimes (creator of "Grey's Anatomy" and "How to Get Away with Murder") both recently signed up. David Letterman has come out of retirement to do a talk show. Barack and Michelle Obama have signed a production deal, too. The money helps: Mr Murphy's deal is reportedly worth $300m; Mr Letterman is said to be getting $2m a show. But so does the company's growing reputation. "They want to be on the channel that they watch," Mr Sarandos says.

In the first quarter of this year Netflix added 7.4m net new subscribers worldwide. That gave it a total of 125m, 57m of them in America. With an average subscription of $10 a month, those customers represent some $14bn in annual revenue which the company will plough straight back into programming, marketing and technology—along with billions more that it will borrow. Goldman Sachs, a bank, thinks that it could be spending an annual $22.5bn on content by 2022. That would put it within spitting distance of the total currently spent on entertainment by all America's networks and cable companies.

Enticed by such prospects, the market values Netflix at $170bn, which is more than Disney. Some analysts see this as outlandish for a company which is spending far more than it collects in revenues, which has $8.5bn in debt and hasn't even had that many hit programmes. Its competitors, though, see it as a call to arms. It was the prospect of building a similarly integrated producer, purchaser and distributor of content that led AT&T, a wireless giant, to buy Time Warner for $109bn. If Comcast, America's largest broadband provider, buys most of 21st Century Fox from the Murdoch family for more than $70bn, it will be to a similar end—and if the Fox goes to the mouse house instead, it will be because Disney knows that to compete with the new giant it needs to own even more content than it already does.

Amazon, Apple, Facebook, YouTube and Instagram are all developing programming efforts of their own. "The first thought on everyone's mind is how do we compete with Netflix?" says Chris Silbermann, managing director of ICM, an agency that represents a number of people who have signed huge deals with Netflix, including Ms Rhimes and the comedians Jerry Seinfeld (another $100m deal) and Chris Rock (two comedy specials for a reported $40m). "Apple wouldn't even be thinking about this business if it wasn't for Netflix," says Mr Silbermann. "Neither would Fox be in play." Rupert Murdoch chose to break up Fox to get out of Netflix's way. Jeff Bewkes, the former chief of Time Warner, acknowledged after agreeing to sell his company that Netflix's direct connection to the consumer gave it a huge advantage.

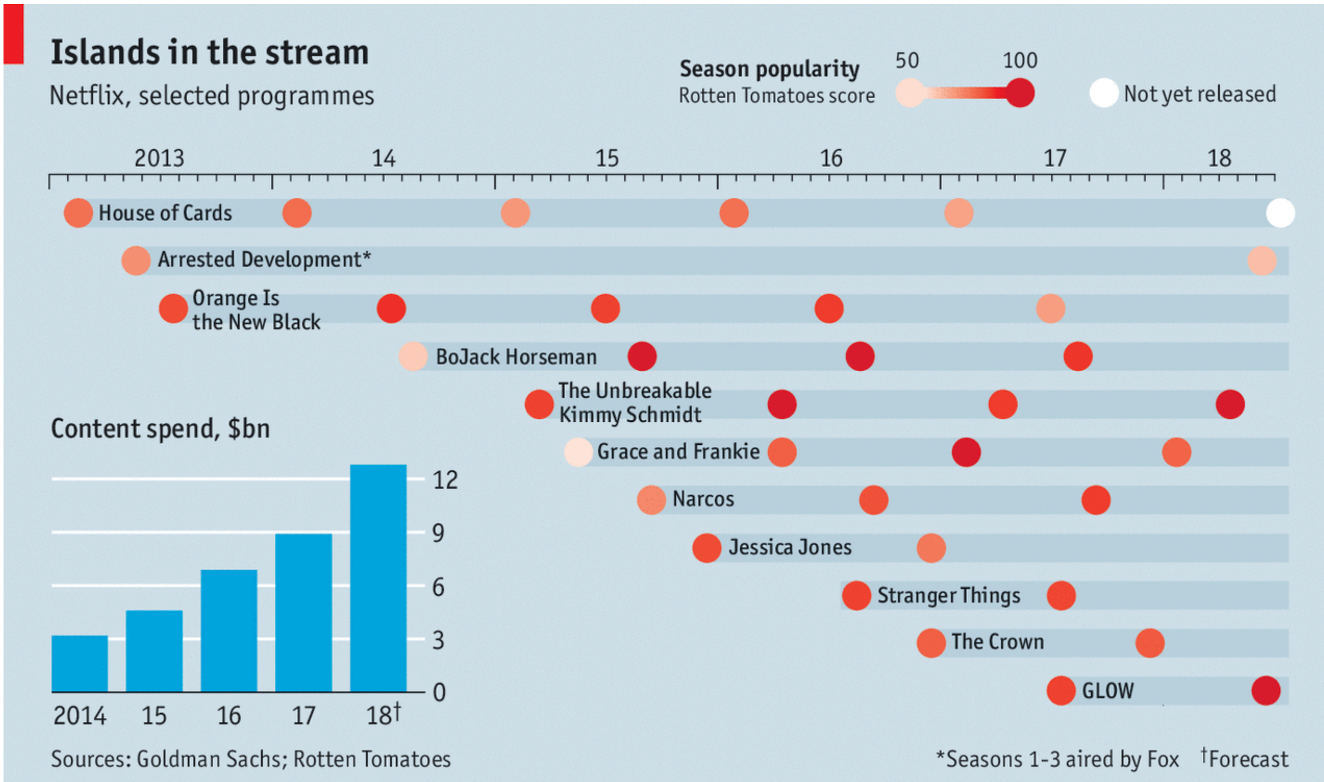
Nobody can watch everything...

For Mr Bewkes that was quite a reversal. At the beginning of this decade he poured scorn on the idea that Netflix could be a competitor, comparing it to the "Albanian army". "He did not believe that the internet was going to be material for a very long time," Reed Hastings, co-founder and chief executive of the Albanian forces, recently told *The Economist* in Amsterdam, Netflix's European headquarters.

What Mr Bewkes missed, but Mr Hastings did not, was not just that the wireless internet would become a reliable conduit for high-quality video, but that in doing so it would change the rules of television. There would be no time slots and no channels, no waiting until next week to see whom the Lannisters betray or the Good Wife sleeps with. Given big enough pipes—in September 2017 Netflix streams were taking up 20% of the world's downstream bandwidth, according to Sandvine, a network-equipment firm—a company would be able to offer every one of its customers something he wanted to watch, whenever and wherever he wanted to watch it, for as long as he wanted to.

That company would need two things: a big, broad, frequently renewed range of programming; and an understanding of its consumers deep enough to serve up to each of them the morsels most likely to appeal. This mixture of breadth and depth, of content and distribution, of the global and the personal, is the heart of Netflixonomics—the science of getting people to subscribe to television on the internet.

One of the reasons that Netflix is spending in such haste is that Netflixonomics is a winner-takes-most proposition. People can only spend so much time being entertained by television. If you can provide them with entertainment they genuinely enjoy for that length of time, they will have little reason to pay anyone else for further screen-based entertainment—though they may splash out more for sport, and put up with adverts for news, real or fake. Being big early thus constitutes a first-mover advantage. And the dash towards size has the helpful side-effect of driving up rivals' production costs at the same time as it eats into their revenues. Netflix is "intentionally trying to destroy us, the existing ecosystem," says one Hollywood executive.



Economist.com

Todd Juenger of Sanford Bernstein, a research firm, says Netflix could have 300m subscribers by 2026, with revenues per subscriber of $15 a month; that suggests $24bn in earnings before interest, taxes, depreciation and amortisation and an enterprise value of at least $300bn, Mr Juenger argues. With investors expecting further growth on top of that, its market value would be a lot higher.

One far-reaching effect of Netflixonomics is that it has changed the calculus of whether a show or film is worth making. The company has identified some 2,000 "taste clusters" by watching its watchers. Analysis of how well a programme will reach, draw and retain customers in specific clusters lets Netflix calculate what sort of acquisition costs can be justified for it. It can thus target quite precise niches, rather than the broad demographic groups broadcast television depends on. Decisions about what projects to pursue, and whether to make them, are up to the executives in Hollywood; Mr Sarandos has 20 people working for him who have the coveted power to "green light" a project. But the boffins at headquarters in Los Gatos help set the budgets.

Once a show is ready for delivery, it is up to executives in Los Gatos like Todd Yellin, vice-president of product, to work out how to get it to the appropriate users and check that they are, in the corny parlance of the company, "delighted" by it. Netflix customers will scroll through 40 or 50 titles on their individualised homescreen, he says, before they choose a title. The choice can come down to details like the poster art, which Netflix tweaks algorithmically according to the aspects of a film or show that would appeal most to a given user.

The combination of personalisation and reach makes the Netflix homescreen the most powerful promotional tool in entertainment, according to Matthew Ball, a digital-media analyst. It lets the company get better results for a lesser-quality show than its peers can by showing it only to those who will like it. Most readers of *The Economist* will not have heard of "The Kissing Booth", a romantic high-school comedy released in May. Critics hated it. But it has been seen by more than 20m households; millions of teenagers targeted by algorithms seem smitten by its leads, Jacob Elordi and Joey King.

Its quantitative understanding, and personalised marketing, of niche projects has seen Netflix revive cancelled shows with loyal fan bases, such as "Gilmore Girls", and take up shows others turned down, such as "The Unbreakable Kimmy Schmidt". It has got Emmy nominations for the A-list cast of a show about a pair of elderly women, jilted by their gay husbands, making sex toys ("Grace and Frankie"). Documentaries like "Wild Wild Country" became hot not just by word of mouth, but by being pushed on the homescreen, poster by individualised poster.

...but everybody can watch something

Netflix can take risks on such projects because failure costs it less than it does others. It does not shepherd users towards shows their co-clusterers have hated, so few come to distrust the brand because of seeing things they really do not like. Stinkers do not impose the opportunity costs of a poor performer in prime-time; no other shows have to be cancelled because the network could not programme Wednesday nights. The stuff for which there is no market just disappears.

Cheap, personalised, advertising-free, binge-released video is widely seen as having hastened a decline in audiences for broadcast television, thus doing a great deal of damage to television advertising. It has also led millions of American households to dispense with pay-TV. Americans aged 12-24 are watching less than half as much pay-TV as in 2010, according to Nielsen data; those aged 25-34 are watching 40% less. Networks devoted to scripted entertainment or children's programming, as opposed to news and sports, have been hardest hit.

To stay in the game, cable networks and other streaming services have commissioned hundreds of hours of high-quality scripted programming, providing an unprecedented glut of good television drama. This has in turn been bad for cinemas. Ticket sales in America and Canada declined by more than 20% between 2002 and 2017—and by 30% on a per head basis. American studios are now either in the blockbuster business—the five Disney films released so far this year have made over $4bn worldwide—or devoted to low-budget offerings best enjoyed with a crowd, like horror.

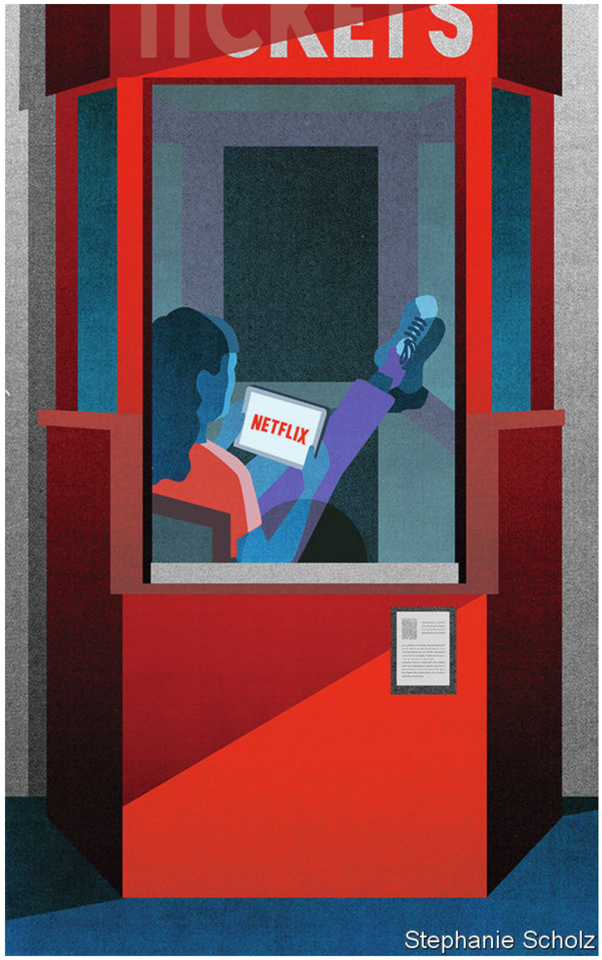
Netflixonomics is also changing the way shows make money. Netflix usually buys up exclusive worldwide rights to the shows it makes and acquires, paying a mark-up over production costs. Creators forgo lucrative licensing of their shows to secondary markets because, in Netflixonomics, there are no secondary markets. That produces handsome upfront deals, but offers much less to the producers if they make something that outperforms expectations. And the bigger Netflix's share of the market, the less generous its upfront deals may need to be.

Feel what the community feels

So producers are delighted to see competitors trying to emulate Netflix's model of integrated production and distribution. Under AT&T, its new owner, HBO is expected to accelerate its move away from its premium-cable base towards direct-to-consumer streaming. It is investing more in shows developed outside America, too, and unwinding partnerships with foreign distributors so that it can stream its own wares worldwide. It will spend over $2.5bn on content this year—as will Hulu, a US-only streaming service co-owned by four studios and best known for its drama "The Handmaid's Tale". Apple has hired Hollywood executives to build out a television offering to which it has committed at least $1bn so far. YouTube—which is more watched than Netflix, but accounts for less of the internet's bandwidth because of its lower definition—also has a subscription service alongside its much larger free-to-view business. Disney is pulling its films off Netflix and launching its own streaming service next year, hoping that its roster of Pixar, Marvel and "Star Wars" movies, not to mention copious princesses, gives it a must-have edge.

Amazon seems perhaps the best placed to compete globally. Its video service is already available pretty much everywhere Netflix is. Amazon Studios will spend more than $4bn this year on content. The company's boss, Jeff Bezos, has said he wants Amazon to have hits as big and buzzy as HBO's "Game of Thrones". To that end the company paid $250m for the rights to make a "Lord of the Rings" TV show. But for Amazon, video will always be part of a bigger strategy. For Netflix it is everything.

Netflix's investments beyond America give it an edge over all its competitors that goes beyond sheer size. It has started turning non-English-language shows into hits: "Money Heist", a Spanish crime-caper series, and "Dark", a piece of German science fiction about missing children, have both been watched by millions in the US, Mexico and Brazil. Nine out of ten people who watched "Dark" were from outside Germany. Upcoming releases include "Sacred Games", Netflix's first series in Hindi, and "Protector", a Turkish superhero story. This summer "Jinn", a supernatural teen drama in Arabic, will begin shooting in Amman and Petra. These shows will be dubbed into a range of other languages, as Netflix's English-language shows are—and that range will include English. Americans are not accustomed to dubbing (outside of 1970s Bruce Lee films). But those watching "Dark" and "3%", a dystopian Brazilian thriller, seemed to prefer it to subtitles.



By offering shows more out-of-the-ordinary and expensive than companies looking just at local markets can normally afford, these shows are meant to make Netflix an enticing premium product. They also allow it to sniff out the best writers and directors. In June Baran bo Odar and Jantje Friese, the creators of “Dark”, signed up to make more shows for Netflix.

The company’s growth in international subscribers—up 48% in 2016 and 42% in 2017—suggests the strategy is working. Goldman Sachs, which is at the bullish end of Netflix assessments, finds that subscriber growth correlates with the rate at which newcontent is added. But Netflix faces several potential challenges. Its easy-sign-up subscription model is also easy to cancel. Netflix does not discuss its churn rate, but MoffettNathanson, a research firm, estimates it to be about 3.5% a month. That is much higher than pay-TV (around 2%) and wireless providers (closer to 1%). A second problem is its thirst for bandwidth. In markets that lack net-neutrality protections (such as America), dominant internet providers might decide to give their own streaming services precedence over Netflix. Aware of such risks, the company is increasingly persuading internet and pay-TV distributors like Comcast, T-Mobile and Sky to bundle its service with theirs, an about-face for some of these incumbents.

There are other ways to stumble. Entertainment companies are exposed to public concerns about behaviour at the top. Netflix dropped Mr Spacey from “House of Cards” after allegations of sexual misconduct and recently got rid of a senior executive over his use of a racial slur; there is no way to insure against future scandals. And if the economy were to turn, reducing both consumers’ appetite for paid entertainment and investors’ appetite for junk bonds, a company which is valued entirely on the basis of putative profits after 2022 would be badly hit. Such a setback would slow Netflix’s growth—and give deep-pocketed competitors like Amazon or Apple time to eat into its leads in inventory, tied-up talent and personalisation.

Some think that, even without such a setback, Netflix’s prospects are being exaggerated. In April MoffettNathanson declared that it could not justify Netflix’s share price “under any scenario”. It did not advise selling the stock, though, noting that investors believed in the Netflix story. Shares have risen by 38% since then, as Netflix reported one of its strongest-ever quarters of subscriber growth.

Sitting in Amsterdam, Mr Hastings appears unconcerned about competition. He argues there is room both for competitors to succeed and for Netflix to continue winning more screen time. He is instead looking towards the challenges of success—those that will arise when Netflix becomes a large presence in societies around the world. “What happened when Televisa used to be like 80% of the Mexican television market, what was it like then? What was their relationship with government, with the society?” Mr Hastings asks. Or Globo, a Brazilian media powerhouse. “How did they get along with their societies when they’re so strong? You have to be gentle obviously as you get that big. How did they pull that off?”

The world’s first global television giant may yet get to find out.

Clarification (July 25th, 2018): *The original version of this article suggested that Netflix has never made a profit. It has in the past, and still does on paper. The wording has been changed to clarify that Netflix currently spends more than it collects in revenues.*

This article appeared in the Briefing section of the print edition under the headline "The television will be revolutionised"

The Supreme Court
Right of way

Right of way

Justice Kennedy is retiring. What happens now?

The deeply conservative 2017-18 term is just a taste of what the Supreme Court could become

Print edition | United States Jun 30th 2018


Getty Images

LAST June, progressives breathed a sigh of relief when Anthony Kennedy (pictured) stuck around to serve a 30th term on the Supreme Court. But a year later, with Justice Kennedy announcing he is ending his tenure on July 31st 2018 and handing another high-court vacancy to President Donald Trump, the left is gasping for air. Abortion, environmental protections, gay and lesbian rights, racial equality and voting rights are all newly vulnerable.

As the court's median justice for more than a decade, the 81-year-old Reagan appointee has sided with the liberals in certain key cases. He stood up for abortion rights and protected affirmative action at universities. He helped to save the anti-discrimination protections at the heart of the Fair Housing Act in 2015. Most famously, he wrote four gay-rights rulings, culminating in a 2015 decision opening marriage laws to gays and lesbians. Yet Justice Kennedy closed his third decade on the court in a decidedly rightward pose. This term the court issued 63 rulings, 18 of which were decided 5-4. Of those, only four rather piddling victories went the liberals' way. And Justice Kennedy did not swing towards them in any of the tight decisions.

That should not come as a huge surprise, says Leah Litman, a law professor at the University of California at Irvine and former Kennedy clerk. Her old boss "has always been on the right", she says. "The left just eked out a few wins along the way". But liberals had high hopes that Justice Kennedy would see the law their way in three of the year's most contentious cases.

The first disappointment for liberals came in *Masterpiece Cakeshop v Colorado Civil Rights Commission*, the tiff over whether Jack Phillips, a Christian baker, had the right to refuse to bake a cake celebrating the nuptials of two men. Justice Kennedy's empathy for the baker won the day in *Masterpiece*. A civil-rights commissioner had spoken disrespectfully of Mr Phillips's faith, Justice Kennedy wrote for a 7-2 majority, unconstitutionally impinging on his religious liberty.

Another case involving hostility towards religion—the wrangle over the third iteration of Mr Trump's ban on travellers from certain Muslim countries—seemed different in the outgoing justice's eyes. In *Trump v Hawaii*, Justice Kennedy voted to uphold Mr Trump's proclamation despite presidential comments suggesting that "Islam hates us" and that Muslim terrorists should be shot with bullets dipped in pig's blood. The Supreme Court's job, Chief Justice John Roberts wrote for the five conservatives, is not to "denounce" presidential statements but to respect "the authority of the presidency itself".

The decision drew a furious dissent from Justice Sonia Sotomayor. It inspired an almost plaintive concurring opinion from Justice Kennedy. While many statements and actions of government officials "are not subject to judicial scrutiny or intervention", he wrote, "that does not mean those officials are free to disregard the constitution and the rights it proclaims and protects". It is an "urgent necessity", Justice Kennedy continued, "that officials adhere to these constitutional guarantees and mandates in all their actions, even in the sphere of foreign affairs". With some evident trepidation about the hands in which he was about to place the responsibility of filling his seat, Justice Kennedy added this mild parting shot: "An anxious world must know that our government remains committed always to the liberties the constitution seeks to preserve and protect, so that freedom extends outward, and lasts."

Anthony and Caesar

A pair of partisan gerrymandering cases teed up just for Justice Kennedy might have reformed voting laws had the man Rick Hasen, an election-law expert, calls "Justice Hamlet" been a little less mercurial. In 2004, Justice Kennedy lamented election "rigging" but couldn't find a workable standard for policing the practice of lawmakers drawing electoral districts to rope out the competition; 14 years later, he had little interest in new theories on how to define egregious gerrymandering in *Gill v Whitford* and *Benisek v Lamone*. What could have been a coalition to rein in partisan redistricting became unanimous decisions to put off the matter for another day. With Justice Kennedy on his way out, and the conservative justices unworried by gerrymandering, that day may never come.

Justice Kennedy and the court's four liberal justices may not have waltzed together in a 5-4 decision this term, but Chief Justice Roberts did, twice, and the soon-to-be-second-newest justice, Neil Gorsuch, took one turn across the aisle. The chief departed from his conservative colleagues in *Carpenter v United States*, a Fourth Amendment ruling requiring authorities to get a search warrant before tracking individuals' location through data beamed to cell-phone towers. Justice Gorsuch, who owes his seat to Senate Republicans' refusal to consider Merrick Garland, Barack Obama's choice for the court, joined the liberals in *Sessions v Dimaya* to curtail the government's power to deport people convicted of certain crimes.

Yet in his first full term on the bench, says Elizabeth Wydra of the Constitutional Accountability Centre, Justice Gorsuch has largely lived up to his billing as a "legal vending machine" for the right. He helped form three 5-4 majorities in June to curb voting rights. In *NIFLA* v Becerra, he joined another 5-4, striking down a Californian regulation designed to inform pregnant women about where to go to get an abortion. After remaining silent in the oral argument for *Janus v AFSCME,* an important case on public-sector unions, Justice Gorsuch signed onto Justice Samuel Alito's 5-4 opinion overturning a 41-year-old precedent that let unions charge non-members an "agency fee" for collective bargaining. In Justice Elena Kagan's dissenting opinion, *Janus* is the result of the conservative justices' "six-year crusade" to cripple the struggling labour movement.

The term ending this week offers a "preview of what the Supreme Court would be like if Chief Justice Roberts were to become the swing vote", Ms Litman says—in other words, a court with a Gorsuch-like jurist in Justice Kennedy's old seat. Except in some criminal cases, "progressives will lose, and they will lose a lot". As bad a beating as the left took this year, losses may be starker and deeper in years to come. And areas of the law in which Justice Kennedy has stemmed the right-wing tide could soon be the wild west. No outright challenges to *Roe v Wade,* the 1973 decision establishing a right to abortion choice, have reached the court in recent years. That may change with Justice Kennedy's departure, as cases involving state abortion bans as early as six weeks' gestation—like a fetal-heartbeat bill Iowa legislators passed this spring—could make their way to the justices' inbox. Challenges to gay rights—even *Obergefell v Hodges,* the same-sex marriage ruling—may get a fresh hearing, too.

This is an extraordinary moment in the life of America's constitution which, though written down, has meanings that the justices find to be ever-changing. The president holds the keys to an appointment that could lock down a conservative majority for decades, while he is under investigation by a special counsel. The Senate must carefully scrutinise whoever Mr Trump taps to replace Justice Kennedy.

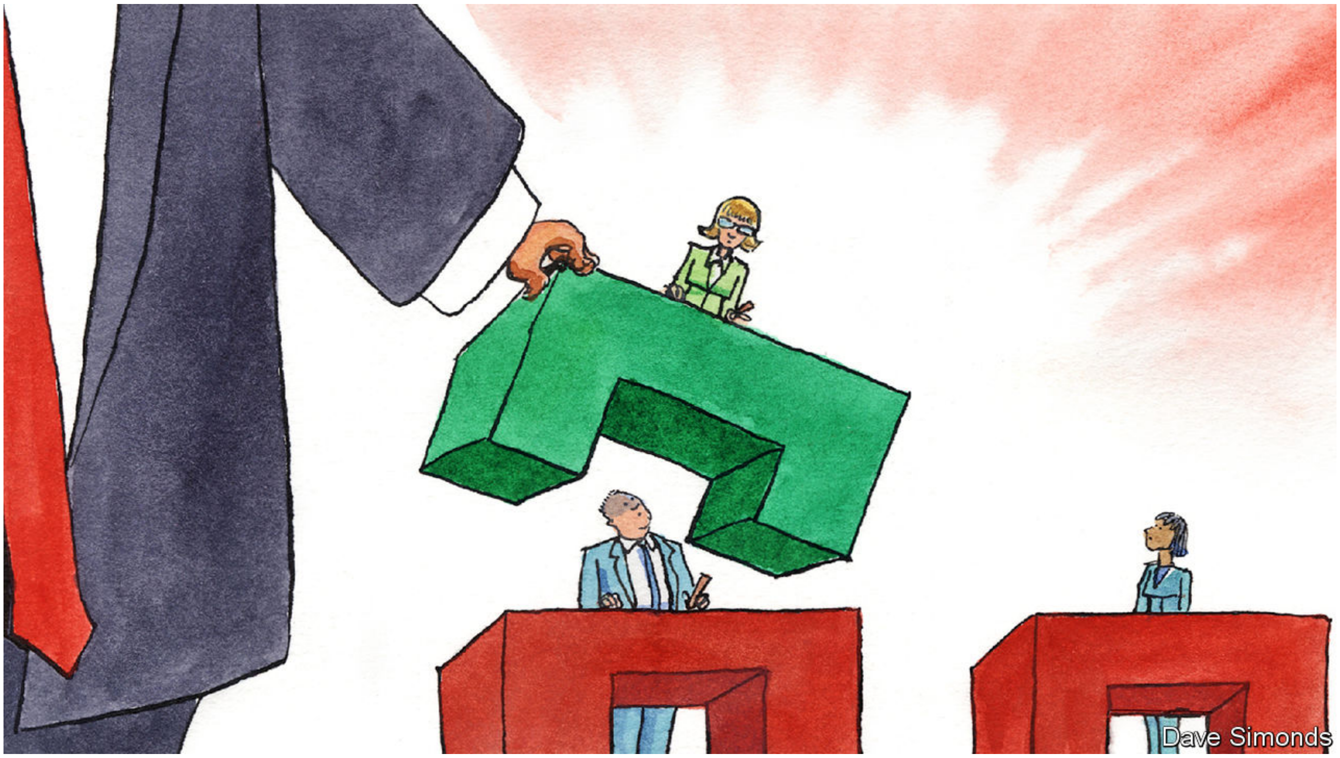
This article appeared in the United States section of the print edition under the headline "Right of way"

Shuffle up

Remaking the federal government

The Trump administration has a plan for a big institutional reorganisation. What could go wrong?

Print edition | United States Jun 28th 2018



ONE would be forgiven for thinking that the Department of Agriculture primarily concerns itself with farms. In fact, over 70% of its money goes to nutrition-assistance programmes like food stamps, a welfare scheme providing 42m Americans with pre-loaded debit cards to buy groceries. It also spends \$6bn on forestry—a job one might think better suited to the Department of the Interior—and \$1.4bn on rural rental subsidies, duplicating the work of the Department of Housing and Urban Development. It also inspects food, with jurisdiction over pepperoni pizzas but not cheese; liquid eggs but not whole; open-faced meat sandwiches, but not closed-face.

Given these haphazard groupings, a government reshuffle might not seem a bad idea. On June 21st the White House released a plan, after several months of tightly guarded work by the Office of Management and Budget, to do just that. Some of its technocratic recommendations are well-considered, like charging a single agency with food-safety inspection or privatising the postal service. The headline proposals—to merge the education and labour departments and consolidate welfare programmes into a rechristened Department of Health and Public Welfare—are not. "This is a plan without an obvious purpose," says Paul Light, a professor at New York University who has studied the federal bureaucracy for more than 30 years. "It seems a lot like moving boxes for the sake of moving boxes," he adds.

Take the proposal to create a new Department of Education and the Workforce. The reason for this, according to the White House, is to avoid duplicating efforts on workforce-development programmes. Yet that is a relatively small portion of what each department does: the Education Department provides university loans and grants and enforces civil-rights laws in schools. The Labour Department crunches economic statistics, administers unemployment insurance and workers' compensations schemes, and investigates unsafe working conditions. Because the laws mandating those programmes are not changing, the amalgamated department would still have to fulfil those functions. "It seems like the goal is just to reduce the number of departments by one," says Demetra Nightingale of the Urban Institute. "Just jamming them into the same department is not going to improve efficiency."

Unlike the proposed education-labour marriage, there is a clearer rationale for reorganising welfare. Benefit schemes like Medicaid, food stamps, cash welfare, rental subsidies and earned-income tax credits are administered by different cabinet departments. They all have differing eligibility cutoffs, which can interact with one another and could cause poor Americans to face marginal-tax rates of 95% in some cases. Harmonising these programmes—some of which were devised more than a half-century ago—would be a worthy goal.

But that is not the aim of the Trump administration's reforms. The first, explicitly mentioned in the proposal, is to impose work requirements on all these programmes. The administration has aggressively pursued this policy by encouraging Republican-led states to institute work requirements for the first time on Medicaid, health insurance for the very poor. It also favours work requirements for food stamp. Both measures would shrink the number of people eligible. This speaks to the second, unstated, motive—to cut the size of these programmes. In its budget proposals, the Trump administration has pitched hefty cuts to housing subsidies and Medicaid. It has tried to cut the food stamps programme by 22% and suggested replacing the cash transfers with a "Blue Apron"-style boxed delivery service.

The Trump administration takes this reshuffle to be a simple exercise in removing tentacles from the bureaucratic leviathan. But such reorganisation requires the consent of Congress, which is typically tough to secure but nearly impossible several months before an election. Congressmen who have become grand through committee memberships will be loathe to give up their power. Actual streamlining would require changes to decades-old legislation, which is even more difficult to achieve. All of this requires a dollop of policy nous and understanding of the Capitol Hill lore. In other words, it probably won't happen.

This article appeared in the United States section of the print edition under the headline "Shuffle up"

Brutalism

Can school design help prevent school shootings?

Recent mass-murders have given rise to a new architectural school

Print edition | United States Jun 28th 2018

"IT IS called a lockdown drill," says Max, a nine-year-old pupil at a private school on the North side. "One teacher pretends to be an intruder. We have to hide in classroom, turn over our desks and hide behind them. We have to lock the door, barricade all the heavy stuff in front of the door and take a book or a ruler so we can throw it at the intruder if he comes in. We have to be super quiet. If someone says it is safe to come out we cannot do that, because it could be the intruder. We have to wait for the principal to come knocking on the door to tell us it is safe to come out."

This year has already seen the murder in February of 17 at Florida's Marjory Stoneman Douglas High School, which had regularly held lockdown drills for years. On May 18th a student at Santa Fe High School in Texas killed ten of his peers and wounded 13 with a shotgun and a revolver. In the days after the Santa Fe massacre Dan Patrick, the Republican lieutenant-governor of Texas, made two suggestions. One was to echo President Donald Trump's call to arm teachers with concealed weapons (many teachers abhor the idea of being armed). The other way he suggested to make schools safer was by reducing the number of entrances to one or two (how children might flee such a place was not apparently a major consideration).

Mr Patrick's proposal might sound bananas, but some new schools are in fact designed with the prevention of mass shootings in mind. The average American school is 44 years old, built long before school shootings were a concern. Jim French, an architect with DLR Group who specialises in building schools, says his trade can help, but only up to a point. "The worst thing we can do is to turn our schools into prisons," he says. (DLR also designs prisons.)

The recently redesigned school in Sandy Hook, site of the deadliest school shooting to date, has a new, light-filled building shaped like an "E" to maximise the number of evacuation routes. It has three entrances that can be reached from parking areas by foot bridges, allowing staff to monitor comings and goings. The school's ground floor is elevated, making it difficult to see inside classrooms from the outside. Each classroom has locks and security doors as well as windows with impact-resistant glass.

Sandy Hook is a special case, as the brief for its architects was to build something that could withstand another horrific attack on the school. Connecticut provided a grant of $50m for the latest in anti-terror measures designed to "delay, detect and deter" an armed intruder. A similar case is a Jewish school in Las Vegas, sponsored by Sheldon Adelson, a casino magnate, and built by Mr French's firm. The task was to make it terrorist-proof, says Mr French, who cannot disclose more details.

The National Rifle Association (NRA) produced a 225-page report in 2013, in the wake of the Sandy Hook shootings, which it dusted off after the massacre at Marjory Stoneman Douglas High. The NRA suggests limiting entry to a single point; building a prison-style fence (the report shows a photo of a deficient fence juxtaposed with one that would have made GDR border guards proud); banning greenery outside schools because intruders may hide in trees and bushes or use them to cut through the aforementioned fence; and making do without windows, or only small ones with ballistic protective glass. Front offices should be protected with two sets of automatically locking doors to create an "entrapment area".

At the end of the report is a draft for a law to allow schools to arm their teachers. Sadly it lacks any estimate of the cost of "hardening" America's more than 100,000 schools, but it would probably run into hundreds of millions of dollars for each state, at a time when schools in Detroit have leaking roofs and schools in Baltimore are unable to heat their classrooms in winter. According to estimates by the American Society of Civil Engineers, America's school infrastructure is underfunded by about $38 billion a year.

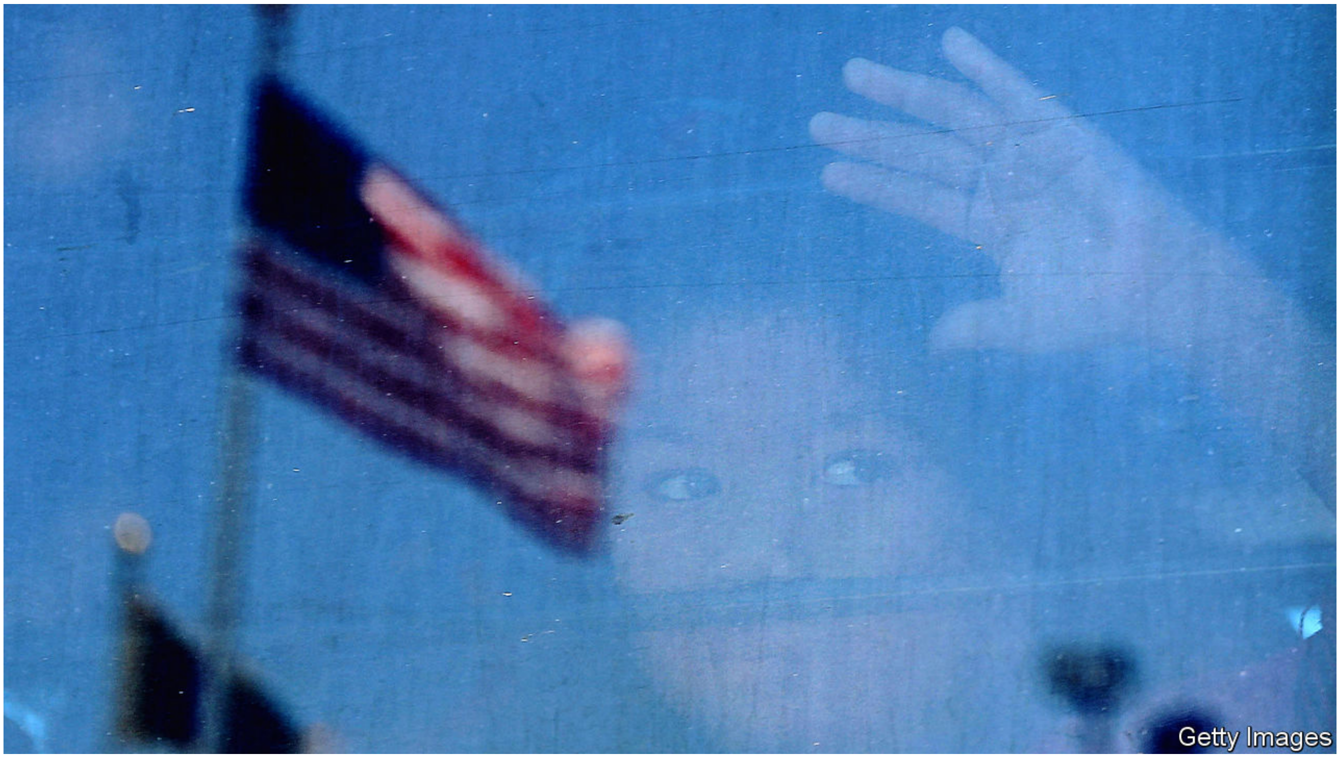
This article appeared in the United States section of the print edition under the headline "Brutalism"

When good men do nothing

America’s immigration system is broken

This the result of decades of dodging hard decisions

Print edition | United States Jun 30th 2018



LESS than ten miles separate two rooms in McAllen, a modest, low-slung city on the Mexican border. The first is Ursula, an immense warehouse which squats behind a high brick wall, almost invisible from the street. It is the largest immigration-processing facility in America, and holds children taken from their parents under a policy that President Donald Trump’s administration initiated in April and then ordered stopped last week. Inside the facility, children lie on mats beneath bright lights that never go out, wrapped in Mylar blankets, caged behind chain-link fences.

Nine miles north, clad in a modest stucco, is the second building—the Catholic Charities Humanitarian Respite Centre, where migrants who have been released from detention can rest, shower, change clothes and have a hot meal before their onward journey further into the United States. Most have travelled for weeks from Central America, though some journeys are more arduous than others. Brenda Riojas, a cheery and tireless spokeswoman for the Diocese of Brownsville, which runs the centre, says that a woman arrived recently with a ten-day-old baby: she had given birth in the Mexican mountains during her northward trek. On one recent Wednesday afternoon, young men huddled around a television watching the World Cup, while parents tended to their children and filled out forms. A smattering of Texans arrived with boxes of clothes to donate.

If you are a liberal, you probably view what is happening in the first building as unbearably cruel and what is happening in the second as decent and just. If you support the president, you probably view what is happening in the first building as regrettable but necessary and what is happening in the second as naive and perhaps dangerous: after all, if you treat them kindly then more will come.

More than any other single issue, attitudes towards immigration define Mr Trump’s base. Some immigration restrictionists use clinical language, arguing that reducing levels of immigration would be better for American workers and immigrants already in America. Not Mr Trump. To him, Mexico is sending “rapists” and members of MS-13, a hyper-violent gang, across the border. (Stephanie Leutert, who directs the Mexico Security Initiative at the University of Texas, points out that his own government’s data show that MS-13, members made up 0.075% of the total number of migrants crossing the southern border in the 2017 fiscal year.) The president discusses immigration in the vocabulary of a pest-controller. Everything suggests that he intends to make the “infestation” of immigrants a central issue in the mid-terms, despite the revulsion at his policy of sundering families to deter future migrants.

The traverse in reverse

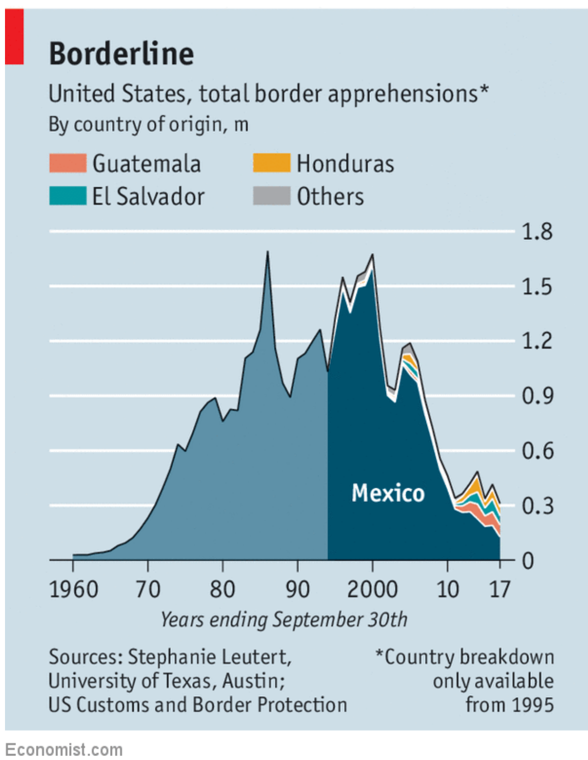
America's immigration system offers something to displease everyone. People such as Jeff Sessions and Stephen Miller—the attorney-general and his funereal former aide, now a policy adviser to Mr Trump—think it far too permissive. Employers find it rigid and unresponsive to their needs. The asylum process is, in the words of a case-manager in Houston, "set up so people fail." This is what happens when decades of congressional kludges are piled on top of each other.

The Supreme Court did not deem regulating immigration to be a federal responsibility until 1875. That year, awash in concerns over the prevalence of Chinese workers, especially in California, Congress passed the Page Act, which banned virtually all Asian women from entering America. The Chinese Exclusion Act, which barred Chinese immigrants, followed seven years later. In 1882 Congress passed the Immigration Act, which put the treasury secretary in charge of immigration control, levied a tax on every non-citizen who arrived at American ports and barred all foreign convicts—"except those convicted of political offences". Naturalisation and citizenship were tightly restricted, often racially; but immigration, by and large, was not. Of the immigrants who arrived in the great wave between 1890 and 1930, more than one-quarter were never naturalised.

By 1910 13.5m immigrants lived in America (nearly 15% of the total population), resulting in a restrictionist backlash. The Immigration Act of 1917 prohibited immigration from Asia, with an exception for the Philippines, which America then ruled, and Japan. It also required that immigrants pass a literacy test, and barred "undesirables", a category that included "idiots, imbeciles, epileptics...polygamists and anarchists".

America did not set permanent numerical limits on immigration until the Johnson-Reed Act of 1924, which used a quota system to govern entry. This system provided visas to up to 2% of the number of foreign-born people of each nationality present at the time of the 1890 census. In effect, this restricted immigration to Europeans, and was especially favourable to Britons and other western Europeans and unfavourable to southern and eastern Europeans, who at the time the act was signed comprised the bulk of newly arrived immigrants.

Congress abolished the national-origins quota system in 1965, with legislation that favoured skilled workers and immediate family members of immigrants already in America. In the civil-rights era, having an immigration system that used national origins—in effect, race—as its determining factor was seen as discriminatory.



Ted Kennedy, who championed the bill after the assassination of his brother John, promised that "it will not upset the ethnic mix of our society." Yet the new measure made America vastly more diverse. Muzaffar Chishti, an attorney with the Migration Policy Institute, a think-tank, argues that the bill's backers assumed it would increase immigration from southern Europe—particularly Greeks, Portuguese and Italians. In fact, immigration soared from newly independent countries in Asia, and nearby ones in Latin America.

In 1960, America was home to 9.7m immigrants, 75% of whom were European. By 2016 that number had soared to 43.7m—13.5% of the total population—89% of whom were non-European. In recent years immigrant populations have spread beyond the traditional hubs, such as California and New York. In 1990, for instance, 173,100 immigrants lived in Georgia, accounting for 3% of its population; by 2016 those numbers had risen to 1m and 10%. Many of the states that saw the steepest rises in share of immigrant population voted for Mr Trump in 2016.

A repeated failure to legislate, which gave the impression that immigration was out of control, helped pave the way for his victory. The last significant legislative attempt to address illegal immigration came in 1986. The Immigration Reform and Control Act legalised 2.7m undocumented immigrants, tightened border security and punished employers who knowingly hired undocumented workers. It was supposed to halt illegal immigration. However, thanks to ineffective employer sanctions ("knowingly" hides many sins), continued demand for labour and the simple fact of a long, unsecurable border with what was then a poor and dysfunctional country, the opposite happened. That gave hardliners a potent answer to every subsequent fix: offer undocumented immigrants "amnesty"—a crude term for a tortuous and selectively granted path out of the shadows—and more will come.

Three similar subsequent attempts failed, for similar reasons. The Comprehensive Immigration Reform Act of 2006 included provisions to enhance border security, establish a new temporary guest-worker programme and provide a path to citizenship for some undocumented immigrants. Co-sponsored by five Republicans and one Democrat, it passed the Senate, but the House preferred a different bill—one that enhanced border security, limited judicial review for undocumented immigrants, increased criminal penalties related to border crossings, strengthened employer verification requirements and neither expanded guest-worker visas nor legalised any undocumented immigrants.

Congress, with the support of George W. Bush, then the (Republican) president, made another run at immigration reform in 2007, introducing a bill that would have enhanced border security, provided a path to citizenship for some undocumented immigrants and ended family reunification, leaving only the spouse and children of a green-card holder eligible to legally immigrate to America. It failed in the Senate.

A similar measure in 2013 passed the Senate, with the votes of all 52 Democratic senators, but died in the Republican-dominated House, which appeared interested only in enforcement. Shortly before that bill died, President Barack Obama enacted Deferred Action for Childhood Arrivals (DACA) with an executive order. This allowed undocumented immigrants brought to America as children who enrolled in or graduated from school, university or the armed forces and had no criminal record temporary, renewable legal working papers. Mr Trump tried to end DACA last September.

If there were ever a perfect moment for immigration reform, this is it. The border now has more fencing and police than it did in 2000, when crossings were at their peak. Then virtually all migrants were Mexicans. Today, with Mexico's economy and birth rate both stable, nearly half come from Honduras, Guatemala and El Salvador—weak states wracked by gang violence—enduring a costly and treacherous journey north. As of early 2017, America was experiencing a net outflow of undocumented Mexican migrants and a decline in its Mexican-born population.

Yet Mr Trump appears uninterested, preferring the political gains he makes from fulminating over the system's failings than doing the hard work of trying to fix them. Mr Trump has remade his party, whose presidential candidates once competed to outdo each other in compassion towards poor migrants, in his own image. Republicans have no compelling electoral interest in fixing the nation's immigration laws. More than 60% of those who voted for the president in 2016 thought it was either "very" or "fairly" important to be born in America in order to be considered truly American. Good luck persuading them to grant legal status to 11m people born outside the land of the free.

The political backlash against immigration is therefore peaking at a time when the number of migrants is receding. In the 2017 fiscal year, apprehensions along the southern border hit their lowest level since 1971.

As the tide goes out, a big population of undocumented migrants is being left behind. After peaking in 2007 at around 12.2m people, the undocumented population in 2016 stood at 11.3m, comprising just over 25% of all the country's immigrants, and about 5% of the American workforce.

A large number of current border-crossers claim asylum in America: about 300,000 central Americans did so in 2017. Many northern European countries put asylum-seekers in reception centres, where they are fed, sheltered and are free to come and go. Life outside these centres would be harder for migrants there than it is inside. America's newest facility for migrant children, by contrast, is a tent city in Tornillo, Texas, where temperatures can exceed 40°c (104°f).

Once someone seeking asylum is released in Texas, they can melt away into the grey labour market or move to a sanctuary city (where local police limit co-operation with federal immigration authorities) and, many fear, skip their hearings at an immigration court. The federal government has tried to prevent this by turning police officers across the country into immigration officials, under a programme called Secure Communities, but it does not have the power to compel local police chiefs to comply. The Trump administration's policy of ending what it calls "catch and release" will probably require a vast increase in the number of border-crossers who are locked up in facilities that look an awful lot like prisons.

There are alternatives to this. A pilot programme that the Department of Homeland Security (DHS) ran from 2015 until the administration killed it in 2017 placed immigrant families under the supervision of social workers, who helped them find housing and navigate the immigration bureaucracy. More than 90% of participants reportedly showed up to all of their check-ins and court hearings. Another programme used ankle monitors to keep tabs on immigrants; this too showed a high compliance rate. Both methods are cheaper than detention centres; neither fits the mood of today's Republican Party.

Duck and cover

Over the past weeks Republicans in the House have engaged in a pointless political theatre, voting on a pair of immigration bills: a hardline measure and a "compromise" bill (the compromise being between moderate and hardline Republicans, not between the two parties) backed by Paul Ryan, the outgoing House speaker. Both failed, though more Republicans backed the hardline bill than Mr Ryan's. The Senate would not have taken up whatever measure passed, and Mr Trump has repeatedly undermined negotiations by, for instance, tweeting that Republicans should "stop wasting their time" on immigration bills before the mid-terms.

And in a narrow sense, he may be right. His approval ratings among Republicans remain high, while Democrats have struggled to muster an effective response beyond (admittedly justified) outrage at Mr Trump's actions. That approach failed in 2016 and it risks failing again in 2018 and beyond. Part of that is circumstance. Enforcement is an essential part of any comprehensive fix to immigration, but as one Democratic strategist says, "in moments when right-wing populism is ascendant, nuance gets lost...it's hard to talk about toughness when children are being ripped from their parents' arms." Some on the party's left flank talk as though any enforcement of immigration law is inherently racist. It is not, of course, but two years of Mr Trump's racially tinged comments about immigrants have left nerves raw.

The window for comprehensive immigration reform may now have shut. One thing that slowed the flow of refugees from Central America over the past few years was co-operation from Mexico. But Mr Trump has torpedoed America's relationship with its southern neighbour, which now appears poised to elect its own populist firebrand, Andrés Manuel López Obrador. Perhaps the two will get along famously. Or perhaps Mr López Obrador will decide he sees no reason to make things easier for a president who treats his country and countrymen disrespectfully, and allow Central Americans free passage to Mexico's northern border.

The current administration's policy is built on a fantasy: that 11m people can be deported against their will. It is that, not the people arriving at the southern border, that makes America's immigration system unique in the rich world. People will die of old age in America before they ever acquire the legal right to live in America. This is an extraordinary failure to govern.

This article appeared in the United States section of the print edition under the headline "When good men do nothing"

Lexington

The Indian-American underachiever

America needs to invest more in its partnership with the world's biggest democracy

Print edition | United States Jun 28th 2018

INDIAN-AMERICANS are enjoying a dazzling coming-out party. For years they were stereotyped as convenience-store owners and overachieving children. Yet in American politics, media, entertainment and the arts, they are suddenly everywhere.

Until 2016 only four Indian-Americans had served in Congress. At least 30 stood for this year's congressional primaries. The first Indian-American of cabinet rank, Nikki Haley, President Donald Trump's envoy to the UN, is a favourite to succeed him. Journalists such as Fareed Zakaria and Manu Raju stand ready to interview her, and comics such as Aziz Ansari and Hasan Minhaj to mock her. Not coincidentally, given the big role Indian-Americans played in bringing their old and new worlds together, US-Indian relations are also making history. James Mattis and Mike Pompeo, the secretaries of defence and state, are due to meet their Indian counterparts for an inaugural "two-plus-two" ministerial summit. The format, previously afforded only to America's closest allies, is intended to highlight the recent coming together of the world's biggest democracies. Indeed, India has perhaps fared better under Mr Trump than any other major power.

The president has lambasted allies, clients and adversaries. But India is none of those. As a US "strategic partner"—a status as close to being a US ally as its tradition of non-alignment permits—it has been less bruised. Though America runs a large trade deficit with India, it is a twelfth the size of America's deficit with China, so less irksome to Mr Trump. Some of his attacks, especially on Pakistan, are welcome to India. The president, who has investments in India and sees its prime minister, Narendra Modi, as a kindred nationalist, may even have a soft spot for the country. Mr Modi's visit to Washington last year was strikingly convivial.

The improvement in US-Indian relations, which began under Bill Clinton and accelerated under his two immediate successors, is based on shared values, interests and fear. Both countries are liberal democracies. India's economic priority, to develop its vast domestic market, is an opportunity for US firms. Above all, both are nervous about China—which India, soon the most populous country, alone in Asia can balance. That apprehension persuaded George W. Bush to give India's nuclear-weapons programme a carve-out from the usual counter-proliferation strictures. Yet far from offering ground for complacency, the US-India partnership would be insufficient even if it were as strong as it seems. And in reality it is weaker. The last-minute postponement of plans for the vaunted two-plus-two summit seems indicative of that.

Of the two tracks the relationship is built on, defence and security, and trade and investment, the first is in better shape. Little over a decade ago India, which has long bought most of its arms from Russia, tended to view America's military reach with suspicion. It is now a cornerstone of America's quadrilateral partnership for the Pacific, alongside Australia and Japan. It conducts more military exercises with America than with any other country. And America's Pacific strategy has been renamed the Indo-Pacific strategy in its honour. Even so, the bilateral partnership does not seem commensurate with the potential Chinese threat.

The two countries do not even agree on what the Indo-Pacific describes. America views it as everything east of India, but India is more concerned with its west, including Pakistan, Iran and the Arabian Gulf, where it has energy and security interests that often run contrary to American policy. More worryingly, India is starting to doubt the superpower's seriousness. America has mulled over committing only $1.5bn to its Indo-Pacific strategy. It is scarcely present in trouble-spots such as Bangladesh and Myanmar where India is already fighting a shadow war for influence with China. "People are too polite to say, 'Where's the US?' But a lot of people think that," says Shivshankar Menon, a former Indian national security adviser. This retrenchment predates Mr Trump. Yet he has exacerbated it, by gutting the State Department and through his preference for dealmaking over strategy. That trait has caused much bigger friction in US-Indian economic ties.

Mr Trump's call for "reciprocal" tariffs with India, where income per head is an eighth of the American average, has caused disbelief in Delhi. It has also collided with Mr Modi's protectionism. India has recently raised tariffs several times, a rare occurence since it began liberalising its economy three decades ago. Mr Trump's threatened crackdown on immigration, which India considers a branch of trade, has gone down even worse. Last year saw a 28% fall in the number of Indians obtaining US student visas. America has also made it harder to secure the H-1B visa that is popular with highly skilled Indians. They are starting to look elsewhere for opportunity, says the vice-chancellor of a leading Indian university. Being familiar with dysfunctional democracy, they are not counting on a post-Trump revival, either. If these tensions are less than America's trade spat with China, it is in part because India's and America's economies are less connected, which suggests a degree of fragility. And while it is said the row has not touched the Indo-US strategic relationship, that may be untrue. Mr Modi made unexpectedly vigorous outreaches to China and Russia this year, on visits to both.

Don't have a cow

The wasted opportunity this represents extends to Indian-Americans. Replete with sparky, second-generation Americans, who have deeper ties to India than their children will have, they are at a point of maximum potential influence. Ms Haley was in Delhi this week to publicise the ministerial summit; Mr Minhaj has performed his stand-up routine in Mumbai. Such connectors are among the reasons US-India relations, a quiet triumph of American diplomacy, should be developing apace. Instead they are dawdling, which is bad for both countries. China's assertiveness suggests America needs India even more than Mr Bush imagined. Yet it is in danger of getting less from India than he hoped.

This article appeared in the United States section of the print edition under the headline "An underachieving relationship"

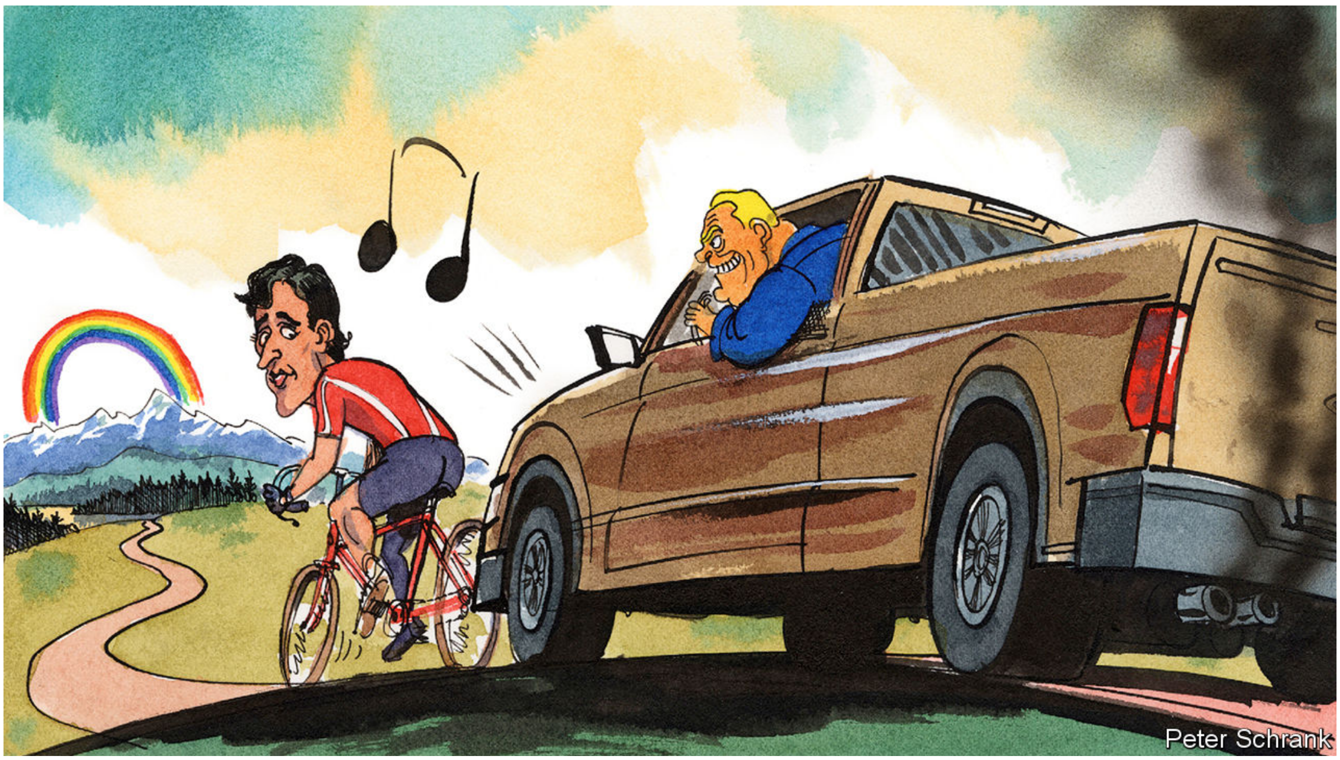
Canada's climate policy
Trudeau and the Toronto troublemaker

Trudeau and the Toronto troublemaker

Doug Ford disrupts Canada's climate policy

Ontario's new premier threatens a fragile national bargain

Print edition | The Americas Jun 28th 2018



DOUG FORD, who is due to be sworn in as Ontario's premier on June 29th, will not dally. The "very first item" on his agenda will be to "cancel the Liberal cap-and-trade carbon tax", he promised after leading his Progressive Conservative Party to victory in an election on June 7th. Motorists are being "gouged at the pumps", he claimed. "The cap-and-trade, the carbon tax, they're gone, they're done," Mr Ford vowed in the Trumpian cadences that he has brought to Canadian politics.

This will please suburban drivers, who provided many of the votes that gave the Progressive Conservatives 76 of the 124 seats in Ontario's legislature, ending nearly 15 years of Liberal rule. Ontario's cap-and-trade scheme, which it shares with the province of Quebec and the American state of California, added about 3% to the price of petrol last year. Canada's Liberal prime minister, Justin Trudeau, will be less pleased. Mr Ford is taking direct aim at his plan to set a national price on carbon in order to meet Canada's commitment to reduce emissions of greenhouse gases under the Paris climate agreement.

That will be the first and perhaps the most vicious of several fights between Mr Trudeau and the premier of Canada's most populous province. Other sources of friction are likely to be corporate taxes, business regulation and social spending. On these issues Mr Ford's small-government, low-tax instincts clash with Mr Trudeau's advocacy of a more muscular government. Such disputes may dominate the country's politics until the national election scheduled for 2019, when Mr Trudeau's main foe will be the leader of the federal Conservative Party, Andrew Scheer.

The coming clash with Ontario is unusual. Ontarians' sense of provincial identity is among the weakest in Canada, according to a survey in 2013 by Statistics Canada, a government agency (only Manitobans were less provincially patriotic). With 14m of Canada's 37m people, Ontario tends to see its interests as identical with those of the country. Toronto, Ontario's capital and Canada's main financial centre, normally gets along with Ottawa, the national capital, about 350km (220 miles) away. Mr Trudeau's inner circle includes several people who began their careers in Ontario's Liberal administrations.

Mr Ford, who will replace Kathleen Wynne, Canada's first openly lesbian premier, will disrupt that harmony. He is a populist with Canadian characteristics. The brother of Rob Ford, Toronto's late mayor, who was most famous for being caught on video smoking crack, the premier-designate rails against Canada's elites and dislikes the mainstream media. He has already ordered government departments to cancel subscriptions to print newspapers and magazines. He talks of rebuilding Ontario's reduced manufacturing sector. Unlike many of Mr Trump's supporters, he is neither anti-immigrant nor anti-trade.

Mr Ford campaigned on a few eye-catching promises, including sacking the head of Ontario Hydro, a utility, to cut electricity prices; ending the provincial monopoly on the sale of wine and beer, which would cut the price of some beer to "a buck"; and repealing a sex-education curriculum that irked Conservatives by, among other things, recognising six genders (including two-spirited, transgender, transsexual and intersex).

The withdrawal from the cap-and-trade scheme, under which businesses that want to emit carbon over a certain limit must buy permits from the government or from firms whose emissions fall below it, will begin Mr Ford's tenure on a combative note. Ontario's participation in the joint system with Quebec and California was to have been its contribution to Mr Trudeau's climate policy. This sets a national price for carbon, which started at C$10 ($7.50) a tonne on January 1st and will rise progressively to C$50 a tonne by 2022. That is supposed to ensure that Canada will meet its promise to cut greenhouse-gas emissions by 30% from the level in 2005 by 2030.

Rebel, rebel

Provinces can control emissions in their own way. British Columbia has already introduced a carbon tax (now C$35 a tonne). Alberta charges C$30 a tonne. Ontario's cap-and-trade scheme would have qualified. If a province fails to tax or cap emissions, the federal government will impose a tax, and send the money back to the province where it was levied. Mr Ford says he will use "all available resources" to oppose that power. He plans to join Saskatchewan's challenge to the national carbon price in Saskatchewan's Court of Appeal. California and Quebec have already shut their shared market to trades in Ontario. Mr Ford promises that Ontario will do its bit to reduce Canada's emissions but has not said how.

The rebels could upset a bargain that Mr Trudeau struck to reconcile his green goals with the ambitions of energy-producing provinces like Alberta and Newfoundland & Labrador. It was already under strain. Alberta agreed to the national carbon price only after the federal government said it would back an expansion of the Trans Mountain pipeline, which carries the province's crude to a port near Vancouver in British Columbia, from where it is exported. In May last year British Columbia elected a left-wing government committed to blocking construction. Kinder Morgan, an American company that planned to build and operate the pipeline, pulled out. It sold the project to the federal government. British Columbia is challenging in court the federal government's right to override the province's environmental laws.

Even if the court allows the Trans Mountain project to go ahead, Alberta may drop out of Mr Trudeau's climate plan. The oil-producing province is due to hold an election next year. Jason Kenney, the leader of the United Conservative Party, which is ahead in the polls, wants to levy the province's carbon tax only on large polluters. Mr Trudeau will find it difficult to impose a carbon price on two recalcitrant provinces. His chance of meeting Canada's emission-reduction target, already small under current policies, could disappear.

Mr Ford is causing trouble for himself as well as Mr Trudeau. His poleaxing of cap and trade leaves firms in Ontario with C$2.8bn of pollution permits that may now be worthless. He can expect lawsuits. Ontario will lose C$2bn a year, 1.3% of revenue, from the sale of permits, at least until it gets the money from a tax imposed by the central government. With Canada's second-highest public debt per person and a growing budget deficit, Ontario can ill afford that. Donald Trump's trade war will cause more pain for the province, which produces 70% of the country's steel.

The need to fight American protectionism is one of the few issues on which Mr Ford and Mr Trudeau agree. As next year's federal elections approach, there will probably be "a lot of federal-provincial waves", says Peter Donolo of Hill & Knowlton Strategies, a public-relations consultancy. They may get rougher after Quebec's election, scheduled for this October. The centre-right Coalition for Quebec's Future is expected to unseat the province's Liberals.

This will make Mr Trudeau's job of managing Canada harder, but it might make his re-election easier. Provincial rebellion gives the prime minister a chance to portray himself as a defender of national unity, a long-time Liberal strength. He may end up being grateful to the troublemaker in Toronto.

This article appeared in the The Americas section of the print edition under the headline "Trudeau and the Toronto troublemaker"

Not going gently

Cuba's funerals: cheap and especially uncheerful

Bidding a loved one farewell is more painful than it should be in the socialist state

Print edition | The Americas Jun 28th 2018

CUBANS had nine days to mourn Fidel Castro, who died in November 2016. After a state funeral, soldiers escorted his ashes from Havana to Santiago, retracing the route taken by the revolutionary army he led. When someone less important dies, undertakers have to hurry up. Just two funeral homes have refrigeration, and that is reserved for foreigners and VIPs. Because of Cuba's searing heat, most folk have to be in the ground within 24 hours. Cuba's nine crematoriums handle a tenth of the 99,000 people who die each year.

Funerals, like education and health care, are free in the socialist state (though cremation costs money). Cubans pay in other ways. Coffins, made by the state-owned forestry company, are flimsy. Pallbearers must carry them with extreme care, lest they fall apart. Government workers get better coffins; children are buried in white ones. With flowers in short supply, mourners make wreaths from twigs and leaves. That horrifies Miguel Pons, one of two deacons at the chapel at the Colón cemetery in Havana. "I would not allow someone in my family to put those 'flowers' [on my coffin], God forbid. Never," he says.

Demand for funereal paraphernalia is rising because of Cuba's ageing population. Of the 24 cemeteries in Havana, all of which were nationalised in 1963, 20 have run out of space. At the Colón graveyard the mausoleums of important pre-revolutionary families near the gates give way at the periphery to unmarked stone slabs. These cover vaults containing up to 24 coffins in which the newly deceased rest for two years. After that relatives must collect the bones to make room for fresh corpses. Many deposit the remains in a nearby ossuary, which houses 80,000 skeletons.

The cash-strapped government promised in January to expand some cemeteries and build more crematoriums. Miguel Díaz-Canel, Cuba's president since April, is eager to boost his popularity. Treating the dead better would create goodwill among the living.

This article appeared in the The Americas section of the print edition under the headline "Not going gently"

Growing pains

Tough times for Embrapa, a jewel of Brazilian innovation

Its technology helped make the country an agricultural superpower. Now it must reinvent itself

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AN HOUR'S drive from Brasília, Brazil's capital, humped zebu cattle take refuge from the heat of the *cerrado* (tropical savannah) under neat rows of eucalyptus trees. The grove and the cattle belong to the *cerrados* branch of the Brazilian Agricultural Research Corporation (Embrapa) in Planaltina. Their purpose is to help researchers test how best to alternate crops and livestock in order to turn degraded pastures into productive fields. Besides providing shade (and, eventually, timber), the trees put nutrients into the soil and offset the effects of methane, a greenhouse gas belched by the ruminants. In 2005 such "integrated systems" covered less than 2m hectares (5m acres). Today they occupy 15m hectares, 5% of Brazil's farmland.

Maurício Lopes, Embrapa's chief since 2012, believes such know-how will be as valuable as the technology Embrapa invented in the 1970s and 1980s, which helped make Brazil an agricultural superpower. Founded in 1973, Embrapa made the *cerrado*'s acidic soils hospitable to maize, soyabean and cattle, and created types of crops and livestock that could thrive in such climes. Once an importer of staples, Brazil now exports $96bn-worth of produce a year. Embrapa reckons that in 2017 it returned 36bn reais ($9bn) to the economy through higher productivity and lower costs, more than ten times its budget.

Yet it faces unprecedented criticism. Farmers say that its research is irrelevant to them. An Embrapa employees group says it is too fragmented, and worries that the cash-strapped federal government will cut its budget. Environmentalists grouse that its research enables farmers to push into the Amazon rainforest.

Mr Lopes thinks these criticisms are unfair. Agricultural production has continued to rise over the past decade even as deforestation declined, he says (though the deforestation rate has gone up again in two of the past three years). Farmers may buy fewer sacks of seeds emblazoned with Embrapa's logo, but its know-how is part of almost everything they do, Mr Lopes insists.

Yet the critics have a point. Nearly 90% of Embrapa's economic contribution comes from work it did in its first 25 years. Seven areas of research, including rice and beans, provided no return last year.

That is partly because Embrapa faces more competition. Laws enacted in the 1990s, including one that improved protection of intellectual property, brought foreign agri-businesses such as Bayer and Syngenta. They have more money than Embrapa to spend on such new areas as biotechnology. Embrapa should focus on areas they avoid, such as integration experiments like the one in Planaltina, says Blairo Maggi, the agriculture minister. Mr Lopes says he wants Embrapa to work in areas the big companies neglect. Embrapa has to be “more diversified, not less” to support production of foodstuffs, from açaí, a tropical fruit, to tenderloin and fish.

But the problem is not just that Embrapa is still paying attention to the wrong things. Salaries consume 70% of the budget; spending on lab equipment, field trials and the like accounts for just 2%. Its labs do almost no work on gene-mapping.

This year Mr Lopes merged 17 administrative units into six and closed four of Embrapa’s 46 regional branches. A plan for a bigger overhaul, leaked to the press, calls for a more centralised institution. Critics say it does not deal with Embrapa’s main shortcomings. Mr Lopes is rumoured to be on his way out. His successor will need to pull Embrapa into the 21st century, perhaps with the help of a few head of zebu.

This article appeared in the The Americas section of the print edition under the headline ”Growing pains”

Bello

The price of electing saviours in Latin America

Countries suffer the consequences for decades

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ON JULY 1st Mexicans are set to elect Andrés Manuel López Obrador as their next president. Since they twice rejected him, in 2006 and 2012, by coalescing behind the opponent with the best chance of winning, that requires some explanation. Mr López Obrador is of the left, but he is a would-be saviour rather than a social democrat. Instead of a better future, he promises to return Mexico to a better, safer past of strong, paternalist government. He invites voters to trust in him, rather than in democratic institutions. As the last two contests showed, in normal circumstances he would not win.

But Mexicans are not looking for politics as usual. Under the outgoing president, Enrique Peña Nieto, they suffer rampant crime and corruption, and mediocre economic growth. Each day 85 people are murdered. Voters "want blood", in the form of systematic punishment of corrupt politicians, according to Jorge Castañeda, who is advising Ricardo Anaya, Mr López Obrador's closest rival. Many think that centrist politicians have failed them and that things cannot get any worse.

Brazilians are in a similar mood ahead of their election in October. Most are not yet focused on it, but one of the front-runners in the opinion polls is Jair Bolsonaro, a crudely authoritarian, misogynistic and homophobic former army officer. Brazil, unlike Mexico, has a run-off vote; Mr Bolsonaro may well figure in it but is unlikely to win it. Nevertheless, that he has a chance is a sign of desperate times. Brazil is only slowly emerging from a two-year slump, public services are stretched and public security has broken down in many parts of the country. A recent poll found that 62% of respondents aged 16-24 would leave if they could.

It is not the first time Latin Americans have turned, in an emergency, to would-be saviours. In 1990 voters in Peru found one in Alberto Fujimori, an obscure former university rector. A political outsider, he was elected when his country faced a terrorist insurgency, hyperinflation and economic meltdown. When he sent tanks to shut down the congress two years later, polite society was appalled but ordinary Peruvians cheered. Mr Fujimori won a second term in 1995.

Or take Venezuela. The collapse of the oil price in the 1980s and 1990s weakened a stable social democracy, hollowing out its welfare state, causing bank failures and exposing corruption. In anger, Venezuelans turned to an army lieutenant-colonel, Hugo Chávez, who had led a failed coup that crystallised popular disillusion with the established order. Chávez was elected in 1998. As the oil price surged again, he became a popular hero. But long before his death in 2013 he had propelled his country towards its current feral state of corruption, brutality and penury.

Colombians in 2002 were suffering the tightening grip of the FARC guerrillas over much of the national territory as well as a recession and a banking crisis. They normally chose moderate presidents, but they elected Álvaro Uribe, an intense conservative who promised to be "the first soldier of Colombia" and to double the size of the security forces.

Mr Fujimori and Mr Uribe saved their countries, but in both cases there was a dark side. Mr Fujimori governed as a dictator and resorted to systematic bribery. Mr Uribe appointed officials with links to right-wing death squads.

When voters choose candidates they normally wouldn't, the negative consequences are long-lasting. In Venezuela, Colombia and Peru these include political polarisation. Peru is trapped in a battle between Mr Fujimori's supporters and anti-*fujimorismo*. Mr Uribe's candidate, Iván Duque, won Colombia's presidential election on June 17th, but he inherits a country that is "divided, polarised and facing off against itself in a seemingly irreconcilable fashion", as Juan Gabriel Vásquez, a Colombian writer, put it in *El País*, a Spanish newspaper.

The saviours never give up. Mr Fujimori's daughter runs what is still Peru's biggest political party. Not for Mr Uribe, who was re-elected to the senate, the example set by Mariano Rajoy, Spain's former prime minister. After parliament ousted Mr Rajoy this month he returned to his job of 37 years ago as a property registrar in a quiet coastal town.

This lasting polarisation is what may face Mexico and Brazil. It is the high price that countries pay when the political establishment fails in its most basic functions of protecting the lives of citizens or preventing the pilfering of public money. When that happens, it is hardly surprising that voters look elsewhere. But the problem with saviours is that, sooner or later, countries have to try to save themselves from them.

This article appeared in the The Americas section of the print edition under the headline "At breaking point"

Politics in the Philippines
Rebel with a cause

Rebel with a cause

The president of the Philippines wants to change the constitution

Critics suspect he has an ulterior motive

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NEVER one to stick to a script, Rodrigo Duterte regales audiences with tirades, profanities and anecdotes. A politician forged in town-hall frays, he knows how to capture hearts and headlines. This week he decided to take on God, calling him "stupid" and a "son of a whore", to predictable uproar. Mr Duterte clearly relishes the spotlight—which has caused some Filipinos to wonder whether he will ever willingly leave it.

Mr Duterte became president two years ago, after winning 39% of the vote in a four-way race. He immediately implemented a series of controversial policies, most notably a bloody anti-drugs campaign. He also imposed martial law on the troubled southern island of Mindanao, a bold step given that a former president, Ferdinand Marcos, used martial law to turn himself into a dictator. Indeed, he allowed Marcos's embalmed body, previously preserved in a ghoulish shrine in his home province, to be interred in Heroes' Cemetery in Manila, the capital.

Most voters are untroubled: seven in ten Filipinos approve of Mr Duterte's performance. Members of Congress, intimidated by his popularity, fawn in the face of his rough talk and tough policies. Both the Senate and House of Representatives voted overwhelmingly to extend the state of emergency. "There's something about him which draws you in," trills Alan Cayetano, the foreign secretary.

Those who are not drawn in find themselves in trouble. In May the chief justice of the Supreme Court lost her job, ostensibly for failing to file some asset-disclosure forms, after she upbraided the president for infringing on the independence of the judiciary in his anti-drugs campaign. Senator Leila de Lima, who has accused Mr Duterte of orchestrating extra-judicial killings in Davao, a city he ran for more than two decades, has found herself in prison for 16 months. She was accused, improbably enough, of peddling drugs with a former lover. "De Lima is not only screwing her driver; she is also screwing the nation," Mr Duterte thundered before her arrest. In both cases, Mr Duterte denies involvement, but did nothing to restrain the allies and underlings who pursued the two women.

For my next trick

The president's next initiative, and perhaps his most controversial, is an attempt to change the constitution, both to introduce federalism and to change the central government from a purely presidential system to a presidential-parliamentary model, similar to that of France. In his big set-piece address to Congress in late July he is expected to urge the lawmakers to declare themselves a constituent assembly with the authority to redraft the constitution. They may cravenly oblige.

Mr Duterte argues that federalism would transfer power and money away from Manila to other, poorer parts of the country. It would also bolster peace deals with armed groups in Mindanao which have sought greater autonomy. The country's 18 regions could become states. The main argument in favour of a parliamentary model, meanwhile, is to foster party politics, rather than the patronage system that currently applies. Lowlier politicians, whatever their notional partisan affiliation, typically rush to ally themselves with the president of the day; there are no mass, ideologically based parties. Even so, the president struggles to push legislation through Congress, not because of determined opposition but because it is a hopeless morass. The need for a government to command a durable majority in parliament, it is hoped, would change all that.

In theory, all these changes would reduce Mr Duterte's authority, both over the regions and over Congress. But critics worry that amid all the upheaval Congress could easily be induced to slip in a provision scrapping the rule limiting presidents to a single six-year term. And there might not be term limits for the new office of prime minister, giving Mr Duterte two potential future perches. Even elections could be affected if the period of transition to a federal system is deemed an excuse to delay them (the next ones, for half the Senate and the entire House, are due in May).

Mr Duterte has repeatedly said that, should he attempt to stay in office beyond the six-year limit, someone should shoot him. But sceptics note that he showed no compunction about gaming term-limits when mayor of Davao. The first time he reached the maximum of three consecutive terms, he spent three years as the local congressman before running for mayor again. The second time, he served as vice-mayor while his daughter was mayor. In all, he held the job for 23 years. He has made no secret of his admiration for Marcos, who was president for 21 years. And as long as Mr Duterte is president, he is immune from prosecution—something activists say he deserves for his conduct of the war on drugs.

There are plenty of obstacles to "cha-cha" or "charter change", as Filipinos call the process of amending the constitution. Three administrations have previously tried to alter it and failed. Mr Duterte commands Congress like a strongman, thanks to his approval ratings. But his predecessor, Benigno "Noynoy" Aquino, also enjoyed sky-high ratings for a couple of years before voters lost their enthusiasm. Accelerating inflation is a potential vulnerability. In May prices rose 4.6% year-on-year, the highest rate in five years.

Even if the fawning Congress produces a new constitution, a plebiscite will be needed to approve it. Mr Duterte is probably the most powerful president since Marcos's dictatorship was overthrown in 1986. The centrepiece of the constitution approved in the wake of the "People Power Revolution", ironically enough, was the six-year limit on the presidency.

Correction (July 7, 2018): *A previous version of this article stated that Leila de Lima has been convicted of drug offences. She is actually still awaiting trial. Sorry.*

This article appeared in the Asia section of the print edition under the headline "Rebel with a cause"

Procreative struggle

South Korea’s fertility rate is the lowest in the world

The population is ageing even faster than in Japan

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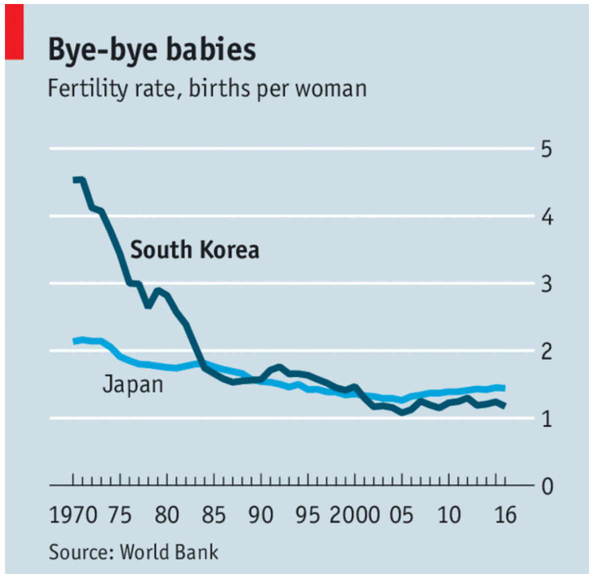
IN THE cherry-tree-studded hills a couple of hours south-east of Seoul sits a bungalow-style school building made of dark bricks. Its wooden floors are lovingly polished. The brightly coloured walls are lined with books and toys. The only thing it is missing is children. Forty years ago, in the region’s heyday as a mining area, Bobal primary school had more than 300 pupils. Today it has three: one girl and two boys, looking forlorn among the empty chairs. The school is only being kept open because a handful of villagers mounted a campaign to resist the education ministry’s plan to merge it with the one in the next town, ten kilometres away. “Keeping the school is important for the community,” says Kim Jung-hoon, whose daughter is one of the three pupils left. “How will we ever persuade families to stay if there is nowhere to go for their children?”

But the education ministry’s plan, which Mr Kim and his fellow activists see as an assault on their village, is a symptom of a wider trend. Since the early 1980s more than 3,500 schools have closed; 28 are set to do so this year. The reason is that South Korea is running out of children. The fertility rate, which suggests how many children the average woman will have over her lifetime, stood at just 1.05 last year, the lowest in the world and far below the “replacement rate” of about 2.1 needed to sustain a population. In Seoul, the capital, the rate is just 0.84. Though South Koreans are not as old as their Japanese neighbours, they are ageing faster.

Most demographers blame a growing mismatch between traditional mores and the changing preferences of younger people. Women are now more educated than men and are keen to succeed in the workforce, despite entrenched sexism and a huge gender pay gap (the average South Korean woman makes just 63% of the salary of the average man). The long hours and rigid hierarchies in South Korean businesses mean that family life is not easy to fit in, even for men. But women face more hurdles. “Many companies still see women as temporary workers who will drop out as soon as they have children,” says Lee Do-hoon of Yonsei University. “So women worry that they won’t be able to return to their jobs after starting a family.”

Affording a family is difficult. Unemployment among young people stands at 10.5%. University graduates, who make up 69% of those between 25 and 34, can no longer expect to walk into a lucrative job and keep it for life. Owning a house in Seoul, where most economic opportunities are, is out of reach for all but the richest.



Economist.com

For many, marriage is also unappealing. Men worry that they will not be able to support a family. Women complain about the outdated expectations of potential suitors. Matchmaking companies deduct points from female applicants who have serious jobs but insufficient domestic skills. “Getting married just means that the guy expects you to stay at home and cook for him,” says a woman who works for an NGO in Seoul. “Why would I want to do that?” Yet having children outside marriage is seen as shameful.

The lack of babies threatens the strained pension system and future economic growth. It does not help that the attempts of past governments to tackle it have mostly inspired resentment. The administration of Park Geun-hye, the previous president, suffered a backlash in 2016 when it published a “birth map” highlighting the most fertile areas of the country in bright pink in an attempt to spur others along. Unsurprisingly, women took exception to being treated like farm animals.

President Moon Jae-in seems set on a different tack. His government has announced measures to improve child care and increase support for single-parent families. That makes sense, since South Korea spends less of its GDP on family benefits than most other rich countries. Mr Moon has also pledged to work towards greater gender equality and less punishing hours in the workplace. The emphasis is on enhancing people’s freedom to choose how to live, rather than just boosting births. This reframing may help, says Mr Lee: “Women don’t want the government to decide whether they have babies or not. They want it to create conditions under which they might want to have them.”

Still, the shift is unlikely to result in a rapid enough change. The government also helps to arrange marriages between rural men and “imported” brides from poorer Asian countries. In theory, it accepts the need for foreigners not just to make babies but to do other jobs as well. But mass immigration remains a touchy subject.

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A 175m-man rehearsal

Local elections in Indonesia prefigure next year's presidential poll

Both leading contenders see grounds for optimism

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IN A shady shop porch in central Medan, the biggest city in the province of North Sumatra, votes are being counted. A young man tirelessly unfolds each ballot, holds it up and announces the candidates marked to a handful of onlookers. Behind him, a woman wearing a floral hijab tallies the votes on a large piece of paper that is taped to the shop's bright blue wall. Polling monitors from assorted political parties count along too. The main race on the ballot, for governor, pits Djarot Saiful Hidayat, the candidate of a coalition led by the president's Indonesian Democratic Party of Struggle, or PDI-P, against Edy Rahmayadi, who is backed by an alliance of Islamist and nationalist parties. Early estimates suggest Mr Edy will win easily.

In all, provinces accounting for 175m of Indonesia's 260m people went to the polls on June 27th, including the four most populous: West, East and Central Java, and North Sumatra. The president, Joko Widodo, known as Jokowi, had hoped for a strong performance by his allies ahead of a presidential and parliamentary vote in April next year. By and large, the results were promising for him: candidates backed by PDI-P, or in a similar mould to the president, swept Java. But the result in North Sumatra, a province Jokowi won narrowly in the presidential election of 2014, gives an indication of how his opponents might forge a winning coalition.

Mr Edy's victory is relevant to next year's presidential race for three reasons. First, the local candidates echoed the probable presidential ones. Like Jokowi, Mr Djarot is a reformist, who promised to fight corruption and bring transparency to the regional government. Mr Edy, meanwhile, is a former army general, as is Prabowo Subianto, Jokowi's opponent at the last presidential election, who is likely to run against him again next year. Mr Edy also appeals to more conservative Muslims. For his final rally he held a communal prayer, while Mr Djarot opted for political speeches followed by live music.

Second, the partisan alliances in North Sumatra resemble the likely national coalitions next year. As well as PDI-P, Mr Djarot was backed by the United Development Party, a mildly Islamic outfit. More or less the same nationalist and Muslim parties that backed Mr Prabowo in 2014 backed Mr Edy.

Third, the election was marred by what Indonesians call "black campaigns". On social media supporters of Mr Edy shared a doctored photo that seemed to show Mr Djarot being served a pig's head at a banquet. One supporter of Mr Edy claimed, without any evidence, that Chinese migrants had been shipped into Medan to skew the vote. These smears resemble widespread allegations that Jokowi is a closet Christian, or has licensed the building of umpteen churches while restricting the construction of mosques.

However, similar falsehoods did not prevent Ridwan Kamil, the modernising mayor of Bandung, from winning the governorship of West Java, a province of 47m people. Although he was not PDI-P's candidate, he has a similar outlook to Mr Jokowi. His main opponent, Sudrajat, was another former general backed by Mr Prabowo and PKS, a conservative Muslim party. He received only 30% of the vote, even though West Java is reputed to be a conservative stronghold and plumped for Mr Prabowo in 2014.

As the result in West Java suggests, voters' choices in provincial elections may not always square with their presidential preferences. Batma, a housewife in south Medan, explains that she opted for Mr Edy because he is most likely to help the unemployed. But she says she will still vote for Jokowi in April.

Presidential candidates must formally register by August 10th. To secure a spot on the ballot, they must have the support of parties that won at least a fifth of the seats in parliament or a quarter of the popular vote at the last election. The next six weeks will see a flurry of activity as Jokowi and others try to put together an adequate coalition. Picking a running-mate from a wavering party can be one way to win the needed support.

Ultimately, though, the pairings will need to appeal to voters. Outside a polling station in a well-to-do part of Medan, Ela Wijayo, a lawyer sporting a bejewelled hijab and a shiny gold handbag, waxes lyrical about Mr Edy's piety. Maybe Jokowi can find an even more godly sidekick.

This article appeared in the Asia section of the print edition under the headline "A 175m-man rehearsal"

Legal assault

Victims of rape in South Asia face further violation from the courts

Although banned, virginity testing is widespread

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WHEN a judge in the high court of the Indian state of Rajasthan recently acquitted a man of rape, he noted of the accuser, "Her hymen was ruptured and vagina admitted two fingers easily. The medical opinion is that the prosecutrix may be accustomed to sexual intercourse." The implication was that only a virgin can really be raped.

The so-called "two-finger test", in which a doctor examines the vagina to decide if a woman is sexually active, was banned in India in 2014, after the Supreme Court ruled that it was an invasion of privacy (as well as irrelevant). In 2016 Pakistan prohibited the test from being used in rape trials. This year Bangladesh followed suit. Yet in all three countries the test is still widely used.

Last year Human Rights Watch, an international pressure group, found that the test is still routine in Rajasthani hospitals. And this year an Indian human-rights organisation, Jan Sahas, looked at the records of 200 group-rape trials and concluded that the test was a deciding factor in 80% of them.

There have been pockets of progress. In a recent rape trial in the city of Mumbai, the judge disregarded the findings of the two-finger test and cited instead the legal change in 2014. "The girl...has a right to make a choice, which includes a right to deny sexual intercourse to a person without her consent," he argued. The Centre for Enquiry into Health and Allied Themes, another NGO, is working with Mumbai's public hospitals to stamp out the use of the test.

But in much of India little has changed. Only nine of 29 states have enshrined the Supreme Court's ruling in local laws, and even when they have, implementation has been patchy. In Pakistan judges who do not follow the law go unchallenged, says Sarah Zaman, who campaigns for women's rights.

Across South Asia, many doctors are taught outdated ideas in medical school. Jaising P. Modi's "Medical Jurisprudence and Toxicology", first published in 1920, remains the standard textbook in the three countries. "The entire medical profession has to be retrained," says Meenakshi Ganguly of Human Rights Watch. "It is literally teaching old dogs new tricks."

New attitudes are even more needed. In Dhaka's slums it is often said that "women are flames and men are candles," notes Ruchira Naved of the International Centre for Diarrhoeal Disease, a campaigning local NGO. "When the candle comes to the flame, it melts." The implication is that men cannot control their lust; it is up to women to make sure not to arouse it. Such views, laments Dr Naved, are still "pervasive".

Experts reckon that fewer than 10% of rapes in South Asia are reported. The two-finger test, says Dr Naved, stops women from coming forward "and then stops them getting justice". In Bangladesh only 22 convictions were secured in 2012-17 out of

18,668 rape cases filed. Politicians make excuses, Mrs Ganguly says: “This is a rural community, they’re very traditional, they’re conservative, it’s a work in progress. I say no, the law is the law. People should jolly well follow it.”

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Banyan

Asia is at last waking up to the threat of a trade war

But some see a silver lining in the hostilities

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IT IS hard to argue that the United States and China are not on the brink of a trade war. President Donald Trump is threatening to impose higher tariffs on $450bn of imports from China, with the first tranche, on $34bn of Chinese goods, due to take effect on July 6th. Mr Trump expects China to blink. But what if it doesn't? Other countries in Asia are only now starting to ask that as they realise how much is at stake.

Nowhere would a rupture of global supply-chains have more impact than in East and South-East Asia, which sit at the heart of them. Intermediate goods account for more than half of Asian countries' exports, on average, and more than three-fifths of their imports. The region is deeply integrated, in often underappreciated ways, argues Deborah Elms of the Asian Trade Centre, which advises governments and business. South Korean screens and Taiwanese chips famously head to China for assembly into iPhones for American end-users; there are countless similar examples. Many Asian companies, Ms Elms says, may not even realise where their products end up. They may still not be aware that they are at risk from the looming trade war.

Political leaders appear to be ahead of local businesses in thinking about the consequences. Mr Trump's lambasting of America's traditional allies at a vitriolic G7 summit in Canada in early June belatedly triggered alarms across Asia. Since then leaders have rushed to show their commitment to an open, rules-based trading order—one without America if need be.

One example is the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), a gold-standard free-trade pact involving 11 countries on both sides of the Pacific. A successor to the Trans-Pacific Partnership, which Mr Trump pulled America out of in early 2017, the CPTPP was signed in March. But several of its members had seemed in no particular rush to ratify it. No longer. Canada, Australia and Japan have all said they will speed up the process. South Korea, which was forced by Mr Trump to renegotiate a bilateral trade pact (and which also has concerns about the strength of its military alliance with America), looks set to apply to join the CPTPP.

Japan's prime minister, Shinzo Abe, once hoped he might persuade Mr Trump to bring America back in to the pact. Instead, Mr Trump has repeatedly humiliated him, not least by refusing to exempt Japan from steel and aluminium tariffs, even though other allies have won a reprieve. Now Mr Abe is mending bridges with China. And he is continuing to fly the multilateral flag with another regional initiative.

On July 1st Mr Abe hosts trade ministers from the ten countries of the Association of South-East Asian Nations (ASEAN), plus the countries in the region with which ASEAN signed bilateral free-trade deals: Australia, China, India, Japan, New Zealand

and South Korea. Negotiations over the so-called Regional and Comprehensive Economic Partnership (RCEP) have for years crawled along at a snail's pace. But the meeting in Tokyo signals a quickening—and is the first big RCEP meeting to be held outside ASEAN.

In terms of rigour, RCEP falls far short of CPTPP. It includes China, which was pointedly excluded from TPP, in which the previous American administration explicitly set out to design a template for open trade that would not be diluted by China's questionable commitment. RCEP was seen at the time as the lowest common denominator—a pointless or even counterproductive distraction. But today its backers promote it as a useful step towards regional integration. With America now hostile to open trade, every initiative has fresh worth to countries whose prosperity was built on commerce.

Collateral damage from trade tensions between America and China seems inevitable. Even if a full-blown trade war is averted—because either country backs down—both sides would not return to the rules-based trade order that has prevailed until now. Rather, a deal would involve some kind of managed trade. That is certainly better than full-blown conflict. But it repudiates that order, while diverting trade and investment.

As for a full-blown war, it could upend the world-spanning supply chains which epitomise Asian economies. Above all, Mr Trump's trade nationalists hate it that, in their search for efficiency, savings and speed, American businesses have internationalised their operations over the past four decades. If the administration's belligerence on trade unsettles American firms and forces them to "onshore" production, Asia would be an early victim.

The supply-chains that bind

Yet some spy a silver lining. Led by China and Japan, Asian countries are at last opening to one another. They are striking bilateral trade deals among themselves, as well as with the European Union. And that begs a question: if the Trump administration succeeds in smashing existing supply-chains, why assume manufacturing will return to America? Might more links in the chain simply relocate within Asia instead? After all, as Japanese policymakers point out, America does not have a monopoly on tech. Reforming Vietnam, which is a member of the CPTPP and has eight bilateral free-trade agreements, including with the EU, has great allure as a production base. Recently President Joko Widodo of Indonesia, which does not typically make life easy for foreign investors, has been asking visitors whether there might be an upside for his country.

Even American multinationals are accountable to shareholders, not to Mr Trump. And America's 326m potential consumers, walled up behind trade barriers, may not prove such an appealing market as Asia's nearly 4bn consumers at a time when dynamic Asian economies are opening to each other. It's an interesting time, as Ms Elms puts it, to experiment with resetting trade patterns. Not that anyone would wish an all-out trade war to be the occasion to experiment.

This article appeared in the Asia section of the print edition under the headline "Chain reaction"

Community management
Vigilaunties

Vigilaunties

China wants eyes and ears on every street

Officials are beefing up neighbourhood-watch schemes to catch crooks and protesters

Print edition | China Jun 28th 2018


Reuters

EVERY day Zhong Zhenhua patrols a small network of streets in a well-heeled part of northern Beijing, where a dozen apartment blocks house about 3,000 people. In recent weeks he has been paying attention to local construction workers to make sure that their building materials do not block people's way. Mr Zhong says he also likes to call on local residents—particularly sick or elderly ones who might need help. The aim is to visit at least one household a day, he explains, though sometimes he can fit in up to five.

Mr Zhong is a "grid manager" operating in part of Huayan Beili Xi Community, a middle-class residential area near the capital's iconic "bird's nest" Olympic stadium. He has been recruited by the local government to watch over a "grid" of streets in the neighbourhood, solve problems if possible and pass bigger ones up the chain of command for higher-level attention. The grid system of ensuring order in urban areas was pioneered in Dongcheng, a central district of Beijing, in 2004. By 2017 about 60% of China's cities were using it in some form, reckons Zhou Wang of Nankai University in Tianjin, up from 45% in 2015.

China has a long history of community control involving civilians. In the 16th century a system known as *baojia* was devised that required households to take turns to monitor each others' activities. Modifications of it have persisted for much of the country's history since then. Communist leaders have been especially fond of deploying local residents to keep a lookout on street corners.

Under Mao, city dwellers were assigned to workplace "units", or *danwei*, which were responsible for providing them with housing and telling the authorities about potential troublemakers, including people considered disloyal to the Communist Party. As a result of economic reforms that China launched in 1978, the *danwei* system has mostly vanished. Every urban area still has a "neighbourhood committee" (its leaders are "elected" by residents from among party-approved candidates). But such organisations have only a shaky foothold in the newly built districts that are home to many millions of young commuters. Luigi

Tomba of the University of Sydney says the emergence of new grassroots forces, such as profit-driven property-management companies and nimbyish homeowners' associations, has been complicating the work of the party-backed committees.

Grid, locked

The aim of grid management is to tighten control again. The government wants this partly because so many urban residents are recent migrants from the countryside or other cities. Long gone are the days when local officials would know, or be able to check quickly, every resident's background. They want to use the grid system to curb crime, help solve residents' complaints and watch out for hazards such as fire risks and pollution. They also want to make sure they can forestall any unrest long before it has a chance to break out. Many residents want greater security, too. They often blame migrants from other areas for crimes such as robbery and rape.

The system involves dividing neighbourhoods into grids covering a few streets. A manager such as Mr Zhong is assigned to each of them. The authorities mobilise volunteers, mostly local pensioners, to help. Retirees have long been the backbone of neighbourhood-watch schemes. During big political meetings or around the time of sensitive anniversaries large numbers of them stand on pavements wearing red hats and armbands (see picture). In some rural places residents are being issued with set-top boxes that allow them to monitor feeds from security cameras in the comfort of armchairs, according to state media. In regions where officials are worried about the possibility of large-scale or violent unrest, such as Tibet and Xinjiang, the grid system has been used as part of a vast extension of surveillance measures aimed at keeping secessionists and terrorists in check. In some parts of Xinjiang waiters and shop assistants have been issued with clubs, body armour and hard hats to help them perform security duties when required.

Officials in Mr Zhong's grid say that one in seven local residents plays some role in public-security work. One of his duties is to look into the problems they report (they often do so using WeChat, an instant-messaging app). He says he also asks volunteers in each apartment building to suggest families who might benefit from his house-calls. Cui Baoxiang, a recently retired businessman who has lived in the area for three decades, is part of a team of 120 party members who mount a regular lookout. For a while there was a rota system for security patrolling, he says, but now every team member knows to keep an eye out whenever they are outdoors. Mr Cui's work includes approaching strangers who enter the neighbourhood to find out who they are and whether they need any help—or whether they might pose some kind of threat.

The authorities' definition of what is threatening is sweeping. It might include someone engaging in unauthorised religious activity, or involve a person from the countryside who has arrived in the capital to petition the central government about an injustice in their own hometown. Local governments hope that grid staff will get to know their patch well enough to be able to detect problems while they are small and easy to handle, says Samantha Hoffman, a visiting fellow at the Mercator Institute for China Studies. Increasingly sophisticated databases aim to make it easier for higher-ups to tap into information logged by grid staff and search it for patterns.

The impact of the grid system is difficult to gauge. The government says that public satisfaction with law and order has risen from about 88% in 2012 to more than 95% today. But those figures are no more reliable than the country's notoriously dodgy crime statistics. All this attentiveness may be a help to some people with minor grumbles that are easy to solve. But for others with more complex complaints the effect may be the opposite. Officials now find it easier to identify problems earlier and put pressure on people to keep quiet about them.

This article appeared in the China section of the print edition under the headline "Vigilaunties"

Kowtow to the gaokao

Some Western universities see merit in China's flawed exam

They should think about its politics

Print edition | China Jun 28th 2018

"DRAWING on your political knowledge, explain why the Communist Party should exercise leadership over the country's economy, armed forces, schools and all aspects of society." So read an essay question in this year's *gaokao*, China's university-entrance exam which was held in early June (anxious parents are pictured outside a test centre in the city of Shenyang; results have been announced in the past few days). The test is notoriously tough, but political flattery can help. Examinees in Beijing were asked to discuss an environmental slogan used by President Xi Jinping. The paper noted that more marks would be given for being "positive".

Despite the Chinese political flavour of some of the questions, growing numbers of Western universities are using *gaokao* results to select students from China instead of requiring them to sit internationally recognised exams such as the Scholastic Aptitude Test (SAT). This month the University of New Hampshire became the first public state-level university in America to accept *gaokao* scores. It joins a handful of privately funded American colleges such as New York University and the University of San Francisco. In Canada around 30 universities allow *gaokao* results to be used instead of the SAT or similar tests. They include the University of Toronto and McGill University. In Australia the University of Sydney took the lead in 2012. Now more than half of Australian colleges welcome the *gaokao*, including seven members of the prestigious "Group of Eight". So does Cambridge University in Britain. Other European universities, including in France, Spain and Italy, are following suit.

This should be good news for Chinese students. Previously, taking tests approved by Western universities had usually meant opting out of the *gaokao*, which requires years of undistracted preparation. Now they can try their luck at both domestic and foreign universities. Last year 1.5m out of more than 9m *gaokao* takers were repeat examinees. Many of them were sitting it again not because they had failed, but because they wanted another shot at getting into one of the best Chinese universities. The option of sending *gaokao* results to universities abroad gives them an "exit route", says Liu Weishi, a parent in Beijing. She says it "spares them an additional year of mind-numbing exam preparation". Some foreign institutions, including New York University and the University of Toronto, do not set minimum *gaokao* scores, unlike Chinese counterparts.

Western universities that accept *gaokao* results do not publicly complain about the political constraints imposed on takers of the exam (it is safe to assume that no marks would have been earned for suggesting the party should not be in charge). But they are aware of its other limitations. They require additional evidence of English-language competency—students often do well in the *gaokao*'s compulsory English section but have nearly non-existent oral skills. They also know that the *gaokao* involves a lot of rote learning, and that those who sit it have little time to develop critical-thinking skills. An admissions officer at New York University says the *gaokao* can still be helpful for evaluating applicants because it assesses “a different readiness”, including self-discipline. Students who get in through the *gaokao* do “very, very well academically”, she adds.

Others are more sceptical. The University of Melbourne is the only one of Australia’s Group of Eight not to endorse the *gaokao*. Carolyn Evans, a deputy vice-chancellor there, says the university has “looked at it a number of times” and decided that “other criteria better predicted success in university study.”

That stance may become hard to maintain. Around one-third of international students in Australia and America are from China. Many Western universities are becoming increasingly dependent on revenue from this source. If some top-class universities offer entry using *gaokao* scores, their competitors may find it hard to resist doing the same.

This article appeared in the China section of the print edition under the headline ”Kowtow to the gaokao”

The future of Syria
Smaller, in ruins and more sectarian

The future of Syria

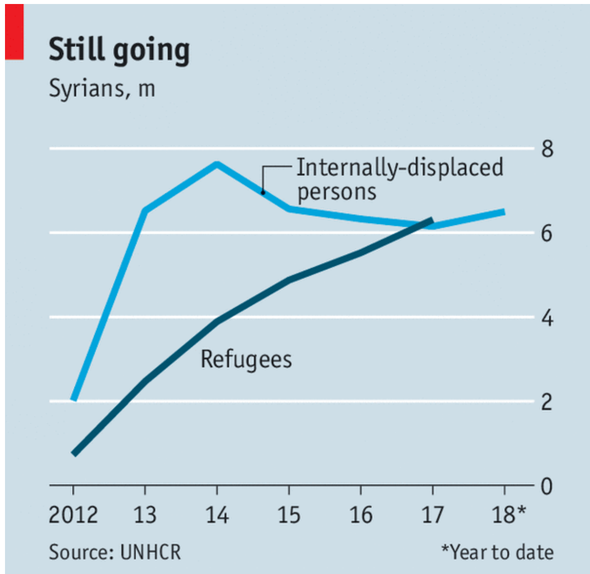
How a victorious Bashar al-Assad is changing Syria

Sunnis have been pushed out by the war. The new Syria is smaller, in ruins and more sectarian

Print edition | Middle East and Africa Jun 28th 2018

A NEW Syria is emerging from the rubble of war. In Homs, which Syrians once dubbed the "capital of the revolution" against President Bashar al-Assad, the Muslim quarter and commercial district still lie in ruins, but the Christian quarter is reviving. Churches have been lavishly restored; a large crucifix hangs over the main street. "Groom of Heaven", proclaims a billboard featuring a photo of a Christian soldier killed in the seven-year conflict. In their sermons, Orthodox patriarchs praise Mr Assad for saving one of the world's oldest Christian communities.

Homs, like all of the cities recaptured by the government, now belongs mostly to Syria's victorious minorities: Christians, Shias and Alawites (an esoteric offshoot of Shia Islam from which Mr Assad hails). These groups banded together against the rebels, who are nearly all Sunni, and chased them out of the cities. Sunni civilians, once a large majority, followed. More than half of the country's population of 22m has been displaced—6.5m inside Syria and over 6m abroad. Most are Sunnis.

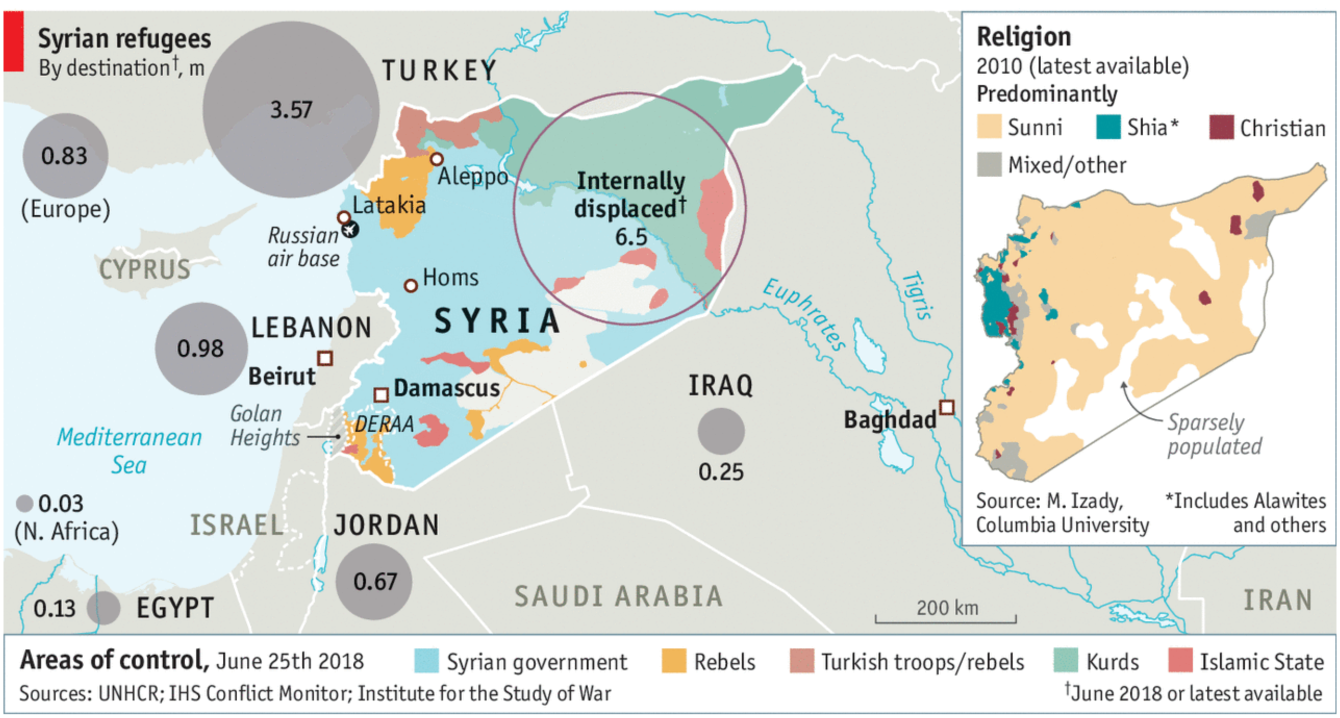


Economist.com

The authorities seem intent on maintaining the new demography. Four years after the government regained Homs, residents still need a security clearance to return and rebuild their homes. Few Sunnis get one. Those that do have little money to restart their lives. Some attend Christian mass, hoping for charity or a visa to the West from bishops with foreign connections. Even these Sunnis fall under suspicion. “We lived so well before,” says a Christian teacher in Homs. “But how can you live with a neighbour who overnight called you a *kafir* (infidel)?”

Even in areas less touched by the war, Syria is changing. The old city of Damascus, Syria’s capital, is an architectural testament to Sunni Islam. But the Iranian-backed Shia militias that fight for Mr Assad have expanded the city’s Shia quarter into Sunni and Jewish areas. Portraits of Hassan Nasrallah, the leader of Hizbullah, a Lebanese Shia militia, hang from Sunni mosques. Advertisements for Shia pilgrimages line the walls. In the capital’s new cafés revellers barely notice the jets overhead, bombing rebel-held suburbs. “I love those sounds,” says a Christian woman who works for the UN. Like other regime loyalists, she wants to see the “terrorists” punished.

Mr Assad’s men captured the last rebel strongholds around Damascus in May. He now controls Syria’s spine, from Aleppo in the north to Damascus in the south—what French colonisers once called *la Syrie utile* (useful Syria). The rebels are confined to pockets along the southern and northern borders (see map). Lately the government has attacked them in the south-western province of Deraa.



Economist.com

A prize of ruins

The regime is in a celebratory mood. Though thinly spread, it has survived the war largely intact. Government departments are functioning. In areas that remained under Mr Assad's control, electricity and water supplies are more reliable than in much of the Middle East. Officials predict that next year's natural-gas production will surpass pre-war levels. The National Museum in Damascus, which locked up its prized antiquities for protection, is preparing to reopen to the public. The railway from Damascus to Aleppo might resume operations this summer.

To mark national day on April 17th, the ancient citadel of Aleppo hosted a festival for the first time since the war began. Martial bands, dancing girls, children's choirs and a Swiss opera singer (of Syrian origin) crowded onto the stage. "God, Syria and Bashar alone," roared the flag-waving crowd, as video screens showed the battle to retake the city. Below the citadel, the ruins stretch to the horizon.

Mr Assad (pictured) has been winning the war by garrisoning city centres, then shooting outward into rebel-held suburbs. On the highway from Damascus to Aleppo, towns and villages lie desolate. A new stratum of dead cities has joined the ones from Roman times. The regime has neither the money nor the manpower to rebuild. Before the war Syria's economic growth approached double digits and annual GDP was $60bn. Now the economy is shrinking; GDP was $12bn last year. Estimates of the cost of reconstruction run to $250bn.

Syrians are experienced construction workers. When Lebanon's civil war ended in 1990, they helped rebuild Beirut. But no such workforce is available today. In Damascus University's civil-engineering department, two-thirds of the lecturers have fled. "The best were first to go," says one who stayed behind. Students followed them. Those that remain have taken to speaking Araglish, a hotch-potch of Arabic and English, as many plan futures abroad.

Traffic flows lightly along once-jammed roads in Aleppo, despite the checkpoints. Its pre-war population of 3.2m has shrunk to under 2m. Other cities have also emptied out. Men left first, many fleeing the draft and their likely dispatch to the front. As in Europe after the first world war, Syria's workforce is now dominated by women. They account for over three-quarters of the staff in the religious-affairs ministry, a hitherto male preserve, says the minister. There are female plumbers, taxi-drivers and bartenders.

Millions of Syrians who stayed behind have been maimed or traumatised. Almost everyone your correspondent spoke to had buried a close relative. Psychologists warn of societal breakdown. As the war separates families, divorce rates soar. More children are begging in the streets. When the jihadists retreat, liquor stores are the first to reopen.

Mr Assad, though, seems focused less on recovery than rewarding loyalists with property left behind by Sunnis. He has distributed thousands of empty homes to Shia militiamen. "Terrorists should forfeit their assets," says a Christian businesswoman, who was given a plush café that belonged to the family of a Sunni defector. A new decree, called Law 10, legitimises the government's seizure of such assets. Title-holders will forfeit their property if they fail to re-register it, a tough task for the millions who have fled the country.

A Palestinian-like problem

The measure has yet to be implemented, but refugees compare it to Israel's absentees' property laws, which allow the government to take the property of Palestinian refugees. Syrian officials, of course, bridle at such comparisons. The ruling Baath party claims to represent all of Syria's religions and sects. The country has been led by Alawites since 1966, but Sunnis held senior positions in government, the armed forces and business. Even today many Sunnis prefer Mr Assad's secular rule to that of Islamist rebels.

But since pro-democracy protests erupted in March 2011, Syrians detect a more sectarian approach to policymaking. The first demonstrations attracted hundreds of thousands of people of different faiths. So the regime stoked sectarian tensions to divide the opposition. Sunnis, it warned, really wanted winner-take-all majoritarianism. Jihadists were released from prison in order to taint the uprising. As the government turned violent, so did the protesters. Sunni states, such as Turkey, Saudi Arabia and Qatar, provided them with arms, cash and preachers. Hardliners pushed aside moderates. By the end of 2011, the protests had degenerated into a sectarian civil war.

Early on, minorities lowered their profile to avoid being targeted. Women donned headscarves. Non-Muslim businessmen bowed to demands from Sunni employees for prayer rooms. But as the war swung their way, minorities regained their confidence. Alawite soldiers now flex arms tattooed with Imam Ali, whom they consider the first imam after the Prophet Muhammad (Sunnis see things differently). Christian women in Aleppo show their cleavage. "We would never ask about someone's religion," says an official in Damascus. "Sorry to say, we now do."

The country's chief mufti is a Sunni, but there are fewer Sunnis serving in top posts since the revolution. Last summer Mr Assad replaced the Sunni speaker of parliament with a Christian. In January he broke with tradition by appointing an Alawite, instead of a Sunni, as defence minister.

Officially the government welcomes the return of displaced Syrians, regardless of their religion or sect. "Those whose hands are not stained with blood will be forgiven," says a Sunni minister. Around 21,000 families have returned to Homs in the last two years, according to its governor, Talal al-Barazi. But across the country, the number of displaced Syrians is rising. Already this year 920,000 people have left their homes, says the UN. Another 45,000 have fled the recent fighting in Deraa. Millions more may follow if the regime tries to retake other rebel enclaves.

When the regime took Ghouta, in eastern Damascus, earlier this year its 400,000 residents were given a choice between leaving for rebel-held areas in the north or accepting a government offer of shelter. The latter was a euphemism for internment. Tens of thousands remain "captured" in camps, says the UN. "We swapped a large prison for a smaller one," says Hamdan, who lives with his family in a camp in Adra, on the edge of Ghouta. They sleep under a tarpaulin in a schoolyard with two other families. Armed guards stand at the gates, penning more than 5,000 people inside.

The head of the camp, a Christian officer, says inmates can leave once their security clearance is processed, but he does not know how long that will take. Returning home requires a second vetting. Trapped and powerless, Hamdan worries that the regime or its supporters will steal his harvest—and then his land. Refugees fear that they will be locked out of their homeland altogether. "We're the new Palestinians," says Taher Qabar, one of 350,000 Syrians camped in Lebanon's Bekaa Valley.

Some argue that Mr Assad, with fewer Sunnis to fear, may relax his repressive rule. Ministers in Damascus insist that change is inevitable. They point to a change in the constitution made in 2012 that nominally allows for multiparty politics. There are a few hopeful signs. Local associations, once banned, offer vocational training to the displaced. State media remain Orwellian, but the internet is unrestricted and social-media apps allow for unfettered communication. Students in cafés openly criticise the regime. Why doesn't Mr Assad send his son, Hafez, to the front, sneers a student who has failed his university exams to prolong his studies and avoid conscription.

A decade ago Mr Assad toyed with *infitah* (liberalisation), only for Sunni extremists to build huge mosques from which to spout their hate-speech, say his advisers. He is loth to repeat the mistake. Portraits of the president, appearing to listen keenly with a slightly oversized ear, now line Syria's roads and hang in most offices and shops. Checkpoints, introduced as a counter-insurgency measure, control movement as never before. Men under the age of 42 are told to hand over cash or be sent to the front. So rife are the levies that diplomats speak of a "checkpoint economy".

Having resisted pressure to compromise when he was losing, Mr Assad sees no reason to make concessions now. He has torpedoed proposals for a political process, promoted by UN mediators and his Russian allies, that would include the Sunni opposition. At talks in Sochi in January he diluted plans for a constitutional committee, insisting that it be only consultative and based in Damascus. His advisers use the buzzwords of "reconciliation" and "amnesty" as euphemisms for surrender and security checks. He has yet to outline a plan for reconstruction.

War, who is it good for?

Mr Assad appears to be growing tired of his allies. Iran has resisted Russia's call for foreign forces to leave Syria. It refuses to relinquish command of 80,000 foreign Shia militiamen. Skirmishes between the militias and Syrian troops have resulted in scores of deaths, according to researchers at King's College in London. Having defeated Sunni Islamists, army officers say they have no wish to succumb to Shia ones. Alawites, in particular, flinch at Shia evangelising. "We don't pray, don't fast [during Ramadan] and drink alcohol," says one.

But Mr Assad still needs his backers. Though he rules most of the population, about 40% of Syria's territory lies beyond his control. Foreign powers dominate the border areas, blocking trade corridors and the regime's access to oilfields. In the north-west, Turkish forces provide some protection for Hayat Tahrir al-Sham, a group linked to al-Qaeda, and other Sunni rebels. American and French officers oversee a Kurdish-led force east of the Euphrates river. Sunni rebels abutting the Golan Heights offer Israel and Jordan a buffer. In theory the territory is classified as a "de-escalation zone". But violence in the zone is escalating again.

New offensives by the regime risk pulling foreign powers deeper into the conflict. Turkey, Israel and America have drawn red lines around the rebels under their protection. Continuing Iranian operations in Syria "would be the end of [Mr Assad], his regime", said Yuval Steinitz, a minister in Israel, which has bombed Iranian bases in the country. Israel may be giving the regime a green light in Deraa, in order to keep the Iranians out of the area.

There could be worse options than war for Mr Assad. More fighting would create fresh opportunities to reward loyalists and tilt Syria's demography to his liking. Neighbours, such as Jordan and Lebanon, and European countries might indulge the dictator rather than face a fresh wave of refugees. Above all, war delays the day Mr Assad has to face the question of how he plans to rebuild the country that he has so wantonly destroyed.

This article appeared in the Middle East and Africa section of the print edition under the headline "Smaller, in ruins and more sectarian"

Rial problems

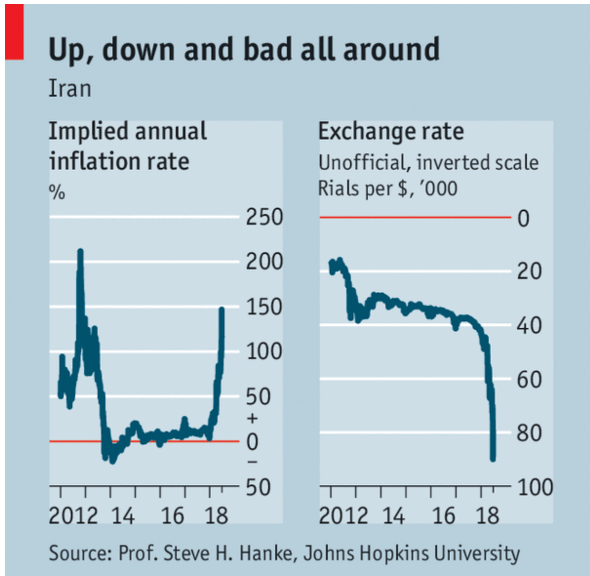
Iran's anaemic economy is pushing people over the edge

The government is struggling with rising prices and a plummeting currency

Print edition | Middle East and Africa Jun 30th 2018

SIX months after the last round of protests over their country's anaemic economy, Iranians are at it again. But unlike the demonstrations in December, which began in the provinces, the latest unrest erupted in Tehran's bazaar on June 25th and spread from there. Anger is growing over rising prices, the plunging value of the Iranian rial (see chart) and the cost of foreign adventurism.

The regime looks worried. Security forces fired tear gas to disperse crowds that gathered at parliament's gates. Ayatollah Sadeq Larijani, the conservative head of the judicial system, threatened those "who disturb the Islamic economy" with execution.



Economist.com

President Hassan Rouhani, a moderate, seems stumped. Instead of the bountiful foreign investment he promised would come from compromising with America, he is reeling from what he calls President Donald Trump's "economic war". The value of the rial on the black market has fallen by over half since Mr Trump took office in January 2017, particularly since May, when America withdrew from the deal it and five other powers signed with Iran in 2015. It had lifted sanctions in return for restrictions on Iran's nuclear programme. In August America will reimpose curbs on Iran's purchase of dollars and sale of gold; it also wants a full ban on oil sales.

Mr Rouhani won an election last year, but he is challenged by hardline clerics and the Islamic Revolutionary Guard Corps, the regime's military arm. Members of parliament seek his impeachment. While protesters cry for the restoration of the monarchy, regime insiders mull a military takeover. In its 40th year, Iran's theocracy looks in poor health.

This article appeared in the Middle East and Africa section of the print edition under the headline "Rial problems"

Don't rig the election

Can foreign observers keep Zimbabwe's election clean?

Hopes are high that the poll next month will be fairer than those in the past

Print edition | Middle East and Africa Jun 28th 2018

ZIMBABWEANS shuddered when a bomb went off on June 23rd in Bulawayo, the country's second city, a few yards from President Emmerson Mnangagwa as he left the podium at the end of an election rally. Would the explosion, which killed two security men, herald a wave of violence against the opposition, as it might well have done if the vengeful Robert Mugabe had still been president?

In the event, Mr Mnangagwa (pictured), who displaced Mr Mugabe in a coup last November, called for calm rather than retribution. He implied that friends of Mr Mugabe's ambitious wife, Grace, who had wanted the top job, were the likeliest culprits. The main opposition leader, Nelson Chamisa, called for calm, too. With parliamentary and presidential elections set for July 30th, Zimbabweans of all parties are praying for a peaceful poll.

But will it be fair? That is harder to tell. Elections since 2002 have been both violent and rigged. Among the worst was in 2008, when the Zimbabwe Electoral Commission (ZEC) took more than five weeks to declare a result; more than 270 activists, almost all belonging to the opposition Movement for Democratic Change (MDC), were killed. The last national polls, in 2013, were relatively peaceful but generally regarded as rigged. Mr Mugabe's ruling Zanu-PF comfortably beat the MDC, which had been discredited by a hapless spell in a coalition government. The result was also attributed to a gross manipulation of the voters' roll in favour of rural voters, who are Zanu-PF's strongest backers.

This time an updated register of 5.7m voters has raised hopes of a fairer poll. But other worries persist. One is the role of the army, which brought Mr Mnangagwa, a former security minister, to power. The generals have yet to declare publicly that they would serve under a government run by a party other than Zanu-PF. In the past, army chiefs have declared undying allegiance to Mr Mugabe at election time.

Still more disturbing are unconfirmed reports that soldiers, discarding their uniforms, have been deployed in the countryside, where more than half the voters reside, quietly threatening them if they vote "the wrong way". Many of the 2m-plus rural people who have been receiving food handouts from international donors fear such necessities could be withheld. Many also think their influential chiefs and village headmen, who have been in thrall to Zanu-PF, will be able to tell how they voted. The main wing of the MDC, led by Mr Chamisa, a sharp-elbowed 40-year-old lawyer, may once again win the urban vote, but he must break Zanu-PF's stranglehold on the countryside if he is to have a chance of winning.

The head of the ZEC, Priscilla Chigumba, a judge, has so far said the right things, but the MDC has already charged her with favouring Zanu-PF. A leading opposition lawyer calls her "the military's pick". She has acknowledged that 14% of her staff are past or present members of the army or ex-guerrillas, but has refused to say which posts they hold. Nor has the ZEC met another opposition demand that it spell out where the ballot papers will be printed, stored or distributed.

Foreign observers will play a vital role in trying to ensure a clean election. Missions under the aegis of the African Union and the Southern African Development Community are likely to whitewash the election, provided it is non-violent, as they have always done before. The key watchers are a European Union team and a joint mission from America run by the National Democratic Institute (NDI) and the International Republican Institute (IRI). Crucially they will stay for at least a month after the election, when hanky-panky over the count is most likely to occur.

The NDI and IRI have acknowledged "several notable improvements in the political environment and electoral preparations as compared to prior elections," but they also lamented that "a number of significant opportunities to break with the past have been missed." Tension is rising. Mr Mnangagwa, now 75, was Mr Mugabe's long-serving chief enforcer, including during the outrageous poll in 2008. Does he seek redemption? That is the question.

This article appeared in the Middle East and Africa section of the print edition under the headline "Try not to rig"

Worrying signs in Senegal

Senegal's democracy is being tested by its president

Macky Sall appears keen to lock up his opponents on corruption charges

Print edition | Middle East and Africa Jun 28th 2018

TO THE casual observer, all seems well in Senegal. Visitors to Dakar, the capital, fly into a new world-class airport. The economy grew by 6.8% last year and the discovery of natural gas heralds an even brighter economic future. To boot, the national team has performed well at the football World Cup.

But the political graffiti scrawled across Dakar's walls tell a different story. The messages demand freedom for the political opponents of President Macky Sall, several of whom have been imprisoned. With a presidential election just eight months away, fears are growing that democracy in Senegal, long an example for west Africa, is being subverted.

The political system has been tested before. Unlike most west African countries, Senegal has never had a military coup, but in 2012 the previous president, Abdoulaye Wade, did run for a third term, which the constitution proscribes. Mr Sall, riding a wave of popular anger, defeated him.

Now Mr Sall's government stands accused of selectively enforcing corruption laws to sideline his opponents. In March Khalifa Sall (no relation), the mayor of Dakar, was sentenced to five years in prison for embezzling $3.4m. Another opposition leader, Barthélémy Dias, was found guilty of contempt of court when he protested against the verdict. He will spend six months in prison.

Another potential challenger, Karim Wade, the former president's son, was arrested in 2013 and found guilty of corruption two years later. After Mr Sall pardoned him in 2016, Mr Wade immediately flew to Qatar. Some observers think his exile was part of a deal with the government. But he is now considering coming back to stand in the election.

Potential candidates face other obstacles. A law introduced in April requires them to obtain signatures from 1% of the registered voters in each of Senegal's 14 districts. Hundreds of people protested against the measure, saying it was unfair to poorer candidates. But the government says it is needed to ensure that only serious contenders appear on the ballot. Parliamentary elections held last year were chaotic, in part because they featured 47 electoral lists.

The protests over the election law and more recent demonstrations by students, angry about unpaid grants, have been met with violence by the government. In May a student was shot dead in the northern city of Saint-Louis, leading to yet more unrest. Images of police brutality have been widely shared on social media. One disturbing video shows a police van crashing through protesters outside Dakar's main university.

Many Senegalese are also unhappy that little of the country's new wealth is trickling down to them. GDP per person was just $2,566 (measured at purchasing-power parity) in 2016, according to the World Bank. The unemployment rate is over 15%. That makes the government nervous—and may increase its propensity to silence critics.

This article appeared in the Middle East and Africa section of the print edition under the headline "Writing on the wall"

A knave's ransom

A new approach to Somali pirates frees more hostages

Don't pay a ransom. Do pay for expenses

Print edition | Middle East and Africa Jun 30th 2018

NO ONE seized by pirates can be considered lucky. But many of the seamen taken hostage by Somali pirates have at least been set free fast, once fat ransoms have been paid. At the height of the piracy scourge off the coast of Somalia almost a decade ago, the average ransom to free a crew and vessel was, by one tally, $3.5m.

Some seamen, however, have languished in captivity for months or even years because their companies balked at coughing up—often because their ship was uninsured, or had run aground, or had been disabled by fire, or had sunk. Crew taken from them were sometimes tortured. "Hard as it may sound, these guys, they don't have any value," says John Steed, a former UN man in Mogadishu, Somalia's capital.

Pirates are still loth to cut their losses by freeing such hostages without payment. Of the few Somali pirates who have given up in this way, most were soon killed, Mr Steed notes, since they could not repay the financiers who underwrote the attacks and the hostages' upkeep. The resulting trap for such failing pirates and their "forgotten" hostages seemed inescapable.

Yet 54 hostages, held on land by various groups of Somali pirates, have been freed in the last several years. This was because of a new approach, say those who negotiated the deals. Rather than try to convince unscrupulous vessel owners to fork up big ransoms, the negotiators, mostly working for nothing, first estimated the pirates' costs—often $100,000-$200,000 for renting a boat and getting weapons and kit; expenses for fuel and food; and payoffs to stop government officials, warlords and village elders from interfering. If that amount or a bit more could be raised from charities and sympathisers, pirates would often accept the deal, once convinced that it was their only hope of satisfying their creditors.

It is easier to raise money for "expenses reimbursement" than for the actual ransom, not just because the former is much less. "You can argue that you're not enriching these people," says David Snelson, the boss of Pbi2, a security firm in Mogadishu that has helped free some of the hostages. Even so, covering pirates' expenses proved unpalatable to the UN bureaucracy, so Mr Steed quit in 2013 to continue his efforts from Nairobi, the capital of neighbouring Kenya, through an American charity called Oceans Beyond Piracy. He has cajoled Somali villagers into renouncing pay owed by pirates for food, transport and guard services. (Many villagers did not like the attention that hostages attracted.)

Though negotiators have generally adopted the expenses approach, it is not a magic wand. Eight seamen are still held in Somalia, all of them Iranian fishermen seized in 2015. Negotiators must still convince governments that paying the pirates' expenses will not benefit people with links to terrorist groups. Negotiators must also contend with pirates fearful of being double-crossed by a rival in their group. Such suspicion is sometimes justified, says Leslie Edwards of Compass Risk Management. His London firm has reluctantly negotiated releases whereby a pirate leader gets a secret extra payment that he will not share with his colleagues.

Somalia's pirates have seized few hostages of late, thanks largely to more use of armed guards on ships. But iJET, a risk-management firm based in Maryland that uses "a facilitation fee" to secure releases, foresees trouble. It reckons that attacks on easier-to-capture fishing boats will pick up as more Somali fishermen turn to piracy as a protest against overfishing by foreign commercial firms. Anger is rising again, as officials in Somalia's semi-independent Puntland region cash in by selling licences to foreign boats for catches that are depleting the fish stocks that have hitherto sustained Somali fishermen—without their having to resort to piracy.

This article appeared in the Middle East and Africa section of the print edition under the headline "A knave's ransom"

Turkey
Recep Tayyip the First

Recep Tayyip the First

Erdogan inaugurates a new political era in Turkey

"New Turkey" will be more Islamist, nationalist and authoritarian

Print edition | Europe Jun 28th 2018

AMID a frenzy of honking, a young woman leant out of the window of a car, one of the hundreds that besieged the headquarters of the ruling Justice and Development (AK) party in Ankara, making an Islamist salute with her left hand and an ultranationalist one with her right. Outside the building, thousands of cheering, singing AK supporters awaited their leader, fresh from his big victory at the polls. "This is Turkey's new liberation," yelled a man hoisting a flag emblazoned with the image of President Recep Tayyip Erdogan and the coat of arms of the Ottoman empire, his voice barely audible over the din. "The West will not boss us around," said another man, a schoolteacher. It was the evening of June 24th, day one of what Mr Erdogan calls the New Turkey, a synthesis of Islamic nationalism and Ottoman nostalgia, and possibly the last day of the old republic founded by Kemal Ataturk.

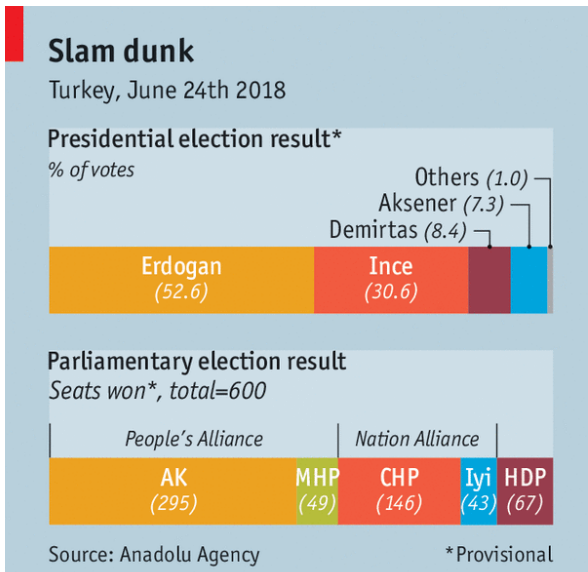
Hours earlier, despite predictions of a much closer race, Mr Erdogan and his party, plus their ultranationalist allies, scored a double knockout in Turkey's elections. In the presidential contest, the Turkish strongman defeated the main opposition hopeful, Muharrem Ince, by taking about 53% of the vote, compared with Mr Ince's 31%. In the parliamentary vote, his AK party and its coalition partner, the hardline Nationalist Movement Party (MHP), won a combined total of 54%, enough to ensure a comfortable majority with 344 seats out of 600 in the assembly. The opposition alliance, led by Mr Ince's CHP and the Iyi party, won just 189 seats. The pro-Kurdish HDP won 12%, enough to clear the electoral threshold and send 67 of its members to parliament.

Though free, it was the most unfair election in Turkey in decades. Under pressure from government cronies, most news outlets pretended that two of the main candidates, Selahattin Demirtas of the HDP and Meral Aksener of Iyi, did not exist. The main national broadcaster and its sister channels offered Mr Ince less than a tenth of the airtime devoted to Mr Erdogan, and ignored his last rally, attended by hundreds of thousands of supporters, on the eve of the vote. A report by the Organisation for Security and Cooperation in Europe welcomed the high (88%) voter turnout, but concluded that Mr Erdogan and AK had enjoyed excessive media coverage, misused state resources and used the state of emergency to restrict the freedoms of assembly and expression.

For Mr Erdogan, the victory marks the last step on the road to a constitution that replaces the parliamentary system put in place by Ataturk, the country's founding father, with a presidential one. Under the new changes, adopted by a slim majority in a 2017 referendum and now in effect, Mr Erdogan has complete control of the executive, including the power to issue decrees, appoint his own cabinet, draw up the budget, dissolve parliament by calling early elections, and pack the bureaucracy and the courts with political appointees. The office of prime minister will disappear.

The president's supporters say the new system will speed up decision-making, further reduce the army's ability to meddle in politics and make unstable parliamentary coalitions a thing of the past. His opponents say the constitution means Mr Erdogan no longer presides over a government, but a regime.

The only conceivable check on the president's powers, parliament, is now in the hands of his AK and its ally, the MHP, which took 11% of the vote, about twice as much as most polls had predicted. Mr Erdogan's party, of which he is absolute master, will ensure that whatever comes out of the president's mouth becomes law. The MHP and its septuagenarian leader, Devlet Bahceli, who went from calling Mr Erdogan a dictator to becoming one of his biggest cheerleaders, will pull him even further to the nationalist right.



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Mr Bahceli has made it clear he opposes any new overtures towards the Kurds and other minorities, and that he wants Mr Demirtas to stay behind bars. (The HDP leader has been under arrest since 2016 on vague terrorism charges, and fought his presidential campaign from a prison cell.) Two days after the election, the MHP called on Mr Erdogan to extend Turkey's state of emergency, which has been in place for almost two years, and which the president had promised to lift in the last days of his campaign. "Erdogan got his presidency, so he must feel very good," says Soli Ozel, a veteran Turkish commentator, "But he's now beholden to Bahceli."

Even if Mr Erdogan ends the state of emergency, there is little reason to think he will stop hounding opponents (tens of thousands have been jailed following a bloody attempted coup in 2016), muzzling the press (the number of journalists behind bars would be enough to staff a couple of newspapers) or picking fights with the West. When they first came to power in 2002, Mr Erdogan and AK partially kept their promise of more freedoms for all citizens, especially Kurds. But over the past decade, almost the only freedoms they have upheld are those of their conservative voters—striking down a law banning women who wore the Islamic veil from state universities and institutions, for instance.

With his new constitution, Mr Erdogan has laid the foundation for a system that in effect removes the secular elite, public institutions and parliament as the middlemen between the president and the people, says Karabekir Akkoyunlu, a Turkish scholar at São Paulo University. But the president may find that remaking society, using a mix of Islamism, nationalism and nostalgia for a vanished empire is harder than remaking the institutions.

The Turkey over which Mr Erdogan now presides remains bitterly divided. On one side there are conservative Muslims and nationalists, for whom he remains a symbol of prosperity, religious freedom and national pride. On the other stand secularists, liberals, and the Kurds of the south-east, who see him as a corrupt and repressive despot. Expecting him to heal divisions he has partly been responsible for creating is naive, argues Soner Cagaptay, the author of a recent book about Mr Erdogan. "He's not authoritarian because he is crazy, but because he is rational," he says. "Down the line, it's the only way for him to avoid losing power."

This article appeared in the Europe section of the print edition under the headline "Recep Tayyip the First"

Coalition of the practical

Emmanuel Macron leads a new effort on European defence

Salvaging something meaty out of European security's alphabet soup

Print edition | Europe Jun 28th 2018

WHEN Emmanuel Macron, the French president, gave his first big policy speech on Europe at the Sorbonne last September, it was so packed with ideas that many have long since been forgotten. On June 25th, however, one of them—a "European intervention initiative" (EI2)—was signed into being by nine European Union countries at a meeting of defence ministers in Luxembourg. The idea is both to prepare a coalition of willing countries for joint European action in crises, and to tie post-Brexit Britain into the continent's future military co-operation.

Mr Macron's idea was born out of French impatience with the EU's efforts at defence co-operation, known inelegantly as Permanent Structured Co-operation (PESCO). Fully 25 countries signed up last December to this arrangement, which commits members to developing joint defence capabilities. Germany has been keen on this mechanism, which keeps efforts at joint European defence within existing EU structures. Its critics, though, regard PESCO as a low-ambition pact that ropes in too many countries, including those with little interest in sending troops abroad, to be operationally useful. Britain, western Europe's only other muscular military power besides France, is not involved.

The EI2, by contrast, is a more exclusive club. It is not a force, nor a new institution, and will have no headquarters. In the words of one insider: "It doesn't look or sound French." Its members include Britain and Denmark, neither of which belong to PESCO but have an interventionist tradition, and countries such as Estonia, which now contributes to the French "Barkhane" anti-insurgency force in the Sahel. Germany is also on board. This club of the willing could prove a more nimble way of improving joint response to emergencies.

Its purpose, Mr Macron said last year, is to build a "common strategic culture", as part of a broader effort to "ensure Europe's autonomous operating capabilities, in complement to NATO." Officials say that, in practice, it is mostly about creating links between general staffs, and sharing training and planning exercises, in order to be readier to act together in crises. It has received the blessing of Jens Stoltenberg, NATO's secretary-general.

Mr Macron's chief concern has been to share the burden of rapid-reaction interventions. The French want other Europeans to join their efforts when common interests are at stake. When France unilaterally dispatched troops to beat back a jihadist incursion in Mali in 2013, it did get help, but mostly logistical. EU decision-making structures, say the French, are too ponderous to be useful when it comes to responding to such emergencies.

Not everybody has been keen. Angela Merkel, the German chancellor, had argued that EI2 should be part of PESCO, but signed up in the end after reassurances that Germany would not be obliged to take part in missions. A shared pragmatism seems to have prevailed. The EI2 will not transform Europe's defence co-operation. Yet it could prove to be a practical way of enhancing the efficiency of Europe's military rapid-reaction capability, at a time of growing concern about divisions in the Western alliance, and uncertainty about defence co-operation after Brexit.

This article appeared in the Europe section of the print edition under the headline "Coalition of the practical"

Panic attack

Confusion over immigration and crime is roiling European politics

The facts and the politics don't line up

Print edition | Europe Jun 30th 2018

AS MAYOR of the small Swedish town of Haparanda, Peter Waara has had his share of problems with refugees and with crime. The first refugees arrived in September 2015 ("the middle of moose-hunting season," Mr Waara recalls), when Haparanda, which sits on the Finnish border, was deluged by busloads of Syrians and Iraqis who thought Finland would welcome them. They were met by the Soldiers of Odin, a far-right group, who demonstrated to stop them at the border. Police had to be called in to protect the migrants. Today a few hundred refugees remain in Haparanda. The town's crime problem, however, mainly involves European drug-traffickers operating from Sweden.

Haparanda is typical: Europe's immigration problems and its crime problems are mostly unrelated. But they are inseparable in politics. In Sweden, where an election is due in September, the far-right Sweden Democrats blame immigrants for a recent spate of shootings. The party's leader, Jimmie Akesson, claims immigration has made Sweden a place where women are "gang-raped, mutilated and married off against their will". Polls show them in a virtual tie for second place with the centre-right Moderates, and only a few points behind the ruling Social Democrats.

Similar fears of immigrant crime have helped create a political crisis in Germany. The interior minister, Horst Seehofer, has threatened to end his Christian Social Union (CSU) party's alliance with Angela Merkel's Christian Democrats if the chancellor cannot by next week find a way to stop asylum-seekers from elsewhere in Europe coming into Germany. That could bring down her government. The CSU is trying to stem its losses to Alternative for Germany, an anti-immigrant party.

In Italy, Matteo Salvini, the interior minister and leader of the populist Northern League, calls migrants "lazy criminals". He has promised to deport up to 500,000 illegal immigrants and has closed Italy's ports to asylum-seekers rescued at sea. Italy's new prime minister, Giuseppe Conte, is demanding a permanent Europe-wide deal to share the refugee burden, ending the current system under which the first country where migrants arrive is responsible for processing their asylum applications.

All of this will come to a head at an EU summit in Brussels on June 28th-29th, where Mrs Merkel must try to cobble together a deal that can satisfy both Mr Seehofer and Mr Salvini. A pre-summit gathering the previous Sunday failed to make much progress. Some elements of a future European asylum system have broad support. Most countries back an idea to set up centres in safe countries outside the EU to review asylum applications. But it is unclear which non-European countries would be willing or able to host such centres. And it is hard to imagine the central European countries changing their minds on taking a share of asylum-seekers who are accepted. All are governed by anti-refugee parties. Last week Hungary began implementing a law which would make aiding migrants a crime.

The uproar over refugees comes at a time when their numbers have actually fallen dramatically. So far this year 42,845 migrants have crossed the Mediterranean to Europe, down by half from the same period last year and by over 80% since 2016. The fear of an immigrant-led crime wave, too, is belied by the evidence. When Donald Trump tweeted on June 19th that crime in Germany had risen by over 10% as a result of refugees, fact-checkers responded that overall crime had fallen by a tenth since 2016, to its lowest level since 1992.

Mr Trump may have been thinking of a study that found that violent crime in Lower Saxony rose by almost 10% from 2015 to 2016, and that 90% of the increase was due to refugees. But Christian Pfeiffer, a criminologist who co-authored the report, says data for 2017 sends the opposite message: the rate of violent crime fell by 6%. Many had blamed refugees for rising burglaries, which have in fact since fallen by a remarkable 30%. Mr Pfeiffer says they were probably the work of eastern European gangs.

Male refugees are committing fewer crimes as they move out of shelters, where fights break out. It also helps that the share of women among the migrants is rising. "The biggest factor in reducing violence is if the number of women goes up," says Mr Pfeiffer. "The young husbands suddenly care about their family."

In Italy, few attempts have been made to measure the criminal impact of immigration, but overall crime fell by 25% between 2007 and 2016. Sweden has seen a recent increase in violent crime, including a spate of attacks with shotguns and hand grenades. In mid-June, four men were shot dead in Malmo over a period of four days. But the violence is mainly between criminal gangs in specific neighbourhoods, says Jerzy Sarnecki, a Swedish criminologist. The gangs tend to have immigrant backgrounds, but reflect failed integration policies in past decades, rather than problems with the latest wave of refugees.

Still, whipping up fear of refugees and crime makes for successful politics. Even in the region around Haparanda, the Sweden Democrats are "stronger and stronger", Mr Waara admits. He says his Social Democrats will respond that at least a quarter of the town already has an immigrant background: Finnish. It may not work.

This article appeared in the Europe section of the print edition under the headline "Panic attack"

No-man's-land

Women-only clubs get a makeover

Unisex networking groups and co-working spaces help women get a leg-up

Print edition | Europe Jun 28th 2018

MOST Finns celebrate the summer solstice with a long night of sweaty sauna sessions and binge-drinking. But this year, on an island off the coast of Raseborg, an hour-and-a-half's drive from the capital Helsinki, a group of women from around the world gathered for the opening of a private island resort to cleanse their bodies and minds of toxins—including, it seems, the patriarchy. "SuperShe Island" is a place for ambitious women to network while experiencing a "vacation on steroids", says Kristina Roth, the resort's German-American founder. Men are strictly banned.

The island resort is just one of a crop of new women-only spaces hoping to bring a sea-change in the way women network. The Allbright, a new club in London, focuses on creating business networks for working women. An American firm called The Wing is an all-female co-working space, and plans to open a London branch later this year. Her Global Network, originally from Sweden, helps women find business contacts in 14 cities around the world.

In the #MeToo era, it is little wonder that many women are seeking the equivalent of influential men's clubs. In the EU women earned 16% less than men in 2016, according to Eurostat. Female entrepreneurs tend to have smaller networks than their male counterparts, mainly consisting of family and friends. Women only represent a third of all entrepreneurs in the EU and are half as likely to be self-employed as men.

Women-only clubs are not a new concept. They existed in London as early as 1860. Today's gentlewomen's clubs, unlike their male counterparts, feature Instagram-friendly interiors, and mindfulness classes. The Wing has a lactation room. At SuperShe, women can fly in on a private helicopter from Helsinki, skinny-dip in the Baltic Sea and dine off a low-cal menu.

Like their male counterparts, these women's clubs have not escaped criticism. The Finnish equality ombudsman investigated SuperShe for discrimination. The project was given the all-clear on the grounds that to achieve its goal of female empowerment, women had to feel comfortable on the island. The Wing, however, is still facing a similar investigation in New York.

This article appeared in the Europe section of the print edition under the headline "No-man's-land"

Back to work

Russia will raise pension ages that date back to Stalin

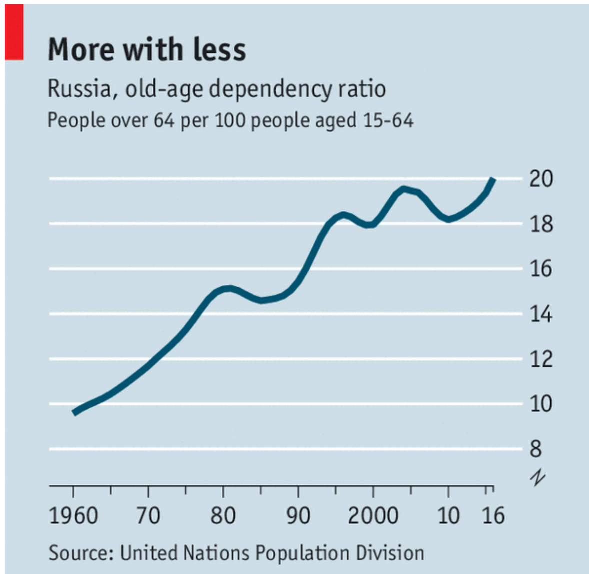
People are not happy, but protests are likely to be muted

Print edition | Europe Jun 30th 2018

WHEN the Soviet Union started paying pensions in the early years of Josef Stalin's rule, the retirement age was set at 60 for men and 55 for women. It has not been raised since. Experts have urged change for decades, but squeamish politicians have balked. Vladimir Putin declared in 2005 that it would not go up as long as he was president.

So it was with trepidation on June 14th, a month into Mr Putin's fourth presidential term, that the government revealed plans to raise the retirement age to 65 for men and 63 for women. They announced the move along with an increase in value-added tax from 18% to 20%, hoping to bury the bad news under the opening of the World Cup that day.

Yet Russians have taken notice. Some 2.5m have signed an online petition opposing the change; according to a government pollster, Mr Putin's approval ratings dropped to "only" 72% on June 17th, levels not seen since before the annexation of Crimea. "They want to solve the government's money problems at the expense of the people," gripes Alexander Serukhin, a 55-year-old engineer in Pskov. Alexei Navalny, the country's leading opposition politician, has called for demonstrations on July 1st, and labelled the government's decision "robbery".



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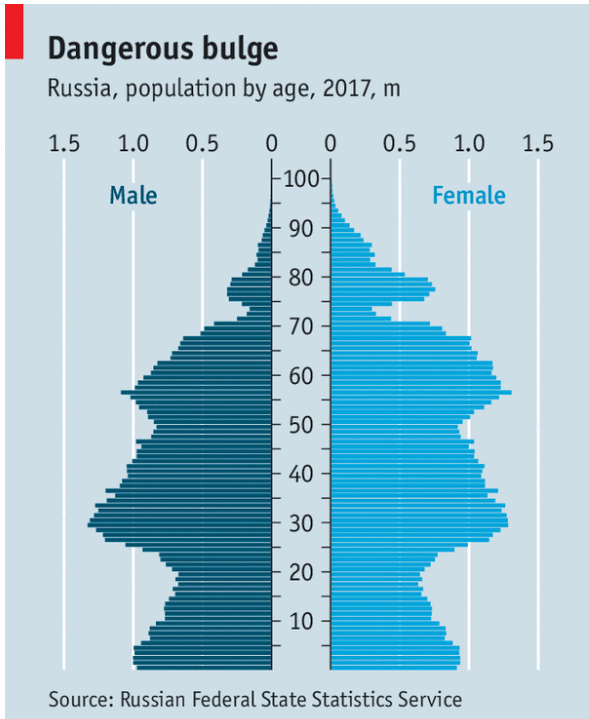
The Kremlin's move does not signal a newfound openness to structural reform. Instead, it reflects overdue necessity. Russia's pension problems begin, as in much of the world, with an ageing population that is now once again living ever longer. Raising the retirement age was suggested in Mr Putin's first economic strategy in 2000. Putting off the move has compounded the problems. Russia's retirement age is lower than in any of the OECD countries; among former Soviet republics, only Russia and Uzbekistan have not raised it since the USSR collapsed. Unhelpful demographic trends exert additional pressure, with a small generation born during Russia's turbulent 1990s now entering the workforce and having to help pay for a large post-war generation reaching retirement age.

The increase, which will be phased in over ten years for men and 16 years for women, should significantly reduce the burden on the federal budget and allow for higher pensions to be paid. The pension fund currently sucks up subsidies worth about 2.5% of GDP. A study by a government think-tank estimates that without changes, the number of pensioners would grow from 40m today to 42.5m in 2035, exceeding the number of workers paying into the system. The proposed changes will see the number of pensioners instead shrink to 35m by 2035.

The government has promised that monthly pensions will go up by 1,000 roubles ($15) in 2019; officials say they could amount to 40% of salaries down the road. Yet many people remain sceptical of such promises, especially after the government wriggled its way out of mandated indexation by turning to one-time payments in recent years when inflation was high. Any increase in future pension payouts will depend on how the government divides the new savings between the federal budget and the pension system.

Several other problems remain unresolved. First, large swathes of citizens eligible for early pensions have been left untouched, in particular those working in hazardous conditions, such as miners and members of the military and security services. Second, the government has not dealt with the country's outsize informal sector and the millions of workers who do not pay into the pension system at all. Crucially, the proposed changes do nothing to stimulate Russia's underdeveloped alternatives to its main pay-as-you-go pension system, the result of a widespread distrust of pension funds and cash savings.



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Whether the age rise will improve the lot of average people remains to be seen. With the change beginning in 2019, many will have little time to plan. Those caught in the transition may encounter trouble staying employed: job-retraining programmes are underdeveloped and age discrimination in hiring is widespread.

Mass protests followed the last major changes to the pension system in 2005, when the government turned a raft of benefits for pensioners into cash payments that for many did not nearly add up to the lost entitlements. Yet sustained unrest this time is unlikely. The middle-aged workers who are most affected tend to be passive and risk-averse.

The Kremlin has also been careful to distance Mr Putin from the plans, placing the blame instead on Dmitry Medvedev, the prime minister. This may leave the president room to play the saviour, perhaps by introducing an amendment softening the proposal. Regardless, the move is certain to deepen distrust of the authorities. For many, like Alexander Mikhalev, who makes watersports goods in Perm, where male life-expectancy is just 63 years, it is a sign that he can rely only on himself. “I’ll work as long as my health allows it,” he says. “I don’t expect any gifts from fate, and what’s more not from the state.”

This article appeared in the Europe section of the print edition under the headline ”Back to work”

Charlemagne

The obstacles on Macedonia's road to the EU

Macedonia's reformers swallowed a difficult deal with Greece. Now they need Europe's help

Print edition | Europe Jun 30th 2018

SOLZA GRCEVA's face curdles into a sneer as she traces the betrayal of her nation. Over coffee in Skopje, the capital of the country that may soon no longer officially be known as the Former Yugoslav Republic of Macedonia, Ms Grceva outlines her grievances. The government's "illegal" agreement with Greece last month to rebrand the country North Macedonia, she says, was a "gesture of weakness and capitulation". What Macedonians call themselves will now be judged in Athens, forging an "Orwellian" state. Ms Grceva, a former MP now running a new centrist party, is far from alone in her anger. When your columnist asks for the bill, it turns out to have been settled by a sympathetic eavesdropper.

The name issue is one of the sillier disputes in a region hardly lacking them. The Greeks believe that plain "Macedonia" implies a claim on their northern regions of the same name; a suggestion the (ex-Yugoslav) Macedonians consider offensive and absurd. To say that passions run deep on this is like saying Brazilians have a passing interest in football. Merely to discuss it is to enter a dizzyingly Balkan blend of history, geography, linguistics, psychology, archaeology and even musicology. After 27 years of this row, it was heartening that Zoran Zaev and Alexis Tsipras, respectively the Macedonian and Greek prime ministers, were able to find a mutually acceptable formula. But the deal has sparked violent nationalist protests and political upheaval in both countries. Its passage into law is assured in neither.

Greek vetoes have long kept Macedonia out of NATO and the European Union. Their lifting means an offer to join NATO should be forthcoming at the club's summit in mid-July. But the real prize remains further out of reach. This week, after a tortuous ten-hour debate, the EU's governments agreed to offer Macedonia (and Albania) a faint green light, proposing a start to membership talks in June 2019 if judicial and other reforms are carried out. It was better than some had feared, but after the Greek deal some Macedonians had dared to hope for more encouraging language, with fewer conditions and a quicker start to talks. "Our drive towards European democracy could have been more openly embraced," says Nikola Dimitrov, Macedonia's foreign minister.

If there is frustration, it is because tiny Macedonia offers a rare good-news story in the Balkans. For years it was run into the ground by a rotten regime that intimidated opponents, hollowed out the state and populated Skopje with kitsch statues of Alexander the Great simply to annoy the Greeks. It took a political crisis, culminating in nationalists storming parliament and beating up MPs, including Mr Zaev, in April 2017, to bring decisive change. Mr Zaev's government, which took office soon afterwards, has started well, soothing quarrels with neighbours and beginning reforms. Relations between Macedonians and the large Albanian minority, once close to war, are smoother than ever. Yet corruption and clientelism remain rife, and the history of Mr Zaev's Social Democrats is less than spotless. The government's reformers need the anchor of EU accession talks, says Mr Dimitrov.

This is where a thoughtful EU would step in. In the autumn Mr Zaev must win a referendum on his name deal. That should be enough to convince the parliament to make the relevant constitutional changes. Yet without a better prospect of EU talks Mr Zaev is exposed to charges from Ms Grceva and her allies that Macedonia has humiliated itself for nothing. If the opposition parties all urge a boycott, the referendum may struggle to reach the required 50% turnout. Mr Zaev has vowed to resign if that happens.

So why the European reluctance to help? Corruption and regional rows have hardly helped the case of the Balkan states. But they have also fallen victim to the EU's fatigue with earlier enlargement. Look at Poland and Hungary, say sceptics, steadily dismantling the rule of law from inside the club. Turkey began membership talks in 2005, and has only turned more illiberal since.

The counterargument is that the Macedonians threw off an authoritarian regime, solved what seemed like an impossible regional dispute and now deserve European help to bury the past. Other powers are sniffing around: Turkey is funding mosques and civil society, and Russian flags have been flown at recent protests. Full EU membership is perhaps a decade away. But simply starting talks could reassure investors, blunt the arguments of nationalists and help convince young Macedonians, who have quit the country in droves, that there is a future at home.

Tidying Europe's courtyard

The debate highlights Europe's conflicted approach to its Balkan courtyard. The strongest opposition to opening membership talks came from Emmanuel Macron, France's president, along with the Dutch. Mr Macron says the EU must reform before growing. But such opponents of enlargement are just "wetting their pants", fearing that the prospect of migration from the Balkans will be a gift to populists, says an irritated Eurocrat; so much for Mr Macron's grand ideas for a Europe that lives up to its potential.

Germany takes the opposite tack, seeing Balkan expansion as a strategic necessity. It is not an outlandish view. Macedonian officials have taken to comparing their detente with Greece to the post-war Franco-German reconciliation, conducted through and for Europe. If that is overblown, fixing one Balkan problem does at least make the others more visible, notes Florian Bieber, an expert on the region. Hashim Thaci, Kosovo's president, says the next step could include the talks between his country and Serbia—a dispute over people and borders that retains the potential for violence.

If the notion that enlargement can solve as well as create problems seems eccentric in parts of Europe, Macedonia's reformers offer a corrective. This week may not have delivered the warm welcome they sought from the EU, but Mr Dimitrov is hopeful. "The bigger the obstacles," he says, "the grander the success."

This article appeared in the Europe section of the print edition under the headline "A Balkan opening"

Business and politics
Hard Brexit unravels

Business and politics

Hard Brexit is unravelling

Amid a row between business leaders and Tory hardliners, a softer Brexit gains political ground

Print edition | Britain Jun 28th 2018

Luca D'Urbino

WITH a Tory government in power, business ought to be content. Yet it is crotchety. In Theresa May's first year in office, many businessfolk complained they were not getting a hearing. Access to the prime minister has improved since she lost her majority in last year's election, but plenty say they are still not listened to.

This is especially true when it comes to Brexit, their biggest concern. Most recently the five biggest business lobbies joined forces to warn that slow progress in the talks in Brussels was forcing firms to plan for a worst-case outcome, losing the benefits of a transitional period after Britain leaves the European Union next March. Their letter followed a statement from Airbus that it might pull out of Britain in the event of a no-deal Brexit. Carmakers piled in, with BMW and Honda warning that leaving the EU's customs union and single market would disrupt supply chains. A counter-blast from Brexiteers was notable for its dearth of business support.

Yet the response from some was still a raspberry. Jeremy Hunt, the health secretary, called Airbus's statement "inappropriate". Boris Johnson, the foreign secretary, reportedly said, "Fuck business," a comment he barely softened by later suggesting his target was corporate lobbyists, not business itself. With open cabinet warfare over fiscal policy as well as Brexit, and Labour under far-left control, many companies feel no party now speaks for them.

The truth is more subtle. Business lobbying, especially over Brexit, is having an impact. Mrs May slapped down her ministers by insisting companies had every right to speak out. Greg Clark, the business secretary, and Philip Hammond, the chancellor (whose Treasury was dubbed the "beating heart of Remain" by Mr Johnson), are listening. Pressure from business groups to preserve frictionless trade by staying in a customs union is proving effective.

For it is becoming plain that hard Brexiteers in the cabinet are losing the fight. The logic of the "backstop" that Mrs May has accepted to avert a hard border in Ireland is that Britain will stay in a customs union and in regulatory alignment with the EU even after the transitional period that is meant to end in December 2020. Brussels knows this. EU leaders, who met for a summit on June 28th-29th, have been critical of Mrs May's delay in setting out what she wants from Brexit. But their willingness to give her more time reflects the perception that she is softening her position.

On July 6th Mrs May will call her cabinet to Chequers, the prime minister's country house, to thrash out the final details of a Brexit white paper due to be published on July 9th. Drafts are circulating around Whitehall. Insiders say its main proposal is likely to be in effect to remain in the EU's single market for goods, but not for services. Combined with a customs union, this is sometimes known as the "Jersey" or "Isle of Man" option, as it is broadly the position of these islands today.

To placate Tory hardliners, the white paper may try to present the plan as a temporary one. That might keep alive the theoretical dream of regulatory divergence at an unspecified future date, as well as that of the "maximum facilitation" option that uses unspecified technology, not a customs union, to avoid border controls on the island of Ireland. Yet business leaders who recall the French aphorism that nothing lasts like the provisional will be reassured by the white paper.

Hard Brexiteers, however, will not be. In a nod to a recent cover of this newspaper, Mr Johnson has vociferously attacked what he calls a "bog-roll" Brexit that is "soft, yielding and seemingly infinitely long". Several ministers believe the Jersey option crosses too many of Mrs May's red lines. That it will not cover services, which make up 80% of Britain's economy, worries some. Systems of mutual recognition or regulatory equivalence will not give service providers the same access to EU markets. And being in a single market for goods and a customs union will make it far harder to do trade deals with third countries.

Charles Grant of the Centre for European Reform, a think-tank, expects these considerations to trigger ministerial resignations this summer. Mr Johnson, who was this week ridiculed even by fellow Tories for flying to Afghanistan to avoid a vote on Heathrow airport (see article), may quit, now that his leadership hopes are going down the pan. So might Liam Fox, the trade secretary. Yet Mr Grant also notes the irony that, although losing hardliners like these may please Brussels, the EU is still likely to say no to Mrs May's softer Brexit plans.

The sticking-point is free movement of labour. EU negotiators say letting Britain stay in the single market for goods without free movement would be unacceptable cherry-picking. Some of them think Mrs May can be pushed into further concessions, including big payments into the EU budget. They may be wrong. Mrs May's political ability openly to breach her Brexit red lines must be limited.

Moreover, some in the EU see attractions in a goods-only option. An official in Berlin says that German businesses, keen to keep selling into the British market, would welcome it. Free movement can be blurred at the edges, as other countries have managed. A compromise could thus be found. And it would be hard Brexiteers, not businesspeople, in a four-letter fix.

This article appeared in the Britain section of the print edition under the headline "Hard Brexit unravels"

Problem in the air

Heathrow's third runway could be blown off course by pollution

Emissions may breach the government's clean-air targets

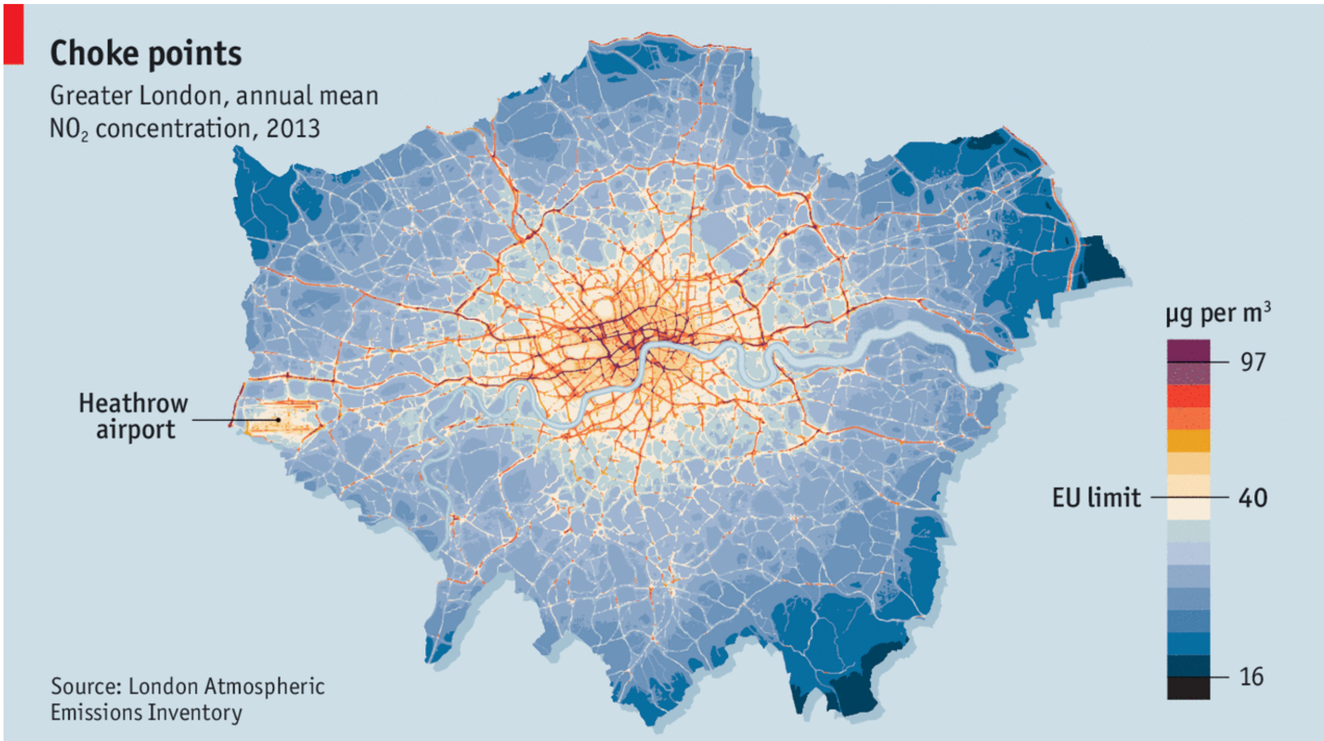
Print edition | Britain Jun 28th 2018

ON JANUARY 10th 1946 the cabinet approved plans for a third runway at Heathrow airport, west of London. Some 72 years later, and after more than a dozen commissions, reports and white papers on where to put it, the third runway remains unbuilt. The project moved a step closer on June 25th, when Parliament voted by 415 to 119 to build a new runway to the north-west of Heathrow. But a big problem could delay it still further: air pollution.

This topic matters, as the issue of emissions resulted in the High Court overturning a previous decision to build a third runway in 2010. In response to this week's vote, four west London councils, the city's mayor and Greenpeace, an environmental group, said they would apply for judicial review within six weeks. Ray Puddifoot, the leader of Hillingdon council, where the airport is located, thinks their case is even stronger than in 2010. "I've got no doubt that we will succeed," he says.

The first issue is carbon emissions. Britain has a target to cut these by 80% from 1990 levels by 2050. To be on course to meet this goal, the Committee on Climate Change, an independent advisory body, says that Britain's aviation sector needs to cap its emissions at 37.5m tonnes of the gas a year. But with an expanded Heathrow, it could produce over 40m by the 2030s. And the north-western site for the new runway will produce more carbon emissions than two alternative sites that were considered.

The second problem is emissions of harmful nitrogen oxides and particulates from vehicles. Heathrow is already the most polluted area of London outside the centre (see map). Nitrogen dioxide levels are rising and several spots near Heathrow already break the EU's limits for the gas.



Economist.com

The airport (whose chairman, Paul Deighton, is also on the board of The Economist Group) has been slashing its own emissions, for instance by charging gassier planes more to land. But it is not on the airport site itself but at nearby major roads that EU limits are being broken, by people driving to and from it. Heathrow wants to raise the share of its passengers using public transport from 39% to 50% by 2030, by using congestion charging on local roads. But the airport lacks the power to impose such a scheme. It may also annoy locals if drivers clogged up backstreets while seeking to avoid charges on main roads.

Matthew Coogan, a transport expert, says people might be nudged out of their cars if the airport moved its car parks and drop-off areas far from the terminals, and made life easier for those arriving by train. Heathrow must hope such explanations of how it could meet its targets hold water in court. Otherwise it may be decades more before London gets its new runway.

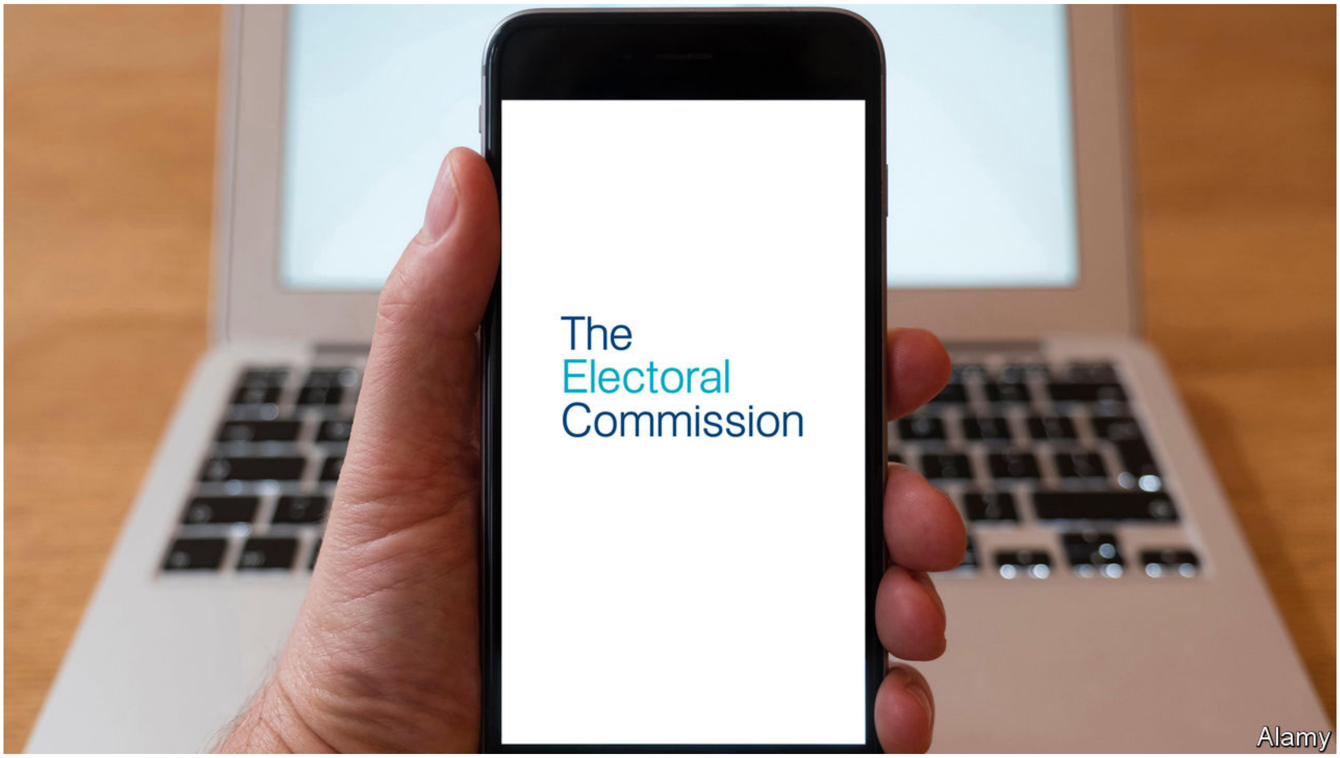
This article appeared in the Britain section of the print edition under the headline "Problem in the air"

Barks and bites

Britain's election watchdog barks at digital campaign methods

The Electoral Commission calls on internet companies to keep databases of election ads

Print edition | Britain Jun 30th 2018



THE internet has lost its democratic lustre. Lauded as a force for change during the Arab Spring in 2010, its reputation has since been sunk by a wave of populism in the West. In a report this week Britain's election watchdog warned that the rise of digital tools in political campaigning had created an "atmosphere of mistrust", and called upon the government and social media companies to fix it.

In its report, the Electoral Commission called for the first time for all social media companies that run election adverts in Britain to create open databases of those adverts. Such databases would have a big impact if widely adopted, helping to catch any messaging that was not formally declared but co-ordinated.

The commission repeated its recommendation that digital campaigning materials should include an imprint which identifies the organisation behind it, which would help the commission to track campaign activity across the web and enforce spending rules.

It also advocated closing a loophole which means that money spent on hiring staff does not count towards a campaign's spending limits. Since posting on social media is free, and staffing costs need not be declared, this offers campaigns a channel through which to send unlimited messages to voters. In addition, the commission requested the power to levy larger fines, saying that the current cap of £20,000 ($26,000) per offence risked becoming a mere cost of doing business for rule-breaking campaigns—particularly in referendums, in which campaigners may worry less about their future reputations.

Some reactions to the report were overblown. The commission did not warn that democracy was under threat from the internet. It praised the positives of online campaigning, stating that new ways of reaching voters are good for everyone. But it did say that changes to digital campaign rules were needed to restore public confidence in the democratic process.

It is up to the government to make those changes. Politicians have little incentive to fiddle with the system that brought them to power. But public disquiet over the growing number of allegations of foul play in the Brexit referendum may provide some fuel. Russian trolls may not have swung the result, but anger over the suggestion that they tried could yet be enough to force change on a bad system.

This article appeared in the Britain section of the print edition under the headline "Of barks and bites"

It's all Greek to them

Why Labour is obsessed with Greek politics

A preoccupation with Hellenic politics once helped Labour. Now it may be a hindrance

Print edition | Britain Jun 30th 2018

GREEK words loom large in politics, although some are better-known than others. Most people recognise the term "democracy". "Politics" itself has Greek origins. Fewer people would be familiar with "Pasokification"—unless they are a member of the Labour Party.

Pasok, a struggling centre-left party from Greece, is surprisingly prominent in the minds of Labour activists. Where once the Greek party commanded the support of 44% of voters, a stint in government overseeing brutal spending cuts saw this figure dribble to 5% by 2015. Naturally, Labour wants to avoid this fate, dubbed Pasokification. So the Greek party has become a cautionary tale cited by Labour activists urging their leaders to maintain opposition to Tory austerity. Fear of the Pasokification of Labour boosted the far-left Jeremy Corbyn during his successful tilt at the Labour leadership in 2015, recall those who worked on his campaign.

It was another Greek party that Mr Corbyn's supporters wanted to emulate. Syriza, the radical left-wing party with a charismatic leader, Alexis Tsipras, promised to roll back austerity in the Aegean, while successfully navigating complicated bail-out negotiations in Brussels. Across Europe, centre-left parties had gone the way of Pasok, with voters deserting them, often for the far-right. For Corbynistas, Syriza provided a rare blueprint for a successful left-wing party when it was elected in 2015.

Three years on, however, Syriza now serves as another warning to some on the left. The parable of Mr Tsipras's eventual capitulation—his radical government brought to heel by capital markets and an intransigent European Union—is seeping into the left's consciousness. Support for the Syriza government has dwindled in Greece. Former members accuse the leadership of treachery. "The left loves a good betrayal," says Joe Guinan, a fellow at the Democracy Collaborative, an American think-tank. After Labour's better-than-expected result in last year's general election, fears of Pasokification have been placated. Now some Labour activists wonder if, in office, it could fall victim to Syrizification.

In front of some audiences, John McDonnell, the shadow chancellor, implies that he would not capitulate to the forces of capital without a scrap. Speaking to activists last year, he casually mentioned that Labour had been "war-gaming" events such as a run on the pound, in the event that the party made it to Downing Street. "It tries to answer the question about what happens when or if they [the establishment] come for us," he said (incidentally while on a panel with a Syriza MP).

Yet Mr McDonnell has also shown a willingness to bend his views, launching a charm offensive in the City. One proposal discussed this month by Labour bigwigs involves souping up the Bank of England, giving it a target to boost productivity and allowing it to comment on fiscal policy. Empowering technocrats jars with other parts of Labour's economic programme, which aims to "democratise" the economy.

The party leadership seems willing to compromise for a shot at power. But fears of Syrizification, when a left-wing party surrenders its radicalism, means some Labour activists may be unwilling to do so.

This article appeared in the Britain section of the print edition under the headline "It's all Greek to them"

Buzzing and blooming

London’s rooftop gardens are a breath of fresh air

Gardens thrive and hives hum above the capital’s polluted streets

Print edition | Britain Jun 28th 2018

SHOULD weary hacks trudging at the end of the day from *The Economist*’s office to Charing Cross station raise their heads, they may raise their spirits, too. Across the Strand, four storeys up, is a band of greenery, becoming lusher as the year progresses. On the roof of Coutts, the posh, private-banking arm of the state-owned Royal Bank of Scotland (of which the queen is said to be a customer), Peter Fiori, the head chef, oversees a thriving garden, home to a host of plants and three beehives.

“We have four microclimates,” Mr Fiori says, as he walks along the thin strip between the troughs in which the produce grows, stopping to pluck a herb, crush it and invite you to smell it, or to pop it into your mouth. Warmth from the roof on the south side, he says, adds several degrees to the temperature. Thus above one of London’s busiest streets guavas, pepino melons and finger limes, plus all manner of berries and wasabi, a pungent-rooted Japanese plant notoriously fussy about its surroundings, are grown for client lunches and dinners. The garden was built by Mr Fiori’s late friend, Richard Vine, with help from The Clink, a charity for prisoners.

Coutts is not alone. Several other local rooftops in central London—including those of the Canadian High Commission, the London School of Economics, the National Gallery and the Savoy hotel—boast rooftop gardens or hives. Late last year the Northbank Business Improvement District, which among other things aims to improve air quality and promote biodiversity in the area around the Strand, was named one of five “business low-emissions neighbourhoods”, sharing in a £1m ($1.3m) fund. Local air quality is among the poorest in the capital.

London has more than 5,000 hives, says Natalie Cotton of the London Beekeepers Association, ten times the density of the rest of the country, although how many are on roofs isn’t known. Ms Cotton says that keeping bees on top of buildings isn’t always practical anyway. A full “super”—the part of a hive where honey is made—weighs more than 20kg, so takes some lifting; and bees expend a lot of energy to get to hives more than a few storeys up.

Many of London’s 140 bee species are struggling, says Ms Cotton, because of a loss of suitable forage in gardens and elsewhere. On the roof of Coutts, Mr Fiori is doing his bit, planting bee-friendly plants such as mint, lavender, sage and chives. “It’s important to give something back,” he says. What goes around comes around: last year Coutts’ hives yielded 12kg of honey. A jar is thought to have found its way to Buckingham Palace, a mile away as the bee flies.

This article appeared in the Britain section of the print edition under the headline ”Buzzing and blooming”

The good, the dumb and the desperate

Britain's outsourcing model, copied around the world, is in trouble

High-profile fiascos and dwindling cost-savings are making many question whether the idea has run out of steam

Print edition | Britain Jun 28th 2018

STEERING Britain's new aircraft-carrier into its home base at Portsmouth is a delicate business. There is little room to spare at the mouth of the base, so the 65,000-tonne behemoth, *HMS Queen Elizabeth*, is nudged along by a specially commissioned tug, *SD Tempest*. Despite the sensitivity of the task, this is not a Royal Navy vessel. The tug was built and is operated by Serco, a private company, which also tows the country's nuclear submarines out to sea from their base at Faslane.

This is testimony to the range of work that Britain's outsourcing companies do for the government, from serving school meals to serving up Armageddon. Serco also runs six prisons, an immigration removal centre and the sleeper-train from London to Scotland, among other things. So big has the sector become that government spending on outsourcing now accounts for about 11% of GDP.

With size has come controversy, particularly since the collapse of Carillion, a big outsourcer, in January. The repercussions of that company's demise are still being felt; its myriad subcontractors are thought to be £2bn ($2.6bn) out of pocket. Almost all the big outsourcers have seen their share price tumble in the past year, with a spate of profit warnings. In April Capita reported an annual loss of £513m, while Interserve reported a loss of £244m.

These commercial crises follow a slew of fiascos. Everyone has their favourite outsourcing blunder. G4S won the contract to provide security for the Olympic games in London in 2012, but failed to rustle up enough personnel, so 3,500 troops had to be deployed just before the opening ceremony. G4S was the culprit again, together with Serco, when in 2014 the two companies were found to have overcharged for the electronic tagging of offenders on parole, some of whom had already died. Last year the government had to bail out the 21 private companies set up to administer the probation service, to the tune of £342m. Only two of the companies had met their targets to reduce recidivism.

Consequently, the outsourcing model is under fire as never before. Jeremy Corbyn's Labour Party has seized on the woes of Carillion and others to argue that "rip-off" private companies should not be allowed to "fleece" the public. Labour's hostility dates back to the 1980s, when Margaret Thatcher developed "compulsory competitive tendering" as both a way to save money and a means to break the power of the public-sector unions (and with them the Labour Party). Although Labour became an enthusiastic outsourcer under Tony Blair in the 1990s, Mr Corbyn now promises to "take back control of public services". On June 25th Labour promised that, if elected, it would re-examine all outsourced defence contracts.

Dismantling the outsourcing model would represent a revolution, as outsourcing has come to occupy a central position in how the state works—and not just in Britain. Since the 1980s Britain's big idea has been exported around the world. Outsourcing now accounts for 6% of GDP in America, 11% in France and 16% in the Netherlands. Is it now failing in the country that invented it—and if so, can it be fixed?

Promises, promises

There are three broad areas of outsourcing, says Nick Davies of the Institute for Government think-tank: goods, works and services. Goods, such as hospital beds, are uncontroversial; no one thinks the government should manufacture them itself. Works means chiefly the construction of schools, prisons, roads and the like. This, too, has long been done by private firms, but since the 1990s companies have taken on more responsibility for their financing, via the Private Finance Initiative. PFI contracts run for up to 30 years, during which time the government repays a firm that stumps up the cash for the project.

Services covers everything else, from organising councils' payrolls to cleaning hospitals. Operating trains also comes under this heading, as the government owns the physical infrastructure (the track and signals) but leaves the train service itself to competing private companies. Privatisation is different, as it involves an asset (such as British Airways) being transferred from the state to the private sector.

Outsourcing is supposed to deliver several benefits. Transferring work from the public sector to better-managed private businesses should reduce costs and improve quality, its proponents argue. On the costs front, outsourcers have often managed to save the taxpayer money by trimming payrolls. For example, National Savings & Investments, a state-owned bank, contracted out the entire operation of its organisation in 1999 to Siemens Business Services. The company took on 4,200 NS&I staff, which it reduced to fewer than 1,700, including 480 in India. In other cases private companies have saved money by innovating. The Forth Valley Royal Hospital, run by Serco, was the first in Britain to use automated guided vehicles to move laundry and waste around in the basement, saving about 40 menial jobs. In 2000 a survey of evidence from around the world, by Graeme Hodge of Monash University, found that outsourcing had resulted in an overall saving in government expenditure of between 6 and 12%.

But the savings to be had from outsourcing have decreased over time. A recent paper by a group of researchers from Denmark estimates that the average cost savings from private contracting across several countries fell from 8.5% in 2004 to just 0.4% in 2014. One reason is that over the past couple of decades, successive private contractors have cut nearly all the fat off the public services they operate.

Another reason is a dramatic improvement in the efficiency of public providers, spurred on by competition from the private sector. Profound changes in political culture since the 1980s have helped, in particular the weakening of the once-powerful trade unions. Richard Watts, the leader of Islington Council, once a byword for loony-leftism, argues that over the past decade or so "councils have significantly overtaken the outsourcers in management competence." The decline in unions' power meant that Islington could drive a harder bargain with workers when it ended the outsourcing of rubbish collection in 2012, bringing it back in house and saving £3m a year. Michael Guy, the director of Kilmarnock prison, run by Serco, concedes that the latest public prisons will be as good as his own. "Public service has caught up and sometimes overtaken us," he agrees.

Furthermore, PFI contracts, the first of which were signed in 1992, have turned out to be costlier than they looked. Although PFI lets the government keep big projects off its books, prettifying the public finances, in the long run the costs add up. In January the National Audit Office (NAO), a spending watchdog, found that "overall cash spending on PFI and PF2 projects is higher than publicly financed alternatives," mainly because the rate at which private contractors borrow is higher than the rate at which government can borrow. The NAO's analysis of one group of schools found that those financed privately cost about 40% more than those financed by government borrowing. Little wonder that PFI has fallen out of favour with procurement departments. The use of PFI deals peaked in 2007-08, with over £8bn worth of new work. Now they amount to less than £1bn a year.

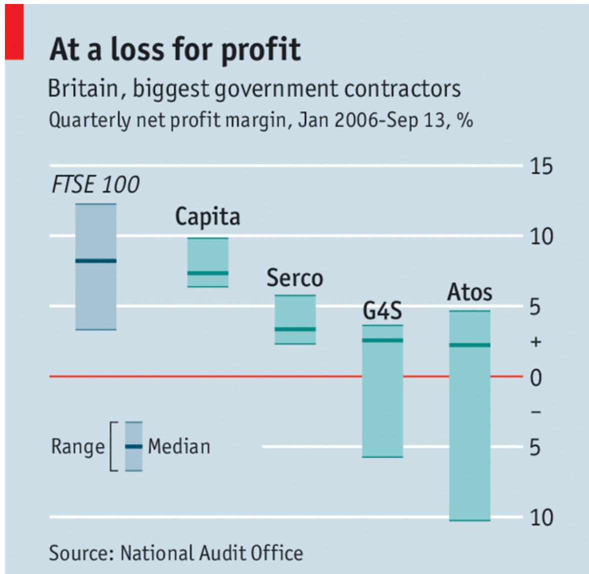
PFI in the sky

Evaluating whether outsourcing delivers higher-quality services is much harder. In cases where public services used to be particularly bad, contracting out has made a clear difference. Mr Watts says that in Islington, "we saw a basic improvement from a very bad set of services to an average set of services." A review of international evidence by Fredrik Andersson of Lund University and colleagues finds that, for services that are easy to contract out, like waste collection, outsourcing typically causes quality to improve or stay the same.

However, the review argues that for services with complicated performance standards the evidence is more mixed. Measuring a company's effectiveness at rubbish collection is one thing; assessing how it runs a jail, say, is far harder. The performance of Kilmarnock prison is judged by 42 indicators, none of which measures reoffending rates. In some industries, complex contracts have proved easy to game. The NAO politely observes that "we rarely see performance management measures ...working as intended".

A related problem is the rigidity of the contracts. Purchasers, such as councils, are locked into deals for years, giving them little flexibility to respond to external shocks, such as the slashing of their budgets under the Conservatives' austerity programme after 2010. Increasingly, councils have taken contracts back in-house to give them more control of their costs. This is as true of Tory-dominated councils, such as Cumbria and Bournemouth, which have brought housing services and road-building back under their control, as it is of the likes of Islington.

Judging the quality of outsourcing is made still harder by a lack of information. Contracts are rarely made public—due, it is claimed, to commercial confidentiality. Thus few comparisons can be made between what a contractor promised and what is delivered. The NAO argues that Britain lags behind G7 countries such as America on transparency.



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If outsourcing looks less good than it once did to the taxpayer, much the same is true for the outsourcing firms themselves. Since the onset of austerity, local and central government have driven ever-harder deals with their contractors. Tenders that were supposed to be judged on both price and quality have, it is generally acknowledged, come to be awarded to the lowest bidder. As a representative of Serco testified to a committee of MPs recently, "the British government is the most aggressive on contractual terms...and it does not hesitate to use its position as the only buyer in the market to insist on conditions which in other markets suppliers would simply refuse to accept." Though they are criticised for "ripping off" the taxpayer, outsourcers these days have lower margins than most FTSE 100 companies (see chart).

Fearing that austerity would slash the number of contracts on offer, outsourcers have engaged in a race to the bottom. Underbidding, known in the trade as "suicide bidding", has become common, as companies try to keep shareholders happy with the promise of new business. Outsourcers underbid in the hope that subsequent amendments to the contract—extra charges here and there—will eventually yield some profits. But often they don't. On June 26th Rory Stewart, a justice minister, told MPs that his department had learned "a real, real lesson" after signing a deal with Carillion that was too good to be true. "We did not get the deal that Carillion was proposing to give us, because it turned out that what Carillion was proposing to us was completely unsustainable," he said.

Austerity has had other perverse effects. To cut procurement costs, the government has preferred to negotiate single big contracts rather than lots of small ones. Outsourcers have thus bought up lots of smaller businesses, to cater for a wide range of functions. This has led to market concentration, undermining the principle of competition that outsourcing is supposed to introduce. In total, there are about 200,000 providers to government. Yet according to Tussell, a firm that analyses public procurement, last year about a quarter of the value of the 60,940 outsourcing contracts signed by the government went to just 29 big companies.

Some services are provided by only a handful of firms. Only Sodexo, Serco and G4S run prisons; only the latter two provide child custody. And although 27% of government procurement goes to small businesses, most of that goes via the big operators subcontracting their own work. The number of single-bid tenders more than quadrupled between 2012 and 2017. Reduced competition, it has been calculated, can lead to an increase in costs of 2-15%.

Contracting, expanding

It may be no tragedy that Carillion's shareholders lost their shirts, nor that other outsourcers are walking away from an industry they no longer find attractive. But as Rupert Soames, the head of Serco, has argued, "The objective of government procurement should not be to create a market in which the only bidders are the dumb or the desperate." Few bidders means bad deals. And clearing up the mess left by Carillion has already cost taxpayers £148m, as well as causing delays to the projects it left half-finished.

Given that part of the problem is a lack of competition, it would be a mistake to give the state back its monopolies, as Mr Corbyn suggests. Better for the government to award contracts with more emphasis on quality, rather than simply using them as a way to cut costs. Still, experience has shown that some public services are easier to outsource than others. One of outsourcing's most important effects has been to force public providers to up their game. If councils are now better able to run their own efficient services, that is a sign of the policy's success, not a failure.

This article appeared in the Britain section of the print edition under the headline "The good, the dumb and the desperate"

Bagehot

The three myths of the NHS

The National Health Service is a great institution. It is also the subject of fairy tales

Print edition | Britain Jun 28th 2018

THE National Health Service's 70th birthday is turning into an extravaganza. The government has given the service a £25bn ($33bn) present to mark the anniversary, which falls on July 5th. The BBC broadcasts daily encomiums to the wonders of free health care. Jeremy Corbyn, Labour's leader, wore a large badge celebrating the NHS's birthday at prime minister's question time.

The NHS is the most popular institution in the country. In a survey by Ipsos MORI last year, 77% of respondents believed that it should be maintained in its current form and 91% supported its founding principles, that health care should be free at the point of delivery and funded by general taxation.

It is so popular because it is more than just a public service. It is also an embodiment of British values at their best: compassion and decency; waiting in line rather than barging ahead; being part of a national community rather than a collection of self-seeking atoms. These values were central to Britain's conception of itself in 1948 when the Labour Party founded the NHS as part of its New Jerusalem. Many people cling fiercely to the health service today precisely because it is a reminder of a more egalitarian society and an antidote to our self-seeking times.

Walter Bagehot, the great 19th-century editor of *The Economist,* argued that the British constitution was divided into two branches: the dignified, which represents the nation in its symbolic form, and the efficient, which gets the work of the world done. The NHS is the most-loved British institution because it straddles this divide. It is dignified because it represents Britons' collective view of themselves as a decent bunch of people, and efficient because it treats more than 1m patients every 36 hours.

The fact that the NHS spans the dignified and efficient divide not only explains why its birthday is being celebrated with such enthusiasm. It also explains why so much of this enthusiasm is coupled with nonsense and exaggeration. It is hard to remember a time other than a royal wedding when so many commentators have uttered so many half-truths—or indeed non-truths—with such grave conviction. Three myths are particularly cloying.

The first is that Labour summoned up the NHS from thin air; that before 1948 the poor died in the streets but after 1948 they were suddenly equipped with new hips and false teeth. In fact, the government inherited a rich patchwork of charitable hospitals, school medical services and employer- and government-subsidised health care. The 1945-51 Labour government didn't build a single new hospital or add significantly to the number of doctors. Its achievement was to nationalise a patchwork system and make it free at the point of delivery.

The second is that the NHS is a unique embodiment of compassion. Aneurin Bevan, the health secretary who created it, sold the NHS as proof that, even as Britain was ceding global leadership to America and the Soviet Union, it was still a superpower in one vital area. “We now have the moral leadership of the world, and before many years we shall have people coming here as to a modern Mecca, learning from us in the 20th century as they learned from us in the 17th century,” he declared. But there was far more than morality at play. The service’s roots are in the “national efficiency movement” of the Edwardian era. The 1905-15 Liberal government introduced medical inspections for schoolchildren in 1907 and national health insurance in 1911, among other reforms, because, in Lloyd George’s words, “The white man’s burden had to be carried on strong backs.” After 1948 the NHS was part of a warfare-welfare state that spent 10% of GDP on defence and maintained a large conscript army because it worried that war with the Soviet Union was imminent.

The NHS does a middling job of turning compassion into care—certainly better than America, but worse than several continental countries that rely on compulsory insurance backstopped by the government. The Nuffield Trust, a health think-tank, points out that Britain has markedly fewer doctors and nurses per person than similar countries, and fewer CT scanners and MRI machines. It also has higher rates of mortality for problems such as cancer, heart attacks and strokes. On the positive side, it is excellent at providing long-term care and value for money.

The final myth is that the Conservative Party is perpetually bent on selling off the NHS to the highest bidder. There may be a few ideologues on the right who dream of replacing the health service with an insurance-based system or an American-style public-private mix. But they are outliers. Conservative right-wingers have shied away from acting on their principles. One of the first big boosts in NHS spending came in 1962 when Enoch Powell, an early champion of the free market, splashed out on 90 new and 134 refurbished hospitals. Mainstream Conservatives like the NHS because it gives the government a way of controlling health spending and ensuring value for money.

Easy on the champagne

It may seem a bit churlish to turn up to a birthday party and spit on the cake. Myths can serve a useful function in boosting morale, particularly when morale has been eroded by a decade of austerity. But the myths that surround the NHS have also done harm. They have given the Labour Party an excuse to demonise Conservative reforms as “backdoor privatisation” rather than subjecting them to serious criticism. They have discouraged the NHS from learning from other countries. They have made it impossible even to think about boosting NHS revenue by charging patients a nominal sum for visiting the doctor. They may even have allowed scandals to go uncovered because nobody can bring themselves to blow the whistle on saintly NHS workers. Britain is right to celebrate a service that provides all Britons with free health care at a reasonable cost. But they are wrong to treat the NHS as an object of awe rather than a human institution with all the imperfections that being human entails.

Award

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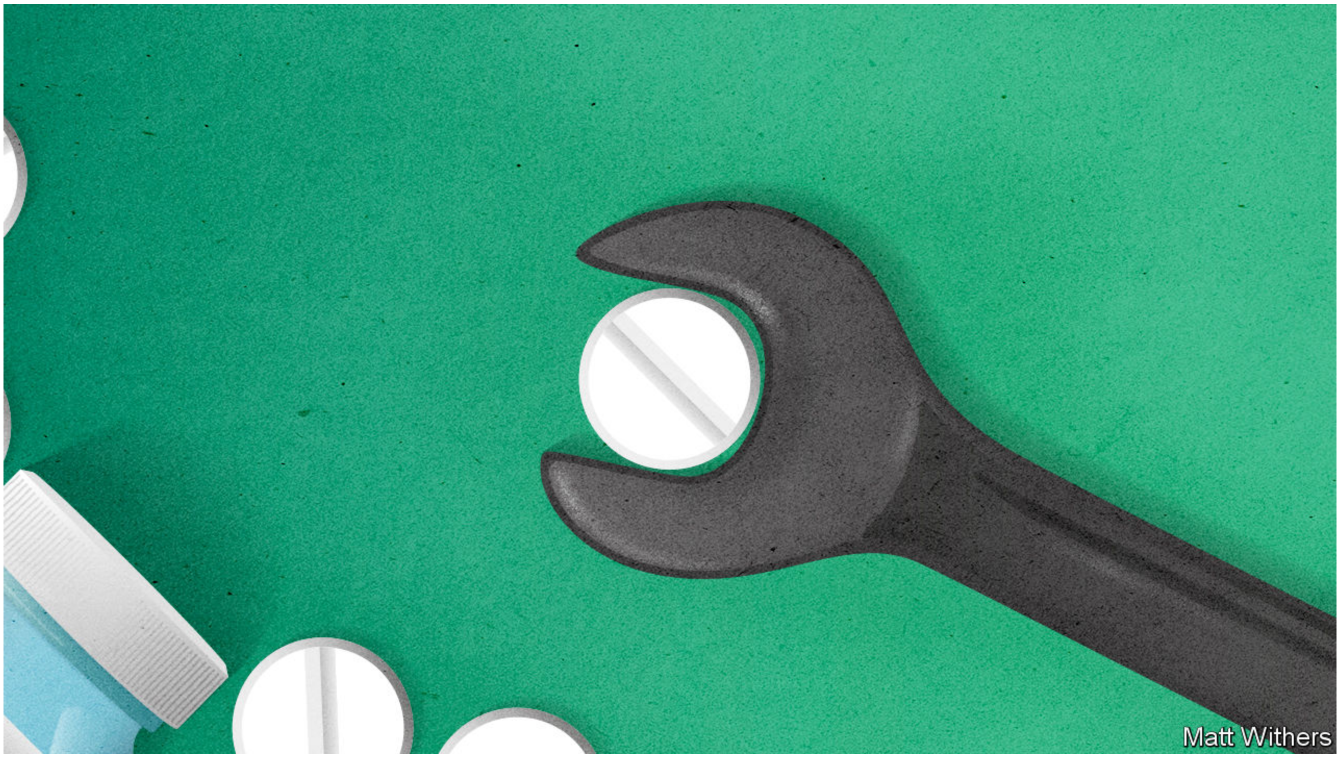
On June 20th, at the Medical Journalists' Association annual awards for health-care journalism, John McDermott, our global public-policy editor, and Natasha Loder, our health-care correspondent, both won prizes—for writing about trauma medicine and cancer, respectively.

Patient safety

Hospitals are learning from industry how to cut medical errors

Industry and behavioural science may both have things to teach doctors

Print edition | International Jun 28th 2018



AFTER a brain aneurysm in 2004, Mary McClinton was admitted to Virginia Mason Medical Centre in Seattle. Preparing for an x-ray, the 69-year-old was injected not, as she should have been, with a dye that highlights blood vessels, but with chlorhexidine, an antiseptic. Both are colourless liquids. The dye is harmless; the antiseptic proved lethal. After kidney failure, a stroke and two cardiac arrests McClinton died 19 days later.

In response, Virginia Mason committed itself to improving safety. It used an unlikely model: the Toyota Production System (TPS), the Japanese carmaker's "lean" manufacturing techniques. Nearly every part of the hospital, from radiology to recruitment, was analysed and standardised. Staff were trained to raise safety concerns. Today Virginia Mason prides itself on its safety record—and sells its take on Toyota to hospitals across the world.

Among its recent customers are five in England's National Health Service (NHS), including University Hospitals Coventry & Warwickshire. On a recent Thursday morning the hospital's patient-safety team began its daily meeting by reviewing errors reported overnight. In one case, a surgeon had perforated a patient's bowel during a laparoscopy. In another, a patient's chest drain, a tube used to remove air, fluid or pus from the thorax, was dislodged.

Since the team was set up a year ago, reporting of such incidents has increased from 35 incidents per 1,000 bed-days in October 2015 to 57 per 1,000 in April 2018. After the meeting, the safety team apologises to the patients involved. It also debriefs the relevant staff, and sometimes, as in the case of the botched chest drain, recommends changes to procedures.

Error messages

"To Err Is Human", a study published in 2000 by America's National Academies of Sciences, Engineering and Medicine, estimated that medical errors were to blame for up to 98,000 deaths a year in American hospitals, or twice as many as deaths in road accidents. A study published in 2016 by researchers from Johns Hopkins medical school in Baltimore puts the number much higher, at 250,000 deaths per year.

That is probably an exaggeration. But a study in 2017 by the OECD estimated that 10% of patients are harmed at some point during their stay in hospital. It also found that unintended or unnecessary harm in a medical setting is the 14th leading cause of ill health globally—a burden akin to malaria. At the annual meeting in May of the World Health Organisation (WHO), the UN's public-health body, delegates discussed "global action" on patient safety.

So policymakers are trying many ways to improve safety. Much is standard fare—tweaks to regulations, changes to training and new kit less prone to cause infection. But Virginia Mason is not alone in looking outside medicine—not just to industry, but, for example, to behavioural science. There is a growing sense that, to make patients safer, hospitals need to simplify the ever more complex world of health care.

Efforts to reduce the harm medics do have a long history. In the 20th century, doctors began systematically to compare how patients are treated in different settings. Take James Alison Glover, a doctor, who noted that, by 1938, 83% of new boys at Eton, England's poshest public school, had no tonsils (perhaps so the silver spoons could fit). Yet just 2% of Basque refugee children fleeing the Spanish civil war then raging had their tonsils out, and were no worse off for it. So Glover urged an end to widespread tonsillectomies, which, given the rate of surgical infections at the time, spared English teenagers a lot of suffering.

Even so, until the 1990s, notes Ashish Jha of Harvard University, harm done to patients was often blamed on doctors, not defective health-care systems. "To Err Is Human" changed that by showing that most cases of harm resulted from dysfunctional ways of working. A lack of good historical data makes it impossible to know if medical errors have become more common. But Dr Jha suspects that the increasing complexity of health care means they are more prevalent than in the 1960s. Back then, a paediatrician, say, would need to know at most a few dozen different drugs. Today it is over a thousand.

Evidence from developing countries supports the idea that errors are the side-effects of better, if more complex, health care. A study in 2010 for the WHO found that rates of hospital infections were higher in poor countries. But, since fewer drugs were doled out, less harm was done by incorrect prescriptions and side-effects.

To improve their hospitals, rich countries have borrowed heavily from two industries: manufacturing and aviation. "Lean" is one of the popular industrial-management theories taken from manufacturing. It suggests that hospitals should study a patient's "flow" through the building much as a car is monitored through the production line. That way bottlenecks and other inefficiencies can be spotted. In addition, Virginia Mason, for example, uses a policy of "stop the line"—ie, any member of staff is encouraged to halt a procedure deemed unsafe. It also has *genchi genbutsu*, or "go and see for yourself", a standardised way for executives to visit wards and speak to staff about safety risks.

Virginia Mason claims that since 2001 it has become more profitable as it has reduced liability claims. Yet there is little evidence that introducing manufacturing-based management to other hospitals has made much difference. A literature review published in 2016 found that just 19 of 207 articles on the effects of "lean" methodologies were peer-reviewed and had quantifiable results. These found no link between lean methods and health outcomes. Mary Dixon-Woods of Cambridge University notes that evangelists for the use of manufacturing methods can be loth to submit to rigorous, randomised studies.

As for aviation, over the past decade the use of checklists like those used by pilots has become commonplace. Before cutting a patient open, surgeons, anaesthetists and nurses go through a simple exercise to ensure they have the right equipment (and the right patient), know the operation to be performed and understand the risks.

In 2009 another study for the WHO suggested that a simple checklist in eight hospitals in cities in eight countries cut the rate of death during surgery from 1.5% to 0.8%, and that of complications from 11% to 7%. Since then checklists have become ubiquitous in Danish, French, Irish, Dutch and British hospitals, and used about half of the time in developing countries.

But, again, there are very few randomised studies to bear this out. And, often, medics know procedures are under evaluation, which may change behaviour. Some of the more rigorous studies are disappointing. One published in 2014, of 200,000 surgical procedures in 101 hospitals using checklists in Ontario, Canada, found no link to improved outcomes. A recent study of the use of checklists in obstetric care in India again found no firm link between their introduction and reduced deaths of infants or new mothers. The reasons for these disappointing results "are primarily social and cultural", suggested an article in the *Lancet* medical journal co-authored by Charles Bosk, a medical sociologist. He argues that many surgeons feel that using a checklist infantilises them and undermines their expertise.

So, more promising may be approaches that do not ask much of doctors themselves. Over the past few years behavioural scientists have begun to try to nudge doctors to make better decisions by studying and acting upon their inherent biases. "Default bias", the tendency to accept the status quo, is powerful in clinical settings. Most doctors, for example, follow the prescription dosages suggested by electronic medical-record (EMR) software. The same is true of the default settings on medical kit. Research in ICUs has shown that, on their standard settings, artificial ventilators can put huge pressure on the lungs, tearing tissue and provoking inflammation. Tweaking ventilators so that they have a "low tidal volume" setting is often better, but many doctors do not have the time to make the necessary calculations. In a study published in 2016, doctors at the University of Bristol showed that, just by switching the default settings on the machine, patients received safer ventilation.

Established in 2016, the Penn Medicine Nudge Unit, based at the University of Pennsylvania, is the first dedicated behavioural-science unit to be set up within a health system anywhere. It has shown how courses of action can be safer when doctors have to opt out of typically better practices, rather than opt in. For example, just 15% of patients with heart attacks were being referred on to cardiac rehabilitation, because doctors had to opt in to the service and fill out a lengthy form. By making referral to rehab the default setting, and providing pre-filled forms, rates rose to 85%.

Opioids offer another example. Many EMR systems are set by default to prescribe 30 pills to patients requiring pain relief, when ten may be sufficient. The consequences can be severe. The more pills in the first opioid prescription, the greater the chance of becoming addicted. By changing the default setting of their EMR, the Penn team doubled the number of patients on the ten-pill doses.

Other researchers are exploring the power of design to improve safety. The Helix team based at St Mary's hospital in London is a joint project of Imperial College London and the Royal College of Art. One of its projects involved prescription forms. The team noticed that when doctors had to write out the units of the drug to be prescribed they often made mistakes—milligrams instead of micrograms, for example. The Helix team redrew the form so that doctors just had to circle a pre-written unit.

Moving upstream

Perhaps the greatest potential for reducing medical errors, however, lies in new technology. Streams, an app developed by DeepMind, an artificial-intelligence company owned by Google's parent, is on trial at the Royal Free hospital in London. It is currently being used to alert doctors and nurses more quickly to patients at risk of acute kidney injury, a potentially fatal condition often first detected by blood tests rather than by a patient's feeling unwell. Instead of having to receive a pager message and then log on to a computer, the medics get an alert to the Streams app on their mobile phone, along with all the data needed to make a quick clinical decision.

In future, Streams may use machine learning to improve how it crunches data. But for now the researchers have focused on how to make the app useful for clinicians. One concern it is trying to tackle, for example, is "alarm fatigue". A study of ICU wards found an average of 350 alerts per bed per day; one averaged 771 alerts. Other research has found that nurses are interrupted every five to six minutes. Little wonder, perhaps, that staff can ignore alerts, with sometimes fatal consequences.

Medical technology is saving ever more lives. But by expanding the range of what medicine can do, progress also brings with it new routes for harm. It is surely right that to tackle these medicine studies the advances other fields have made in dealing with complexity. But the profession has too often been oddly slapdash in implementing these advances. They too need to be subject to the scientific rigour—and exhaustive testing—that has served medicine so well. It might also help to remember that, for all health care's dazzling progress, doctors are mere humans.

This article appeared in the International section of the print edition under the headline "Physician, heal thy systems"

The ins and outs

How to fix what has gone wrong with the internet

The internet was meant to make the world a less centralised place, but the opposite has happened. Ludwig Siegele explains why it matters, and what can be done about it

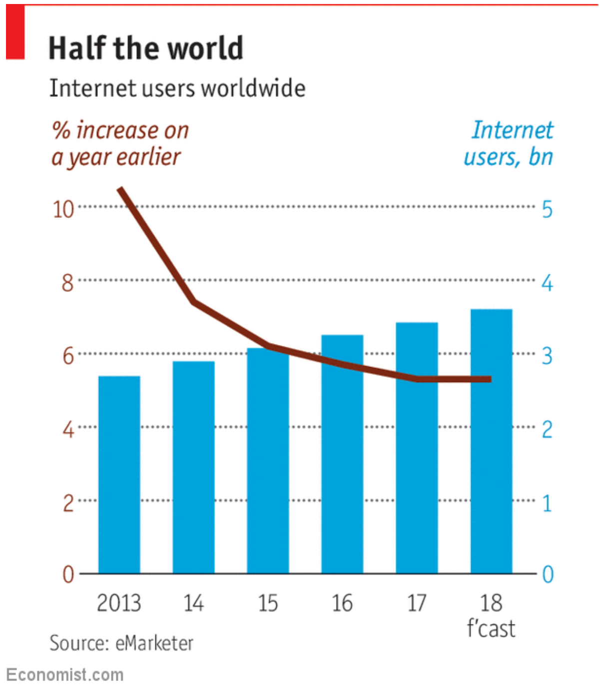
Print edition | Special report Jun 28th 2018

HAS THE INTERNET failed? Sitting in his office at Christ Church, an Oxford college, Sir Tim Berners-Lee, the inventor of the world wide web, has his answer ready: "I wouldn't say the internet has failed with a capital F, but it has failed to deliver the positive, constructive society many of us had hoped for."

Two decades ago he would have scoffed at the idea that the internet and the web would do anything but make this planet a better place. In his autobiography written in the late 1990s, "Weaving the Web", he concluded: "The experience of seeing the web take off by the grassroots effort of thousands gives me tremendous hope that...we can collectively make our world what we want."

Until a few years ago most users, asked what they thought of the internet, would have rattled off a list of the things they love about it—that it lets them stay in touch with friends, provides instant access to a huge range of information, sparks innovation, even helps undermine authoritarian regimes. And in some ways it has been a tremendous success. Just under a quarter of a century after the first web browser was released, around half the world's population is online. But like Sir Tim, many people have recently become more critical of it, concerned that it creates online addicts, hoovers up everybody's data and empowers malicious trolls and hackers.

At the heart of their disenchantment, this special report will argue, is that the internet has become much more "centralised" (in the tech crowd's terminology) than it was even ten years ago. Both in the West and in China, the activities this global network of networks makes possible are dominated by a few giants, from Facebook to Tencent. In his latest book, "The Square and the Tower", Niall Ferguson, a historian, explains that this pattern—a disruptive new network being infiltrated by a new hierarchy—has many historical precedents. Examples range from the invention of the printing press to the Industrial Revolution.

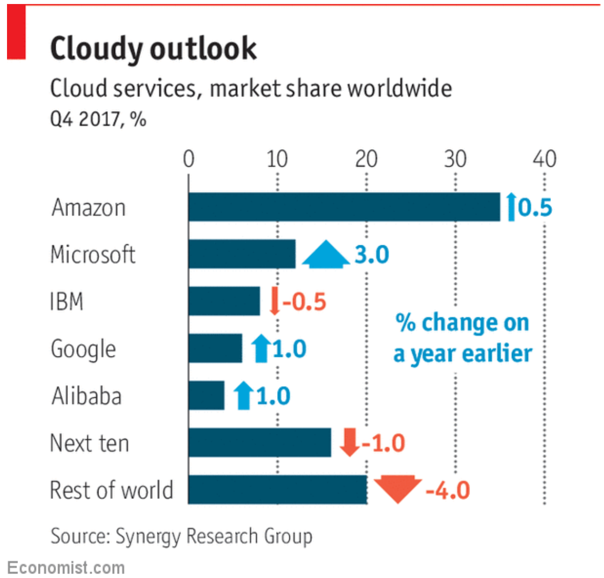


At the same time the internet has become much more strictly controlled. When access to it was still mainly via desktop or laptop computers, users could stumble across amazing new services and try many things for themselves. These days the main way of getting online is via smartphones and tablets that confine users to carefully circumscribed spaces, or "walled gardens", which are hardly more exciting than television channels. Makers of mobile operating systems can decide through their app stores which services smartphone owners have access to. Another control point is cloud computing, which by its nature puts outsiders in charge of applications and their associated data. Meanwhile governments, which long played no part in the internet, have established power over large parts of the network, often using big internet firms as willing enforcers, for instance by getting them to block unwelcome content.

This is more or less the opposite of what the early cyber-gurus had intended. When the first message was sent over the internet nearly half a century ago, on October 29th 1969, the system was "biased in favour of decentralisation of power and freedom to act", according to Yochai Benkler of Harvard University. Its technological roots played a large part in that. A child of the cold war, the internet was meant to connect disparate networks and computers so they could still communicate even if central links became unavailable, say in the event of a nuclear attack. "We wanted anything connected to the net to connect to anything else connected to the net," explains Vint Cerf, one of the engineers who developed the communication protocols (he now works for Google).

To make this possible, Mr Cerf and his colleagues had to make the internet "permissionless", in today's lingo. Any network and any computer can join in as long as it follows the protocols. Packets of data are handed from one network to another, regardless of content. This loosely coupled architecture later inspired Sir Tim, who devised the protocols for the world wide web that work on top of the internet proper.

Those protocols were complemented by a set of organisations that allowed the rules to evolve, along with the software that puts them into effect, and keep both from being captured by outside interests. Chief among them has been the Internet Engineering Task Force, whose philosophy was perfectly summed up by David Clark, one of its founders: "We reject: kings, presidents and voting. We believe in: rough consensus and running code."



The combination of open technical rules and flexible governance set off a frenzy of creativity and innovation. Starting in the mid-1990s, millions of websites were set up and tens of thousands of startups launched. Even after the dotcom bubble collapsed in the early 2000s, this decentralised activity continued unabated, for instance in the form of blogs. Users actually did what Sir Tim had hoped they would: publish online and link to each other, creating a great virtual conversation.

Today the internet is a very different beast. The connections to transfer information still exist, as do the protocols, but the extensions the internet has spawned now greatly outweigh the original network: billions of smartphones and other devices, and cloud-computing factories the size of football fields, containing unimaginable quantities of data. The best way to picture all this is as a vast collection of data silos with big pipes between them, connected to all kinds of devices which both deliver services and collect more data.

The centralisation of the internet and the growing importance of data has given rise to what Frank Pasquale of the University of Maryland, in a recent paper published in *American Affairs*, calls a "Jeffersonian/Hamiltonian divide" among critics of big tech. One group stands in the tradition of Thomas Jefferson, one of America's founding fathers, who favoured smaller government and less concentration in business. Its members want to rein in the tech titans through tougher antitrust policies, including break-ups. The other group follows the thinking of Alexander Hamilton, another founding father, who supported strong central institutions, both in politics and in the economy. Its adherents argue that to reap the benefits of artificial intelligence (AI) and distribute them fairly, online giants should be treated as utilities.

Jefferson v Hamilton

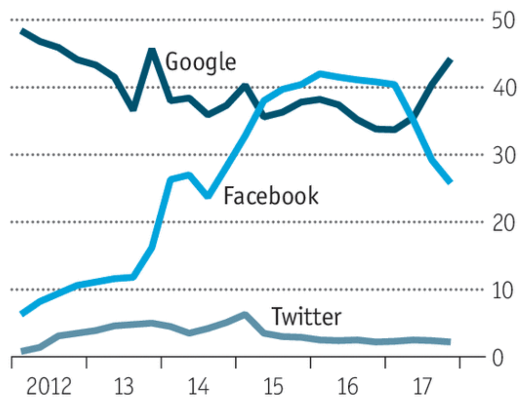
This framing also helps to understand the reactions to centralisation more generally. The Jeffersonian side worries that a centralised internet offers less scope for innovation. Although the online giants themselves are a source of much invention, they dampen it elsewhere, so that fewer new ideas are being tried. Venture capitalists now talk about "kill zones", areas they will not invest in because one of the big players may squeeze the life out of startups or buy them up at a low price.

The political consequences of the internet's growing centralisation are even more troublesome, if less obvious. Walled gardens often limit free speech, as Facebook's sometimes ham-fisted attempts to police its social network have shown. Having to hack the algorithms of only a few platforms makes it easier for Russian trolls and their Western counterparts to meddle in elections by spreading misinformation. The concentration of reams of personal data in one place makes serious leaks more likely. One example is the recent scandal at Cambridge Analytica, a political consultancy that acquired data on 87m Facebook users in underhand ways (and as a result went out of business). Dominant platforms are also handy for spooks, as shown by the revelations in 2013 by Edward Snowden, a former CIA employee who leaked vast amounts of classified information. Intelligence services had to tap into only a couple of computing clouds to find what they wanted. And online giants have plenty of cash to influence offline politics.

Yet among Jeffersonians a sense of a new beginning is also in the air. The buzz at technology conferences today is reminiscent of 1995, shortly after the birth of the world wide web, when a new piece of software called a browser took the web mainstream, and the internet with it. At today's events startups are pushing ambitious plans, often based on blockchain technology (immutable distributed ledgers of the sort that underlie Bitcoin and other crypto-currencies), promising to "re-decentralise" the online world.

Battle of the titans

Referral traffic to major* digital publishing websites, % of total



Source: Parse.ly

*2,500 sites

Economist.com

Hamiltonians, on the other hand, argue that without the free services and easy-to-use interfaces offered by companies such as Google and Facebook, far fewer people would be using the internet. Without cloud computing, which lets firms crunch vast quantities of data, AI would be nowhere. Having a few powerful firms in control also helps curb the demons of decentralisation, such as cybercrime and hate speech. This kind of thinking, long used by online giants to make the case against regulation, has gained some traction on the left in the West. But it is mostly thriving in China, where the government wants tech titans to help it in its quest to turn the country into a cyber-superpower.

Tacking between the two sides is a growing group of academics who are trying to devise new ways to rein in big tech through regulation. Some of their proposals are more Jeffersonian, such as forcing firms to unwind recent mergers. Others are more Hamiltonian, including making companies share some of their data.

This special report will start by chronicling how the internet became centralised, then discuss all three strands in turn. While not hiding its sympathies with the Jeffersonian side, it will conclude that to re-decentralise the internet, ideas from all three camps are needed. There is no central solution.

This article appeared in the Special report section of the print edition under the headline "The ins and outs"

More knock-on than network

The story of the internet is all about layers

How the internet lost its decentralised innocence

Print edition | Special report Jun 28th 2018

IN "INFORMATION RULES"—published in 1999 but still one of the best books on digital economics—Carl Shapiro and Hal Varian, two economists, popularised the term "network effects", which means that in the digital world size easily begets size. The more popular a computer operating system, the more applications it will attract, drawing in even more users, and so on. Two decades ago the idea helped people understand the power of Microsoft and its Windows software. Today it is the default explanation for how Facebook, Google and other tech giants became dominant. The more people sign up to a social network, for instance, the more valuable it becomes for present and prospective users.

Yet Mr Varian is not too happy about how his intellectual offspring is being used, and abused. "The only thing more dangerous than an economist is an amateur economist," he said at a conference in Brussels in late 2016, "and there are a lot of amateur economists out there who like to talk about network effects." He agreed that some firms had benefited from network effects, in particular Microsoft and Facebook. But for Amazon's e-commerce business and Google's search engine, for instance, they have been of little help.

Critics might point out that this assessment is a tad self-serving: Mr Varian has been Google's chief economist since 2002. But he does have a point. Although economic flywheels played an important role, the story of how the internet became centralised is more complex. It is more about knock-on effects than network effects.

Digging deep

To understand the internet's recent history, it helps to keep in mind that, like most digital systems, it is designed in layers. At the bottom are all the protocols that allow different sorts of networks and devices to exchange information, or "internetwork" (hence internet). At that level, it is still largely decentralised: no single company controls these protocols (although the number of firms providing internet access has dropped sharply, too; most Americans have a choice between only two offerings).

Yet the next layer up—everything that happens on top of the internet itself—has become much more concentrated. This is particularly true of the web and other internet applications, which include many consumer services, from online search to social networking.

Centralisation is also rampant in what could be called the "third layer" of the internet: all the extensions it has spawned. Most people use one of two smartphone operating systems: Apple's iOS or Google's Android. Cloud computing is a three-horse race among Amazon, Google and Microsoft. And then there are data. Amazon, Facebook and Google not only dominate their respective core markets; they have accumulated more digital information than any other online company in the West. Indeed, they can be seen as databases on a planetary scale which use the information they store to sell targeted advertising and fuel artificial-intelligence (AI) services.

So why did the different layers develop different characteristics? The internet's base was designed to move data around and publish information, so its protocols did not record what had been transmitted previously and by whom. "The internet was built without a memory," explains Albert Wenger of Union Square Ventures, a venture-capital firm. The groups which developed the original protocols, the Internet Engineering Task Force and the World Wide Web Consortium, could have added to the rule book. But they did not do so, or only belatedly.

One reason was ideological: many internet pioneers believed that the protocols would be enough to prevent centralisation. The other was that, even though they moved faster than conventional standard-setting bodies, they were still slow. "If the internet's governance mechanisms had worked better, we wouldn't have had all these private actors rush into the void," says Kevin Werbach of Wharton, the University of Pennsylvania's business school.

And rush in they did. The lack of built-in memory on the web made it difficult to offer certain applications. Online shops, for instance, had no way of knowing what a customer had previously ordered from them. Netscape, a now-defunct software firm, developed a workaround in the form of "cookies", small files that live in a browser, which originally served as a digital shopping cart. Later, as e-commerce became more sophisticated, these became digital identifiers, with the corresponding data residing on a server.

These subtle technical changes created an opportunity for a few firms to become the internet's memory. At its core, Google is a list of websites and a database of people's search histories. Facebook keeps track of their identity and the interactions between them. Amazon collects credit-card numbers and purchasing behaviour. Yet being the repository of such information does not entirely explain how these firms came to dominate their respective markets. This is where the network effects come in.

The internet fundamentally changes the economics of content of all sorts, from news to video. Ben Thompson, the author of *Stratechery*, a widely read newsletter, has summarised this shift in what he calls "aggregation theory". In the offline world, he explains, power and profits accrue to firms that control distribution, such as printing presses and cable networks. But online, distribution is essentially free and the hard part is to aggregate content, find the best and serve it up to consumers.

So the first priority is to attract as many users as possible, which today's online giants did by creating a great "user experience". Google, for instance, won out against Alta Vista, the leading search engine in the late 1990s, because its interface was cleaner, searches came up more quickly and the results were more accurate. Once such advantages have been established, they start up all kinds of flywheels. The service attracts users, which attracts suppliers of content (in Google's case, websites that want to be listed in its index), which in turn improves the user experience, and so on. Similarly, the more people use Google's search service, the more data it will collect, which helps to make the results more relevant.

At some point, Google and the other tech titans also came to benefit from good old economies of scale. Each of them now operates dozens of vast data centres around the world, manages millions of servers and uses superfast private networks. Google, which has the biggest one, handles about a quarter of the internet's total traffic. To boost its cloud-computing business, the firm is also building three new underwater fibre-optic cables to run along ocean floors from the Pacific to the North Sea. Such investments make it harder for competitors to catch up.

Although Google understood the importance of the user experience right from the start, it took longer to work out how to make money from search. Having tried to sell its technology to companies, it went for advertising, later followed by Facebook and other big internet firms. That choice meant they had to collect ever more data about their users. The more information they have, the better they can target their ads and the more they can charge for them.

That approach has proved a huge success, as Google's results remind investors every quarter (the company took in $31bn in the first three months of this year). Yet as a business model online advertising has two big drawbacks, says Ethan Zuckerman of MIT's Centre for Civic Media. It requires companies to track users ever more closely, and it encourages even more concentration. And advertisers tend to flock to the biggest ad networks to get the widest exposure. Between them, Facebook and Google now collect nearly 60% of online advertising dollars in America, according to eMarketer, a data outfit.

Being large-scale data collectors for advertising purposes has also been the perfect preparation for the firms' next incarnation as AI companies, says Glen Weyl, an economist at Microsoft Research who also teaches at Yale University. They not only have reams of data but plenty of engineering talent and the necessary computing infrastructure to turn their digital hoard into all kinds of "cognitive" services, from speech and facial recognition to software for drones and self-driving cars.

Critics of big tech, such as Jonathan Taplin, a former director of the Annenberg Innovation Lab at the University of Southern California and author of "Move Fast and Break Things", worry that AI could trigger another round of concentration. It certainly introduces another set of network effects: more data means better and more popular services, which generate more data. The big fear is that in the future one of the online giants will turn into some sort of "Master AI", ruling not just the online world but many other industries too.

For now, that has a whiff of science fiction about it, and it may never materialise. But meanwhile the dream of changing the economic laws of the internet to bring it closer to its decentralised roots is being vigorously pursued by a plethora of blockchain startups and activists.

This article appeared in the Special report section of the print edition under the headline "More knock-on than network"

Raiders of the killer dapp

Blockchain technology may offer a way to re-decentralise the internet

Startups want to remake the internet with blockchain

Print edition | Special report Jun 28th 2018

WHAT MASS IS for Catholics, technology conferences are for geeks. Speakers at these gatherings often sound like preachers, promising a dazzling future. So it was at a blockchain conference in Berlin in March, organised by Blockstack, a startup. The enthusiasm on display echoed that of gatherings in the mid-1990s. Some speakers quoted early cyber-gurus, such as the late John Perry Barlow, author of "Declaration of the Independence of Cyberspace", and Sir Tim Berners-Lee, the inventor of the original web, now known as Web 1.0.

Such events seem to be heralding the birth of a new technology movement. Businesses and projects with odd names are already proliferating. They are easily confused with the many startups that have recently launched new crypto-currencies via an initial coin offering (ICO), a much-hyped form of crowdfunding. But though Blockstack and its ilk have done the same, their main aim is to use technology to make the online world a more decentralised place where people can do business "on their own terms", in the words of Ryan Shea, co-founder of Blockstack. Again, this sounds like the sort of thing geeks said in the 1990s. Will this generation succeed where the previous one failed?

It will not be easy. To achieve their objective, they will have to overthrow an existing digital regime, called Web 2.0, that is still going strong. But it seems to be a feature of information technology that every few decades its most profitable part becomes commoditised. In the 1970s the microprocessor radically reduced the cost of computers. In the 1990s open-source software started to dethrone Windows, Microsoft's then-dominant operating system. Now it is the turn of data, predicts Joel Monegro of Placeholder VC, a venture-capital firm set up to bet on the trend.

You can check out, but you can never leave

Today online applications bundle user interface, code and data. Facebook, for instance, is best known for its website and app, but both are just the tip of a virtual iceberg: most of the software and all the information that keep the social network going lives in the firm's cloud. Controlling those data gives these companies power. Users are free to move to another service, but they would lose all that information, including the links to their friends. By contrast, in the new world of Web 3.0 (or Web 3, for the truly initiated), interface, code and data are meant to be kept separate. This would allow power to flow back to users, who could decide which application can access their information. If they were not happy with one social network, they could easily switch to another. With such decentralised applications, or "dapps", users could also interact directly with other users without an information-hoarding intermediary in the middle.

To be sure, similar ideas have been tried before—and failed. Decentralised services, then called "peer-to-peer", briefly flourished in the late 1990s and early 2000s. They fizzled out mainly because no one knew how to build a robust decentralised database. That changed in 2009 with the invention of Bitcoin and the blockchain, the technology that underlies the crypto-currency. In essence, it is a ledger without a centralised administrator, maintained collectively by some of its users, called "miners", who also protect the blockchain and keep each other in check.

Though these days Bitcoin is mostly used to speculate, the crypto-currency can be seen as a dapp. The blockchain is a specialised database in the form of an immutable record of the transaction history of every bitcoin in circulation, which makes it clear who owns what. Holders of the currency use a piece of software called a "wallet", essentially a browser for the blockchain that carries the necessary cryptographic keys, to keep track of their assets and transfer money.

Almost all Web 3.0 projects borrow heavily from Bitcoin and Ethereum, another blockchain that comes with "smart contracts", snippets of code that encapsulate business rules which are executed automatically if certain events occur. The most advanced projects focus on building the software infrastructure needed for dapps. Blockstack, arguably the most ambitious, is best seen as an operating system for such applications.

Another field of much endeavour is decentralised digital storage. One such effort is Solid, a project led by Sir Tim, which features individual "data pods" where people keep their information (though it does not use blockchain technology). Another is the InterPlanetary File System (IPFS), the brainchild of Juan Benet, a co-founder of Protocol Labs, a startup.

Actual dapps are still few and far between. Graphite, which runs on Blockstack, is a bundle of online word-processor and other office applications, much like Google's G-Suite. OpenBazaar, which relies on IPFS, is an alternative to Amazon. There is no central server to list what is on offer and to process transactions; instead, buyers and sellers download software that can settle things directly between them. The most popular dapp so far is a game called CryptoKitties, a marketplace for digital pets that lives on the Ethereum blockchain.

Building the right tools and applications will take time, but it is not the hardest part of decentralisation. Plenty of institutional innovation is also needed. If blockchains are to manage without central administrators, others will have to handle the task. These could be miners, but also developers and operators of "nodes", computers that keep copies of the blockchain. Web 3.0 projects are often like mini-economies, with a currency and a governance system. And project leaders, though often of a libertarian bent, have no choice but to become regulators.

Previous efforts at decentralisation also foundered because the economics proved wanting, including those of the original internet. Historically, most protocols were developed by researchers and then maintained by non-profit organisations. But when the internet went mainstream and the money poured in, things got more complex. Commercial interests made finding consensus more difficult, and engineers preferred to join fast-growing internet companies building applications. Besides, incentives to adopt new protocols were lacking. So they became the poor relation of the internet, whereas applications thrived, explained Mr Monegro, the venture capitalist, in an influential blog post, "Fat Protocols", in 2016. With Web 3.0, he says, it will be the other way round.

Again, Bitcoin pointed the way. Satoshi Nakamoto, its elusive inventor, also designed what is now called a "crypto-economic model". Miners are promised a monetary reward for their number-crunching work. Details aside, every ten minutes they participate in a lottery. The winner gets the right to update the blockchain and a small number of bitcoin. The reward gets paid out only after a dozen more lottery rounds, so it is in the winner's interest to keep the system ticking.

Many Web 3.0 projects have developed their own crypto-economic models. The idea is to replace a centralised firm with a decentralised organisation, held together by incentives created by a token—a kind of "crypto-co-operative". All those involved, including the users, are meant to have a personal stake in the enterprise and get their fair share of the value created by a protocol.

Having kittens

Some models are just intended to create a thriving marketplace, which in the case of CryptoKitties means you can buy, sell and breed them for monetary rewards. Other projects are more ambitious. Filecoin, too, is meant to be a marketplace where digital storage space will be exchanged for an eponymous digital token. To keep it flowing, the project, also founded by Protocol Labs, has resorted to much economic engineering. A complicated mechanism matches supply and demand.

The most elaborate working crypto-economic model, however, is Steemit, an online forum which rewards its 1m or so registered users for posting contributions or rating content with real money in the form of steem, another sort of token. One type is liquid and can be cashed out using an exchange, which is meant to provide near-instant gratification and attract users. The other, called "steem power", is less easily convertible and supposed to keep members engaged: the more they own, the more weight their votes have.

If this sounds complicated, the bylaws of these crypto-co-operatives can be even more so. Once more, Bitcoin is a good place to start, although in this case as an example of how not to do it. When the mysterious Mr Nakamoto disappeared in late 2010, he did not leave behind any governance mechanism to speak of. Only a rudimentary one has been put in place since. Bitcoin developers agree to changes to the system's software, which miners then implement in what amounts to a vote by computing power. But in recent years the two groups have been at loggerheads over how best to increase Bitcoin's capacity. As a result, several factions have already created their own version of the currency. Ethereum is now running into similar problems.

To avoid such difficulties, some newer blockchain projects are planning to hardcode their decision-making processes into the software in the form of smart contracts, a method known as "on-chain governance". Tezos, for instance, calls itself a "self-amending ledger". It allows anyone to propose changes which are then voted on. Winners get some tokens as a reward.

Polkadot, for its part, is planning to write a “constitution” into its “genesis block”, the anchor for every distributed ledger. Token-holders will be able to vote on changes to the system. But there will also be a “constitutional court” which can override decisions.

Web 3.0 projects need to solve a number of practical problems before they can truly take off. Bitcoin, again, helps illustrate the hurdles. Chief among them is what crypto-buffs call “scalability”, meaning that blockchains are currently not able to deal with large numbers of users. Bitcoin’s capacity is higher than it was, but the maximum is still about ten transactions per second, compared with the thousands that a centralised payment system can handle. Newer blockchains do better, but are unlikely ever to beat centralised databases.

Moreover, many blockchain projects are themselves quite centralised. Almost all bitcoin mining happens in China and is controlled by a few firms (although the government is now trying to constrain the energy-hungry industry). And token ownership is often concentrated, too. Steemit, the online forum, is an extreme example: 90% of the “steem power” tokens are held by 2% of users, though the firm is trying to change this.

“Blockchain is a ten-year-old technology. But where are all the applications?” asks Tim O’Reilly, who pushed peer-to-peer and coined the term “Web 2.0” Still, he does not rule out a sudden breakthrough that might cut the “blockchain’s Gordian knot” and make such ledgers more scalable, for instance. Even Facebook seems to see that as a possibility: last month it created a blockchain unit. It is also said to be interested in taking over one of the blockchain projects.If such a breakthrough were to happen, successful dapps might come in unfamiliar shapes. “It is easier for new technology paradigms to win in new areas than to re-fight old battles,” says Chris Dixon of Andreessen Horowitz, another VC firm with investments in the field. Remember, Google did not win over Microsoft by developing another operating system. What might be the search engine of Web 3.0? Mr Dixon points to services that manage data in creative ways, for instance extracting insights from digital information while letting consumers and companies keep control of their data.

But what if trying to re-decentralise the internet is a fool’s errand? That is what China’s leaders think.

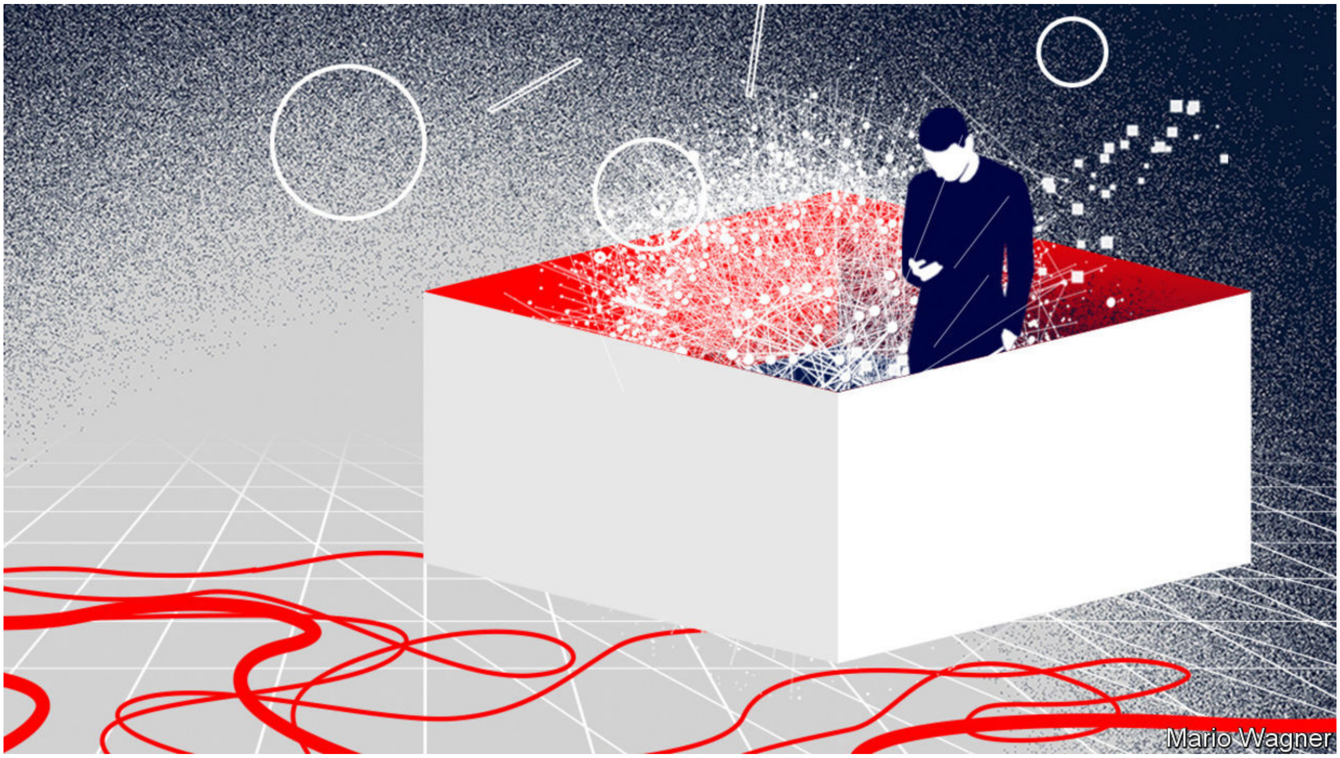
This article appeared in the Special report section of the print edition under the headline ”Raiders of the killer dapp”

The ultimate walled garden

China has the world's most centralised internet system

A perfect example of a Hamiltonian internet for maximum control

Print edition | Special report Jun 28th 2018



THE HEADQUARTERS OF Western tech giants are typically horizontal affairs, in keeping with their supposedly flat corporate hierarchies. Facebook's Silicon Valley campus is a jumble of two-storey buildings connected by parks and bridges. Google's is a collection of dozens of separate structures spread over an entire neighbourhood in Mountain View. Employees commute between them on colourful bicycles.

By contrast, Tencent, China's biggest tech titan, has gone fully vertical. Its brand new home consists of two office towers, 39 and 50 storeys high, which are among the tallest in the coastal city of Shenzhen. The only horizontal elements are three sky bridges connecting the towers, which boast facilities such as a running track and a rock-climbing wall. Once everyone has moved in, the buildings will accommodate more than 10,000 employees.

Tencent's towers are a fitting symbol of China's internet, which is already the world's most centralised by far. The state has always kept close tabs on what is going on in its virtual space, and more recently has teamed up with the country's online giants, notably Tencent and its main rival, Alibaba, to control that online world even more tightly. What is happening there can be seen as a counter-project to the West's Web 3.0—a kind of Hamiltonian internet. The project may provide further proof of what the late Melvin Kranzberg, an influential historian of technology, once stated as its first law: "Technology is neither good nor bad; nor is it neutral." In other words, it all depends on the aims it serves.

When China started building its "Great Firewall" around its version of the internet 20 years ago, *Wired* magazine, then the central organ of online culture, wondered whether it would suffer the fate of its physical predecessor, the Great Wall, which largely failed to protect the country against raids. But it has got more and more effective. In particular, its operators have learned to balance the aim of keeping out Western democratic values with the need to maintain close links to the world economy. China's recent clampdown on virtual private networks (VPNs), services that tunnel through the Great Firewall, seems designed to fine-tune these filters.

Within China, censorship is, in essence, outsourced to the internet firms. In April Toutiao, a popular news-aggregation service, found itself in the cross-hairs of China's top media regulator for posting "vulgar" content. The firm's chief executive, Zhang Yiming, quickly issued an apology, saying he should have realised that "technology has to be guided by the core values of socialism." He also promised to hire another 4,000 censors, on top of the 6,000 his firm already employs. The total number of "content controllers" working in China's internet industry, some reckon, is more than 2m.

Nearly the same number, it is thought, work for the Chinese government, injecting propaganda and misinformation into the social-media flow. In one study in 2017 a group of researchers at Harvard and other American universities found that this "50-cent party", so called because members supposedly receive 50 cents (in yuan) for every piece of content, generates nearly 450m posts per year. Most of them do not attack critics of the Communist Party and the government, or even discuss controversial questions. "We show that the goal of this massive secretive operation is instead to distract the public and change the subject," the authors conclude.

Despite this tight government control, Chinese internet firms enjoy extensive commercial freedom. Indeed, they are less regulated than Western ones, which is a big reason why the competition is much tougher and innovation in some areas, such as ride-hailing and rental bikes, has been faster. Kai-Fu Lee of Sinovation Ventures, a venture-capital firm based in Beijing, compares Chinese entrepreneurs to gladiators. Hardened by the copycat wars of the 2000s, during which most of them tried to replicate Western ideas, they have now come into their own. And unlike startups in Silicon Valley, those in Beijing or Shanghai sometimes tackle dominant firms head-on.

All the same, Alibaba and Tencent are the acknowledged leaders, particularly in financial services (Baidu, China's number three, struggles to keep up). With their respective subsidiaries, Alipay and WeChat Pay, they dominate mobile payments. In the big coastal cities, these services have all but replaced cash for smaller purchases and generate immense amounts of data, which the companies then use to target advertisements, improve their e-commerce services and power artificial-intelligence (AI) offerings. Alibaba and Tencent also control much of China's venture capital. According to McKinsey, a consultancy, between them they make about half of all VC investments in mainland China. In America the tech titans account for only around 5% of such investment.

But as Xi Jinping, China's president, tightens his grip on the country, the tech giants, too, have found themselves more constrained. In addition to being forced to ensure that the government retains its monopoly on information, they are now also being required to help make China a "cyber-superpower", turning them into "quasi-state-owned companies", in the words of Max Zenglein of the Mercator Institute for China Studies, a think-tank. Nowhere is this clearer than in AI, where the country wants to be the world leader by 2030 and plans to build a domestic industry worth $150bn.

China's biggest advantage in AI is data, of which, thanks to more than 770m internet users, it has more than any other country. But instead of decentralising this treasure trove, as the Web 3.0 movement hopes to do in the West, China's plan seems to be to centralise them even further to make the most of them. Each of the tech giants has been put in charge of specific types of digital information, turning them, in effect, into national data champions. Alibaba collects data needed for smart cities, Baidu for autonomous vehicles and Tencent for medical imaging.

Some in Beijing even want to enroll blockchain technologies in their quest for technological world domination—further proof that, as with the internet itself, technology is what you make it. The government has clamped down hard on Bitcoin and other crypto-currencies because it considers them a threat to government control and a danger to the financial system. But shorn of their anonymity, distributed ledgers can be a boon for regulators: they can provide visibility, for instance on who owns what. In early June it emerged that China's central bank has built a blockchain-based system that digitises cheques, allowing it to track them. It also seems to be considering issuing its own crypto-currency. And NEO, a Chinese firm which has launched a blockchain similar to the West's Ethereum, is exhibiting some distinctive Chinese characteristics, such as a digital-identity service.

Leading thinkers in China argue that putting government in charge of technology has one big advantage: the state can distribute the fruits of AI, which would otherwise go to the owners of algorithms. Feng Xiang of Tsinghua University, one of China's most prominent legal scholars, recently warned that "if AI remains under the control of market forces, it will inexorably result in a super-rich oligopoly of data billionaires who reap the wealth created by robots that displace human labour, leaving massive unemployment in their wake." If government can ensure that AI serves society instead of private capitalists, he argues, the technology promises to create wealth for all.

Essential services

Such thinking has also been gaining some traction in the West, although so far only at the political fringes. The underlying idea is that some types of services, including social networks and online search, are essential facilities akin to roads and other kinds of infrastructure and should be regulated as utilities, which in essence means capping their profits. Alternatively, important data services, such as digital identity, could be offered by governments. Evgeny Morozov, a researcher and internet activist, goes one step further, calling for the creation of public data utilities, which would pool vital digital information and ensure equal access to it. Ben Tarnoff, a left-wing writer, argues that "data resources" should be nationalised and put under state control. "Data is no less a form of 'common' property than oil or soil," he recently wrote.

As with Web 3.0 projects, however, such ideas face many practical problems, whether in the West or in China. AI is still in rapid flux. Putting a utility in charge of data would almost certainly slow innovation. National data champions would also make life harder for startups, which may need digital information in a different form. And picking winners has generally proved tricky.

More important, to most Western thinkers the idea of governments controlling their people's data has something Orwellian about it. Even in the West, where such data utilities would presumably be democratically controlled, the potential for abuse would be huge. Not least, it would provide police and spooks with direct access to people's data.

When it comes to democracy and human rights, a Jeffersonian internet is clearly a safer choice. With Web 3.0 still in its infancy, the West at least will need to find other ways to rein in the online giants. The obvious alternative is regulation.

This article appeared in the Special report section of the print edition under the headline "The ultimate walled garden"

A new school in Chicago

How regulators can prevent excessive concentration online

Conventional antitrust thinking is being disrupted from within

Print edition | Special report Jun 28th 2018

MONOPOLIES ARE GOOD—so long as they can be challenged, however remote the possibility. That belief has long held sway at the University of Chicago, a bastion of free-market thinking, which helped make the word "antitrust" lose most of its meaning in America, not least with respect to technology. "Punishing Google for being a successful competitor would stifle innovation and dynamic competition," concluded the late Robert Bork, long the Chicago school's leading antitrust expert, in a paper published in 2012 (commissioned by Google, which needed ammunition to defend itself in an antitrust investigation at the time).

Now this monopoly of thought is itself being disrupted from within. In April, for the second time in as many years, Booth, the university's business school, invited leading antitrust thinkers to discuss monopolies, this time in tech. And many came, from representatives of the old Chicago school, such as Dennis Carlton, to tech's most ardent foes, such as Barry Lynn and Matt Stoller of the Open Markets Institute, a think-tank. Ideas about what should be done were disparate, including such proposals as creating property rights for data and treating social media as a public-health problem because of their addictive qualities. In his winding-up speech Luigi Zingales, one of the organisers, proposed the creation of an interdisciplinary committee for internet-platform regulation. If it is ever convened, what should it focus on?

Information technology comes in cycles, each giving rise to a new computing platform. In the current cycle, the key component—or the next platform—is data. Facebook may have started as a social network, Google as a search engine and Microsoft as a maker of operating systems and other software. But today they all deal in data, not least to target advertisements. And now the firms are quickly becoming fully fledged data distilleries: they suck up as much digital information as they can, crunch it in vast data centres and turn it into artificial-intelligence services. At the three firms' annual developer conferences in early May, AI was everywhere. New services unveiled included one by Microsoft to interpret people's offline movements and one by Google which is able to call hair salons and other local businesses to make appointments.

Philosopher's stone.2

The strange thing about data is that they are an inexhaustible resource: the more you have, the more you get. More information lets firms develop better services, which attracts more users, which in turn generate more data. Having a lot of data helps those firms expand into new areas, as Facebook is now trying to do with online dating. Online platforms can use their wealth of data to spot potential rivals early and take pre-emptive action or buy them up. So big piles of data can become a barrier to competitors entering the market, says Maurice Stucke of the University of Tennessee.

That said, there are other ways of looking at data. Geoffrey Manne of Northwestern University argues that, unlike physical resources, they are not rivalrous, meaning they can be collected and used by different parties without causing a clash of interests. It is not the data that are valuable, he says, but the services powered by them. Some firms are just better at developing new offerings than others.

Still, assuming, as many economists in the field now do, that data matter quite a bit, what can regulators do to limit their power? Broadly, possible actions fall into two buckets, one more Hamiltonian, the other more Jeffersonian, to stick with the labels of Frank Pasquale of the University of Maryland mentioned earlier in this report.

Of the two, the first is the more straightforward. When Facebook took over WhatsApp, a popular messaging service, for about $23bn in 2014, the deal barely raised any eyebrows in antitrust quarters. Today the acquisition would probably be blocked, because it has since become clear that Facebook was taking over a serious rival. And despite promises to the contrary, the social network proceeded to merge some of the two firms' data, which last year earned it a fine of €110m ($122m at the time) from European Commission regulators.

Turning back the clock

As well as blocking new mergers, this approach could involve unwinding some that have already happened. One proposal tabled in Chicago was to require Facebook to spin off WhatsApp and Instagram, another popular social-media app which it took over in 2012. Whether it makes sense to split up the firms' core business is a different question; equipped with the same data set, one of the successor generation would probably end up dominant again after a few years.

A related idea being considered is to block big online firms from offering certain services on top of their platforms because they might favour them over rival offerings. Such a conflict of interest was at the core of an antitrust case in Brussels in which Google was accused of having discriminated against competing comparison-shopping services and fined €2.4bn. Amazon, too, often competes with merchants that use its online marketplace. To avoid such conflicts, limitations have been imposed in other industries, such as railways and banking, points out Lina Khan of the Open Markets Institute. Why, she argues, should this not be possible for platforms?

The second, Jeffersonian bucket is variously labelled “data sharing”, “data portability” and, in geekish, “regulation by API” (application programming interface). The champions of data monopolies accept that they will be hard to avoid and even harder to take apart, so they want incumbents to be required to give startups access to some of their data and thus create more competition.

Some of the proposed measures already exist. Both Facebook and Google allow users to export many of the data they hold on them. Europe’s new privacy law, the General Data Protection Regulation, now mandates “data portability” (as well as a “right to be forgotten”, which requires firms to delete personal data if a user asks). But so far not many are clicking the download button, mainly because of the dearth of services that allow such data to be uploaded.

This is why some want to push this approach further. Mr Zingales and Guy Rolnik, another organiser of the Chicago conference, have suggested that dominant social networks should be required to allow access to their social graphs, the network of connections between friends, to make things easier for competitors. In the early days of social media this sort of data-sharing was possible. Instagram, for instance, asked new users to import a list of their Twitter followers.

Viktor Mayer-Schönberger of Oxford University would like to introduce a “progressive data-sharing mandate”. If a company’s market share reaches a certain threshold of, say, 10%, it would have to start sharing some of its “feedback data” (information collected from people using AI services). When the market share increases, so would the sharing requirement. “When feedback data from large players is available to smaller competitors, then innovation...is not concentrated at the top,” he argues in “Reinventing Capitalism in the Age of Big Data”, a new book co-written with Thomas Ramge, a journalist.

Albert Wenger of Union Square Ventures, a venture-capital firm, calls for a “right to an API key”. This would not just give users real-time access to their data but allow them to plug into the inner workings of a service. A good example is Twitter in its early days: people had the choice of different applications that linked into the microblogging service.

All these suggestions raise two big questions. One is whether any of them are workable. The measures in the first option seem feasible, although merger controls can be sidestepped. The proposals under the second approach could stymie innovation. As for the third, what type of data should be shared, and in which format? And how can the tension between data-sharing and privacy be resolved? Much will depend on how regulators interpret the GDPR, but the legislation does not seem to condone the idea of exporting your social graph because it includes personal information on your friends.

The other big question is whether any of these ideas can be made to fit with existing antitrust law. Critics of the tech titans have not spent much time thinking about that, says Carl Shapiro of the University of California, Berkeley. Before regulators can limit data power, for instance, they have to show that it has been abused, which will be tricky. So far only one big data-related antitrust investigation has been launched, by Germany’s Federal Cartel Office. In December it found that Facebook had abused its dominant position by getting users to agree to let the firm collect personal data from other websites.

Many participants at the Chicago conference called for a big trial that could put the spotlight on firms’ practices, as the Microsoft case did in the 2000s. In Europe this is a distinct possibility. Data “can foreclose the market—they can give the parties that have them immense business opportunities that are not available to others,” said Margrethe Vestager, the EU’s competition commissioner, in a recent interview. In April she announced an investigation into Apple’s proposed acquisition of Shazam, a popular smartphone app that identifies songs. This would give the iPhone-maker access to data that could help it poach customers from rivals such as Spotify.

But in America a major case seems unlikely to be brought, even if the Democrats regain power in Washington, DC. The recent techlash notwithstanding, the online giants still have many left-leaning friends, and have contributed to Democratic campaigns. So in the absence of any quick technical or regulatory fixes to the internet’s centralisation, what can be done?

This article appeared in the Special report section of the print edition under the headline ”A new school in Chicago”

The art of the possible

There is no single solution to making the internet more decentralised

Stopping the internet from getting too concentrated will be a slog, but the alternative would be worse

Print edition | Special report Jun 28th 2018

FIXING THE INTERNET can look like mission impossible, even in the West. A Jeffersonian reform in the form of Web 3.0 appears a long way off, and its regulatory equivalent, a vigorous antitrust policy, does not look much more promising. Online, humanity seems bound to sink ever deeper into a Hamiltonian hole. But such an outcome is not inevitable.

It is important to set realistic expectations. Nobody seriously thinks that the internet could ever return to its first, totally decentralised beginnings. Most markets are somewhat concentrated, and no technology is likely to change that. In the metaphor by Niall Ferguson quoted at the start of this report, rather than tear down the data towers, the task at hand is to create a sufficiently vibrant digital town square to make diversity flourish.

Similarly, there is no single solution for decentralising the internet. But a decent-sized digital square could be maintained through a mix of measures, combining both Jeffersonian and Hamiltonian approaches, as well as regulation. What might that look like?

Looking back, forcing the tech giants of the past to share some of their wealth seems to have been a good idea. Intel would have found it harder to develop microprocessors without a consent decree in 1956 that forced AT&T, then America's telephone monopoly, to agree to license all its past patents free of charge, including the ones for the transistor. Microsoft might never have come to rule PC software if IBM, accused of monopolising mainframes, had not decided in 1969 to market computers and their programs separately, a move that created the software industry. Google might not have taken off in the way it did had Microsoft not agreed, at the end of its antitrust trials in America and Europe in the 2000s, not to discriminate against rival browsers and to license technical information which allows other operating systems to work easily with Windows.

The equivalent course of action now would be to force today's giants to open up their data vaults, thus lowering the barriers to market entry and giving newcomers a better chance to compete. A useful case study might be the European Union's Second Payment Service Directive, which came into force early this year. On the old continent big banks must now give other firms access to transaction data at the say-so of an account-holder.

Admittedly, designing a similar solution for the world of data would be tricky. Mandating extensive data-sharing would amount to expropriation. It would also clash with privacy considerations: the reason why data on tens of millions of Americans leaked from Facebook ahead of the 2016 presidential election was that the applications on the firm's platform had some access to users' social graphs. But the information-technology industry has solved more difficult problems in the past.

Equally important, governments must make it easier for decentralised alternatives to emerge. That could mean creating demand for such offerings either by using them themselves or by mandating their use, for instance by requiring that some of them, such as blockchain-based digital identities, are offered by big online-service providers. But it also means doing away with regulation that ends up strengthening existing online giants.

In America the Computer Fraud and Abuse act and Digital Millennium Copyright makes it an offence, punishable by prison, for outside firms to plug into the platforms of online giants. Such legislation should be dispensed with. It is also unhelpful to treat all crypto-tokens as securities and regulate them as such, as America's Securities and Exchange Commission seems set to do. Exceptions should be made for those that are clearly intended to power new types of services. The European Union may need to tweak its brand-new General Data Protection Regulation (GDPR) to make it less complex. Big firms have the resources to comply with its rules, whereas smaller outfits are likely to struggle.

The internet's physical infrastructure is still less concentrated than the applications that run on top of the network, and every effort should be made to keep it that way. America's recent decision to scrap strict rules requiring telecoms carriers to treat all types of traffic equally (known as "network neutrality") is counterproductive: it will give the carriers more control over the network and allow them to extract more rent. Instead, the Federal Communications Commission should expand such initiatives as the Citizens Broadband Radio Service, which allows more sharing of radio spectrum.

Some of this may sound like small beer, but the history of information technology shows that small tweaks have often been effective in bringing down the giants. Moreover, the mix of technology and regulation will have to be adjusted and re-adjusted over time. "There won't be a great moment, one great battle which you win," says Mr Benkler, the Harvard academic.

It sounds Sisyphean, but the alternative would be even more painful. Decentralisation is ultimately a question of democracy. As digital technology penetrates society ever more deeply and the two become ever more intertwined, the rules of the former will increasingly govern the latter. And the more the internet, along with its applications and everything that is attached to it, is controlled by tech titans (or indeed by the government, as in China), the less free it is likely to be. As John Sherman, the senator who gave his name to America's original antitrust law in 1890, put it at a time when the robber barons ruled much of America's economy: "If we will not endure a king as a political power, we should not endure a king over the production, transportation and sale of any of the necessaries of life."

This article appeared in the Special report section of the print edition under the headline "The art of the possible"

European rail
New kids on the track

New kids on the track

European state rail firms face scrappy new competitors

Some worry that established giants may play dirty in order to survive

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Alamy

THE opening of Britain's Liverpool and Manchester Railway in 1830 marked several firsts in rail history. It was the world's first inter-city line. It was the scene of the first widely reported passenger fatality. And it was also the first where all trains were hauled by the track owners. Previous lines had seen competition between operators, leading to the drivers of horse-drawn passengers trains and steam-pulled coal trucks having fisticuffs on the tracks. Two centuries later, the question of whether train and tracks should be operated by the same firm still simmers across Europe.

That is because new EU rules, enticingly called the "fourth railway package", will force all state rail firms to open their tracks to rivals from next year. It means a "tectonic shift" for the industry, argues Leos Novotny of LEO Express, a rail startup based in Prague. And it comes at a time when commuters are particularly grumpy about trains. In France three months of labour strikes at SNCF, the state rail firm, have made millions late for work every week and chaos marks Britain's railways after an abortive timetable change on May 20th. In Germany, Deutsche Bahn, the state rail giant, once looked up to as a paragon of quality and efficiency in Europe, is increasingly under attack in the country's press for its dirty, late trains.

The new rules are the culmination of a decades-long effort by the European Commission to boost competition. This began in 1991 when it forced rail operators to produce separate financial accounts for their track and train-operations units. As part of its latest reforms, the commission wanted to introduce a strict separation of the two businesses. However, under pressure from some state rail operators—in particular Deutsche Bahn and SNCF—it compromised. Only an internal "Chinese wall" is needed to separate the functions.

Even so, the coming changes are radical. The "market pillar" of the reforms will force state rail firms to open their tracks to competition. From 2019, anyone will be allowed to run services on profitable routes using "open access" rights. And from 2026, private companies will also be able to bid for public-service contracts on lines that require state subsidies to operate.

Economist.com

The experience of countries that have already opened up to competition is that it cuts costs and hammers down fares. In the Czech Republic, for example, new operators have achieved costs per seat kilometre that are 30-50% lower than those of the state operator. Passengers are benefiting: the average ticket price from Prague to Ostrava has fallen by 61% since 2011, when the state rail firm lost its monopoly. Greater liberalisation is also associated with rising passenger numbers and an ability to get by on lower subsidies (see chart).

Competition is also spurring innovation. Many firms are adopting yield-pricing strategies used by budget airlines to increase the utilisation of their trains and to cut costs per seat. To keep customers from defecting to rivals, some are attaching other travel services to their own in order to differentiate themselves. Deutsche Bahn, which does already face some private competition, now offers e-bike hire as well as train tickets in some German cities. On June 22nd Italy's state rail firm launched an app called Nugo through which travel services from 50 other companies, including ferry and car-sharing rides, can be bundled into the firm's tickets.

As for the newcomers, they come in three main types: state rail operators from other countries; bus companies looking to diversify, such as Germany's Flixbus; and private rail firms that have started from scratch, a category which includes LEO Express. A few of them are simply copying the business models of incumbents but with much lower costs. Some, such as NTV-Italo, an Italian startup, behave more like full-service airlines, with four classes of service instead of two and loyalty schemes. That has forced its rivals to up their game.

Fiercer competition could not come at a worse moment for some of the continent's biggest state rail firms, which are already suffering from dire financial problems. Worst of all is SNCF, which has a towering debt pile of €47bn ($54bn). The fourth package will mean it will lose the monopoly it has long held on France's tracks. It is doing well on high-speed and commuter routes but its regional trains and rail-freight businesses are faring badly. Rail unions, which have been striking against reforms to end their members' right to a job for life, will make it hard for SNCF's bosses to react to change in the industry, notes Yves Crozet of the University of Lyon.

Deutsche Bahn will face far more competition from private operators after the fourth package takes effect. It has so far struggled to compete with newcomers. Profits have been squeezed; worries about its credit-worthiness are rising. A decade of cost-cutting has produced a steady fall in punctuality, quality and customer satisfaction. The number of late trains has increased by 30% since 2009; Germans are among the least satisfied with their railways in Europe. In 2016 the firm needed a €2.4bn bail-out from the German government to keep its investment plans on track.

The entry of more rivals is intended to encourage such firms to become leaner. It is also forcing them to diversify abroad. Trenitalia, Italy's rail giant, has done so very recently, into Britain. Ernesto Sicilia, chairman and managing director of its new British unit, says that his firm is moving into the country in order to replace contracts lost at home as liberalisation bites. Yet the strategy has risks. NS, the Dutch state operator, has expanded abroad so rapidly that it now attracts criticism from politicians at home for carrying more passengers each day in Britain than in the Netherlands. Yet passenger numbers have in fact disappointed in recent years on many of its British franchises, and it is worried about possible losses. Deutsche Bahn lost money on its Scotrail franchise last year and needed a £10m ($13m) bail-out from its parent.

With their backs against the wall, state rail firms are not above using questionable tactics. Some have been found guilty of using their control over the tracks to win unfair advantage over private operators. Last year Spanish competition watchdogs fined Deutsche Bahn and Renfe, Spain's state rail company, over €75m for collusion in the country's rail-freight market. The same year NS was fined €41m for using data it had as an infrastructure owner to unfairly win a rail contract in Limburg, a Dutch province. Meanwhile, last October, Lithuanian Railways was fined €28m for going as far as removing a section of track on a cross-border link with Latvia to make life harder for a rival train operator. Rail startups also accuse various national champions of hogging the best rail slots, of engaging in predatory pricing and of pursuing vexatious litigation against them to push them out of the market.

But many newcomers, including Radim Janèura, founder of Student Agency, another bus company, from the Czech Republic, are hopeful that the fourth package will overcome many of these problems. The rules strengthen the regulators' powers to prevent anti-competitive behaviour, rather than acting in retrospect when complaints are made, as now. And the Luxembourg Protocol, a new set of global rules on rolling-stock leasing, will make it easier for startups to finance new trains, says Howard Rosen of the Rail Working Group, a trade body.

Ticket to ride

New entrants have often found it easier to take market share in smaller countries, where state rail firms do not have as much financial muscle as in larger states. And bigger companies, such as Flixbus and Student Agency, are less easily pushed around. Flixbus found it easy to request the track slots it wanted from Deutsche Bahn, says Jochen Engert, its chief executive—possibly because the incumbent feared a backlash from Flixbus's legions of customers (the firm controls over 90% of Germany's bus market).

Smaller outfits may be too financially weak to take advantage of the reforms: LEO Express, for all Mr Novotny's optimism about the coming changes, has lost money since its founding in 2010. And the high costs involved in starting a new railway firm mean that it will take time for the full benefits of competition to be felt by EU passengers, says Lorenzo Casullo of the OECD, a think-tank. Europe's railways are on a long journey, but commuters will surely be better off down the line.

This article appeared in the Business section of the print edition under the headline "New kids on the track"

Bartleby

Tortured by meetings

You take minutes and waste hours

Print edition | Business Jun 30th 2018

MOST workers view the prospect of a two-hour meeting with the same enthusiasm as Prometheus awaited the daily arrival of the eagle, sent by the gods to peck at his liver. Meetings have been a form of torture for office staff for as long as they have pushed pencils and bashed keyboards.

One eternal problem has been their inefficiency. In 1957, C. Northcote Parkinson, an academic and legendary writer on management, came up with the law of triviality, that "the time spent on any item of the agenda will be in inverse proportion to the sum [of money] involved." In that same spirit, this columnist would like to propose an even broader principle, applying to gatherings of ten people or more, and immodestly called Bartleby's Law: "80% of the time of 80% of the people in meetings is wasted."

Various corollaries to this law follow. After at least 80% of meetings, any decisions taken will be in line with the HIPPO, or "highest-paid person's opinion". In short, those who backed a different outcome will have wasted their breath. Perhaps because they are aware of the futility of their input, fewer than half of the people in a large meeting will bother to speak and at least half of the attendees will at some point check their phones.

Part of the problem lies in the paradox that, although workers hate attending meetings, they loathe being excluded even more. Nothing is so likely to induce paranoia than a department meeting to which you are not invited. To avoid this fear, managers are tempted to invite as many people as might be interested.

Clearly there are occasions when everyone should be involved: when a significant event occurs such as a change of leadership or strategy, or the announcement of job losses. If workers are organised into small teams, there is much to be said for the "morning huddle" in which members update each other on their progress; the whole thing can take 15 minutes.

But most meetings drag on for much longer. Maurice Schweitzer, professor of management at the Wharton School of the University of Pennsylvania, says they work best when preparation is done. Informing people of the agenda in advance keeps them from being caught off guard—surprise often leads to a negative reaction to plans. Sadly, he adds, preparation is not a sexy part of management so seldom gets done.

One prerequisite is to establish if the meeting is designed to persuade the staff to go along with a management decision or to learn about the workers' ideas and problems. If the former, then allies of whoever is in the chair should speak first, and drive the agenda. But such meetings ought to be rare in a well-run firm.

If a meeting's object is to learn what people think, a new approach is required. Low-status employees should be encouraged to speak, says Mr Schweitzer, and there should be a "no interruption rule" so they cannot be intimidated. Another option would be to let people submit views anonymously in advance.

The danger of a "no interruption" rule is that garrulous colleagues might make such meetings extremely lengthy. At one point, every worker will have lost patience with "Tommy Tangents" (those who drone on at length about an issue that is irrelevant to the agenda) and "Hearsay Harrys" (those who cannot tell the difference between a personal anecdote and scientific evidence). So Bartleby would favour limiting all interventions to a maximum of 2-3 minutes.

The best way to avoid Parkinson's law of triviality is to get the agenda right. Jay Bevington of Deloitte, a consultancy, says there is a temptation to leave the most important—and therefore the most contentious—items until the end of the meeting. Instead they should be tackled at the start.

Furthermore, there is no point in holding a meeting unless everyone knows what has been decided afterwards. Mr Bevington says that many would be surprised how many board directors leave a meeting without being sure of what has been agreed upon.

But perhaps the best solution to tedious gatherings is to have far fewer of them. GE's new boss, John Flannery, has called for "little or no meetings where possible". Thanks to the miracle of modern technology, messaging groups allow management and employees to keep in touch. Information can be imparted in succinct form and those who are not involved can ignore the messages and get on with their work. Next time a manager is tempted to call colleagues together, they must have a good answer to the question: "Is this meeting absolutely necessary?"

This article appeared in the Business section of the print edition under the headline "Taking minutes, wasting hours"

Power Failure

John Flannery gets down to business restructuring General Electric

Booted from the Dow this week, GE is becoming humbler but fitter

Print edition | Business Jun 28th 2018

AP

THIS should have been one of the very darkest weeks in the history of General Electric (GE). The firm founded by Thomas Edison has been a member of the Dow Jones Industrial Average, a stockmarket index composed of leading American companies, for over a century. Alas, mismanagement and a failure to move with the times have turned the erstwhile icon of innovation into a disorganised, debt-laden mess. GE's shares have plunged to below a quarter of their peak value in 2000. On June 26th GE was ejected from the Dow index and replaced by Walgreens Boots Alliance, a big health-care firm.

Yet on that same day a ray of sunshine also fell on GE. John Flannery, an insider known for his number-crunching skills who has been the troubled firm's boss since last August, announced details of a much-awaited restructuring plan. Over the next couple of years GE will spin off its healthcare division and unwind its newish stake in Baker Hughes, a petroleum-services firm. He had previously confirmed the sale of its train locomotive division. Taken together, these three units generate roughly $40bn a year, about a third of the firm's annual revenues.

GE's share price rose on the news. The obvious reason for cheer was Mr Flannery's renewed promise to slim down the unwieldy conglomerate, including a vow to slash its net debt and pension obligations by $25bn. He also promised to cut an extra $500m in costs, on top of previously announced cuts, by 2020. Beyond this willingness to wield the axe, Mr Flannery's plan for fixing GE has three attractive elements: call them "spinners", spin-offs and "spinning down".

First, the plan lets management focus on the core businesses of power generation, aviation and renewables (what people at the firm call "things that spin"). This rump produces about $70bn a year in revenues. GE's power division, which generates about half of those revenues, is in particularly deep trouble. A combination of mismanagement, ill-judged investments and weak global demand has left it in crisis. The division is shedding some 12,000 workers, nearly a fifth of its global workforce. Delivering on GE's promise to continue "right-sizing the business" to match lower demand will require hard work.

Second, the restructuring is being done in a thoughtful way that should produce shareholder value. Rather than, say, sell the profitable health-care unit to a strategic buyer in return for a rapid infusion of cash, Mr Flannery will spin it off as a standalone firm. He will give 80% of its shares to GE shareholders (who will thus capture any future financial gains), and sell the remaining fifth. Research by Emilie Feldman of the Wharton School shows that such spin-offs create value in two ways. Freed from overbearing parents, the new entities become more efficient at allocating capital. Intriguingly, her research shows that the divesting firms also improve their financial performance after a spin-off.

The third reason for cheer is Mr Flannery's desire to reform GE's management culture. This week he launched a new "GE Operating System" which promises less centralised decision-making and red tape, and a spinning down of resources from headquarters to business units. GE's bloated board of directors has been replaced with a smaller, more relevant one that includes Ed Garden, a co-founder of Trian, an activist investor. Steven Winoker of UBS, an investment bank, calls this the most important of all the reforms, praising the new directors as "sharp, useful people".

The road ahead remains rocky. The firm may be forced to cut its dividend again, reckons Mr Winoker, which will produce howls of protest from investors. Still, if his bold plan succeeds, Mr Flannery will in time have moulded a humbler but fitter GE that may yet endure another century.

This article appeared in the Business section of the print edition under the headline "Power failure"

Crossing the London bridge

Contrition wins the day for Uber in a big market

Regaining its London licence was a key test of Dara Khosrowshahi's overhaul

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SECOND chances exist, after all. Last September Uber was sideswiped when Transport for London (TfL), the city's transport regulator, revoked the ride-hailing giant's licence to operate in the capital, citing concerns related to public safety and reporting of drivers' criminal offences. The decision appeared to dent the prospects of the firm, which counts London as its largest European market and one of the most lucrative of its 600 cities. Uber continued to operate in London while appealing the decision, but a lot still hung in the balance.

Welcome news came on June 26th when a judge in London awarded the firm a licence for 15 months. In court Uber had taken a contrite and muted stance, promising to do more to provide support for riders and drivers, including launching a telephone hotline for passengers. The chief magistrate for the case, Emma Arbuthnot, decided that Uber had not acted in a sufficiently "fit and proper" manner previously, but that its new approach and leadership suggests it is ready to do so now.

TfL will still monitor it over the next 15 months, which will serve as a probationary period of sorts before its licence is again reviewed. Some doubt if Uber has really changed its rough-and-tumble ways. Gerald Gouriet, a lawyer representing the Licensed Taxi Drivers' Association, said that an "Uber in sheep's clothing" had appeared before the court.

Uber certainly has plenty to be sheepish about. It was Silicon Valley's biggest star before it suffered a series of public-relations and legal scandals. One episode, which fuelled concerns in London, involved revelations that the ride-hailing firm had designed software, called Greyball, to hide information from regulators and law-enforcement officials. Another complaint involved Uber's lack of timely reporting of attacks on passengers by drivers, suggesting the ride-hailing company prioritised profits over public safety.

Dara Khosrowshahi, who took over as chief executive last August, has been trying to win back trust. Uber is trying to change its image by undertaking a marketing campaign; it includes a national TV advert in America starring Mr Khosrowshahi, who almost seems to be running for political office as he pledges "new leadership and a new culture". He has also invested more effort in improving the firm's treatment of drivers; previously being "nice" was a hallmark of Uber's American rival, Lyft. Uber now allows passengers to tip drivers in many markets.

He must also tend to the firm's business. Earlier this year he raised money from SoftBank, a Japanese investor, which should tide it over until an initial public offering expected next year. In the first quarter of 2018 Uber claimed around $11.3bn in gross bookings, a huge sum; losses are narrowing. But it may be the more money the firm makes, the more concessions that regulators and drivers will feel they can extract from the firm.

Regulatory pressures remain heavy. In Britain Uber is appealing a ruling that it must count drivers as employees rather than contractors, entitling them to a minimum wage and holiday. Mr Khosrowshahi has so much to do that he is unlikely to get much time off himself this summer.

This article appeared in the Business section of the print edition under the headline "Crossing the London bridge"

First gear

VW opens Rwanda’s first car-assembly plant

The vehicles will be used in a new car-sharing and ride-hailing service

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HOW to sell cars when most people can’t afford to buy one? That is the conundrum for Volkswagen in Rwanda, where it is opening the country’s first car-assembly plant. A new Polo costs 33 times the average Rwandan income. Most cars on the road are second-hand imports. Rwanda absorbs perhaps 3,000 new cars a year, says Thomas Schäfer, VW’s chief in Africa. Past projects by carmakers in Africa, he admits, have ended in “monumental failure”.

Yet there was a hopeful mood when VW launched its operations in Kigali, the Rwandan capital, on June 27th. The moment opens ”a new chapter in Rwanda’s journey,” said Paul Kagame, the president, after taking a demonstration model for a spin. In truth, little of the manufacturing will happen locally, at least to begin with. VW will build its vehicles elsewhere, partly dismantle them, then put them back together in Rwanda.

The real novelty is how the cars will be used. VW is linking production to a ride-hailing and car-sharing service, stocked with its own vehicles. More people will pay to use a car, it reasons, than can afford to own one. At first, firms and government agencies will be able to use shared vehicles; from 2019 a similar service will be rolled out to the general public, with cars stationed around the city. Anyone with the mobile app will also be able to call up a lift, starting this October. The cars will be used for a few years, then sold into the second-hand market. The $20m project will initially produce 1,000 vehicles, with capacity to churn out 5,000 units a year.

Kigali is a small, orderly place in which to test the idea. If it works, VW could replicate it. It has recently restarted assembly in Kenya and Nigeria, after decades away, and hopes to enter Ghana and Ethiopia. Mr Schäfer likens VW’s African ambitions to its decision to enter China in 1985. At the time, Chinese car-ownership rates were lower than in most African countries today. Now, VW sells over 3m passenger cars a year there.

Some help comes from African governments, which shield producers from competition. Kenya plans to lower the maximum age for imported vehicles, from eight years to five. Nigeria imposes tariffs of up to 70% on car imports. Yet protection is often patchily implemented.

For now, cautious carmakers are edging along in first gear. Firms such as Peugeot, Nissan and Toyota have also opened new operations in Africa, often in partnership with local firms. Like VW, they are typically assembling knock-down kits, rather than building new cars from scratch. There is a long road ahead.

This article appeared in the Business section of the print edition under the headline "First gear"

Crypto's white-shoe firm

A disciplined startup emerges from the Wild West of crypto-currency

Yet Coinbase's future depends on volatile appetite for the currencies

Print edition | Business Jun 28th 2018

MOST startups proudly announce their presence on buildings, billboards and any surface offering visibility. Not Coinbase, a crypto-currency startup. Visitors to its headquarters on a high floor of an office tower in San Francisco find themselves before an unmarked door and doorbell. They are asked to confirm by intercom which firm they intend to see. An online search for Coinbase shows its offices at a different location, a diversion tactic to keep away disgruntled crypto-currency investors, thieves who are trying to get access to crypto-assets, and other malefactors.

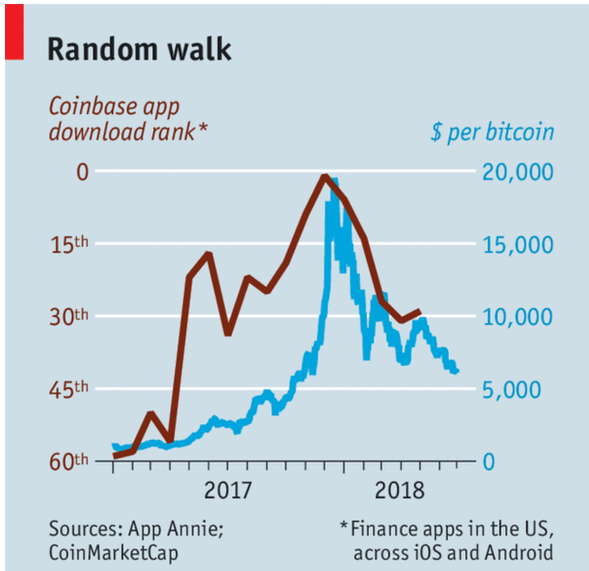
Such inconspicuousness contrasts with the company's high profile. Coinbase is one of Silicon Valley's fastest-growing young firms and by far the most prominent business to emerge from the mania around crypto-currencies. The six-year-old startup, an online brokerage for buying and selling bitcoin and other crypto-currencies, claimed a valuation of $1.6bn when it raised $100m from venture capitalists last year. It reportedly now has a valuation of around $8bn. It claims to have around 20m user accounts, perhaps half of all crypto-currency exchange accounts held globally, and stores assets worth $20bn. As well as catering to retail investors, it manages an exchange for professional ones trading large volumes of crypto-currency. Rumours swirl that Facebook, a social-networking giant, is interested in buying it.

As the price of crypto-currencies rocketed last year, with bitcoin notching up a sixteen-fold increase, Coinbase achieved revenues in 2017 of around $1bn. "We're selling picks and shovels in a gold rush," says Brian Armstrong, its boss. Coinbase charges a fee on every transaction, much like Charles Schwab does when people purchase stocks. The question now is whether Coinbase can be a star performer if, as has been the case recently, crypto-currencies perform poorly. (Bitcoin, for example, had fallen by 55% between the start of the year and June 27th.)

Crypto-currencies are "everything you don't understand about money combined with everything you don't understand about computers", in the words of John Oliver, a comedian. Such opacity has presented an opportunity for Coinbase, which has both an easy-to-use mobile app and a law-abiding reputation. In contrast to other startups such as Airbnb, a room-sharing app, and Uber, a ride-hailing firm, both of which launched in new markets without first seeking government approval, Coinbase was careful to first secure licences in American states where it planned to operate. This has probably hampered its growth but helped it to avoid controversy.

Mr Armstrong became an advocate for crypto-currencies after seeing the difficulties of moving conventional money around the world. While studying at Rice University in Houston, he co-founded an online marketplace for tutoring, called UniversityTutor.com, which grappled with how to pay tutors worldwide in various currencies. He later worked at Airbnb and then attended Y Combinator, a startup school, before setting up Coinbase with Fred Ehrsam, once of Goldman Sachs.

Both founders contradict the stereotype of crypto-enthusiasts as wild, lawless iconoclasts. On June 27th Mr Armstrong launched GiveCrypto.org, a philanthropic effort to encourage people who have made fortunes in crypto-currency to give some away; he pledged $1m of his own money. Yet Coinbase's digital fortunes are not immune to volatility. Mr Armstrong declines to comment on how recent falls in the value of crypto-currencies have affected Coinbase's sales, but acknowledges that "in up markets people tend to trade more".



Economist.com

Since bitcoin's peak in December Coinbase has fallen from America's most-downloaded finance app to the 29th-most popular, according to AppAnnie, a research firm (see chart). To insulate itself from price swings, Coinbase is diversifying beyond the brokerage business. It has added an asset-management division, custody and other business lines, and is buying other crypto-startups. Trying to expand quickly is never easy, however. Last year Coinbase struggled to accommodate a spike in demand for new accounts.

According to people close to the firm, Coinbase wants to go public as soon as next year. But, in addition to crypto-currency volatility, three potential threats to its plans loom. The first is regulation. America has adopted a hands-off attitude towards crypto-currencies; it is the largest market not to have big restrictions on trading them. China, India, Japan and South Korea have all imposed rules that make trading crypto-currencies difficult, costly or illegal. Any change could be disastrous for Coinbase. A change to America's currently generous tax treatment could also reduce crypto's allure as an investment.

A second threat is competition. Coinbase has shown that there is lots of appetite for investing in crypto-currencies, and banks are now eyeing the market. Robinhood, an online brokerage that has won customers by selling shares without charging a commission, now offers crypto-currencies. Just as stock-trading fees have collapsed over time, transaction fees in crypto-currencies are likely to tumble, putting pressure on Coinbase's margins.

Security is the third and most acute risk. In January armed robbers targeted a crypto-currency exchange in Canada; there have been many instances of individual investors' bitcoin being stolen by hackers and thieves. A similar incident could devastate Coinbase's business, since most of the $20bn of crypto-assets it stores are uninsured. Executives and the board are aware of the risks. "As a bank chief executive you can authorise a big wire transfer in a robbery, and then undo it the next day. Digital currencies are like handing over a suitcase of cash. You can't get it back," says Balaji Srinivasan, Coinbase's chief technology officer. The doors of the office remain unmarked for a reason.

This article appeared in the Business section of the print edition under the headline "Crypto's white-shoe firm"

Schumpeter

America Inc and the rage against Beijing

Boohoo. Just how badly has US business been treated by China?

Print edition | Business Jun 28th 2018

Brett Ryder

ONE of the naughty secrets about America's trade war with China is that it has the tacit support of much of America's business establishment. For the past 20 years big firms' default mode has been Sino-infatuation. Schumpeter attended a dinner in 2016 between the captains of USA Inc and Li Keqiang, China's premier, and you could taste the deference in the air more keenly than the beef on the plates. But lately bosses' mood has flipped into a hostility that risks becoming jingoistic and unhelpful.

While a few Sino-dependent companies such as Apple and Boeing want to lower the temperature, many others consider themselves mistreated by China; for them, it is payback time. This stance has two flaws. The sense of victimhood is over the top; American firms have done reasonably well in China. And it is stoking the White House to escalate a conflict that may spill over from trade tariffs into a war over investment by multinationals.

China may have been bad for steel workers in Cleveland but the calculation for companies is different. Globalised production has lowered labour costs. Since China's entry into the World Trade Organisation in 2001, profit margins in America have been 22% above their 50-year trend. And companies engage not just in trade, but in cross-border investment too.

It is this investment that riles American firms. China originally promised to open up its vast market, bosses complain, but today it bars companies from some industries and forces them into joint ventures with partners that steal their intellectual property. Chinese firms get cheap state loans. The "Made in China 2025" plan envisions that foreign firms are excluded from new areas such as artificial intelligence. The overall result, bosses grumble, is that American firms are puny in China, making 4% of their global sales there. Champions such as Amazon and Goldman Sachs have either flopped or been largely excluded. Only perhaps a dozen companies make over $1bn of profits a year from China, including General Motors and a few tech-hardware stars.

Such complaints are valid, but the picture is lopsided. Most bosses love China's state-run model when it involves them getting privileged access to its omnipotent leaders. Other big countries have infuriating investment curbs, both explicit and tacit, including India and France. The transfer of know-how from rich countries to poorer ones, by hook or crook, is an integral part of economic development. Firms often fail abroad—there is no God-given right to triumph. And few bosses bother to calibrate their China problem. They should ask themselves how big their business in China ought to be—or, what would "fair" look like?

Schumpeter has considered four measures of Chinese corporate unfairness, using data from Morgan Stanley and Bloomberg. The first is the weight of China in the foreign sales that American firms bring in. It stands at 15%; if it was in line with China's share of world GDP, it would be 20%. This shortfall amounts to a small 1% of American firms' global sales (both foreign and domestic). America Inc is similarly underweight in the rest of Asia, but there is much less fighting talk about South Korea or Japan.

The second test is whether there is parity in the commercial relationship. Firms based in China make sales to America almost exclusively through goods exports, which were worth $506bn last year. American companies make their sales to China both through exports and through their subsidiaries there, which together delivered about $450bn-500bn in revenue. Again, there is not much of a gap. American firms' aggregate market share in China, of 6%, is almost double Chinese firms' share in America, based on the sales of all listed firms.

The third yardstick is whether American firms underperform other multinationals and local firms. In some cases failure is not China-specific. Walmart has had a tough time in China, but has also struggled in Brazil and Britain. Uber sold out to a competitor in China, but has done the same in South-East Asia. American consumer and industrial blue chips are typically of a similar scale in China to their nearest rivals. Thus the sales of Boeing and Airbus, Nike and Adidas, and General Electric and Siemens are all broadly in line with each other. Where America has a comparative advantage—tech—it leads. Over half of USA Inc's sales in China are from tech firms, led by Apple, Intel and Qualcomm. Overall, American firms outperform. For the top 50 that reveal data, sales in China have risen at a compound annual rate of 12% since 2012. That is higher than local firms (9%) and European ones (5%).

The final measure is whether American firms are shut out of some sectors. This is important as China shifts towards services and as the smartphone market, a goldmine, matures. The answer is clearly "yes". Alphabet, Facebook and Netflix are nowhere, and Wall Street firms are all but excluded from the mainland. Chinese firms, however, can make a similar complaint. The market share of all foreign firms in Silicon Valley's software and internet activities, and on Wall Street, is probably below 20%. America's national-security rules, thickets of regulation, lobbying culture and political climate make it inconceivable that a Chinese firm could play a big role in the internet or in finance there.

The great wail about China

Far-sighted bosses know their stance on China must reflect a balanced assessment, not a delusional vision of globalisation in which anything less than a triumph is considered a travesty. But their voices are being drowned out. The shift of the business establishment to hawkishness on China has probably emboldened the White House and also led the Treasury and Department of Commerce to be more combative. Most big firms are blasé about tariffs; they can pass on the cost to clients. Few export lots to China. But soon China will run out of American imports to subject to retaliatory tariffs; in a tit-for-tar war, beating up American firms' Chinese subsidiaries is a logical next step. USA Inc's Sino-strop would then end up enabling the opposite of what it wants.

This article appeared in the Business section of the print edition under the headline "Raging against Beijing"

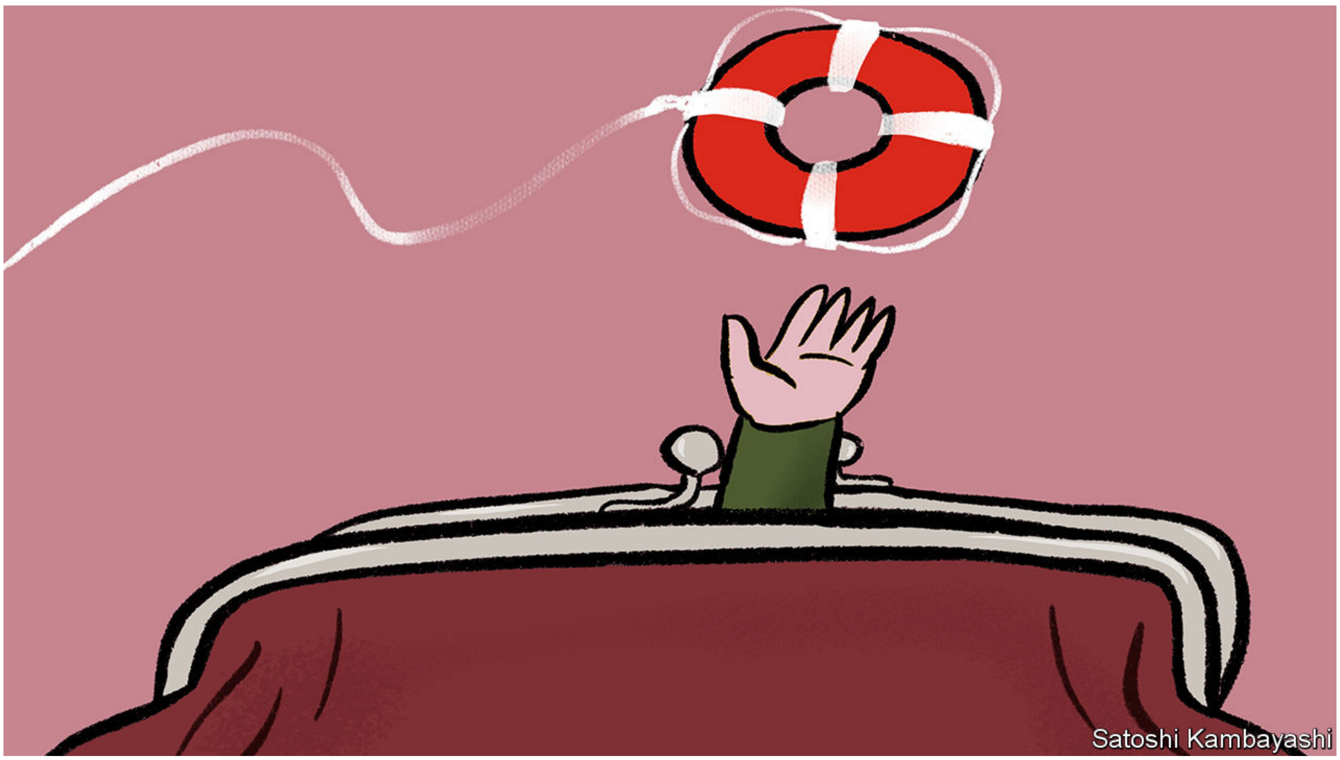
Wages
The real story

A real story

The rich world needs higher real wage growth

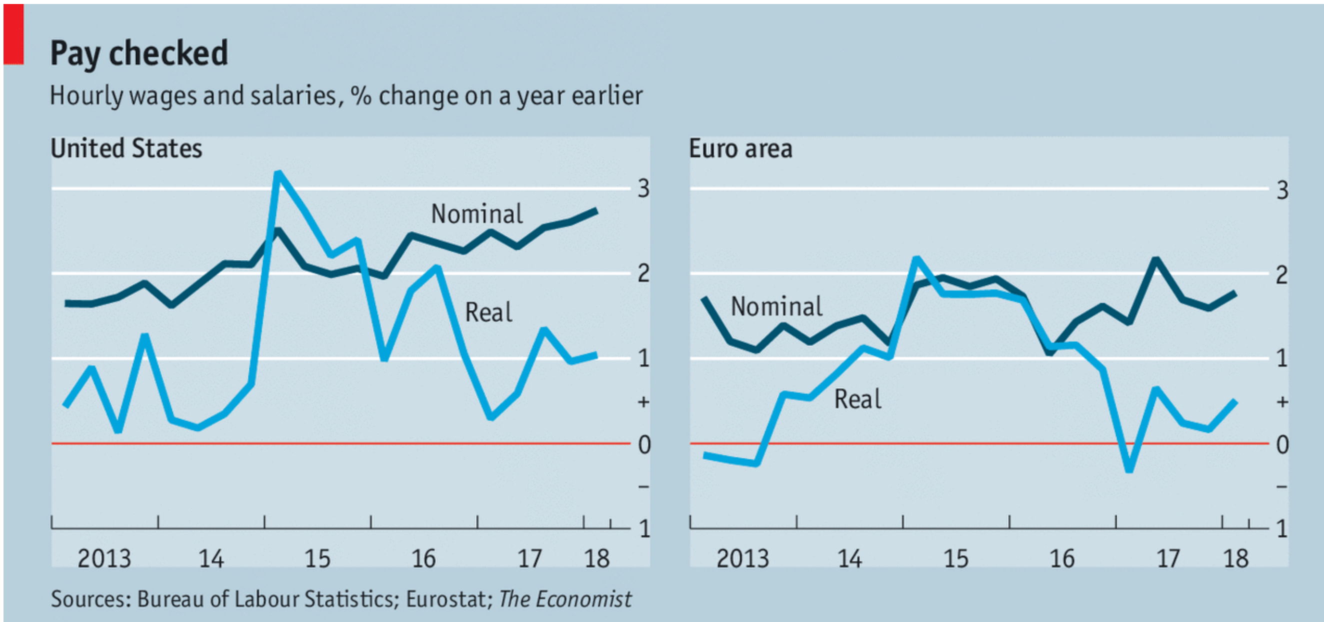
Pay is rising, but so are prices. Blame more expensive oil

Print edition | Finance and economics Jun 30th 2018



CENTRAL bankers and economists have spilled much ink in recent years on the question of why wages have not grown more. The average unemployment rate in advanced economies is 5.3%, lower than before the financial crisis. Yet even in America, the hottest rich-world economy, pay is growing by less than 3% annually. This month the European Central Bank devoted much of its annual shindig in Sintra, Portugal to discussing the wage puzzle.

Recent data show, however, that the problem rich countries face is not that nominal wage growth has failed to respond to economic conditions. It is that inflation is eating up pay increases and that real—that is, inflation-adjusted—wages are therefore stagnant. Real wages in America and the euro zone, for example, are growing more slowly even as the world economy, and headline pay, have both picked up (see chart).



Economist.com

The proximate cause is the oil price. As the price of Brent crude oil, a benchmark, fell from over $110 a barrel in mid-2014 to under $30 a barrel by January 2016, inflation tumbled, even turning negative in Europe. That sparked justified worries about a global deflationary slump. But it was an immediate boon for workers, who saw nominal pay increases of around 2% translate into real wage gains of about the same size. (An exception was Japan, where a rise in the sales tax from 5% to 8% in 2014 squeezed wallets.)

Since then, nominal wage growth has gradually picked up as labour markets have tightened, roughly in line with the predictions of economists who use broader measures of slack than just the unemployment rate. But inflation has risen in tandem with wages, as the oil price has recovered to close to $75 a barrel. That means many workers are yet to feel the benefit of the global economic upswing that began during 2017. In America and Europe, real wages are growing barely faster than they were five years ago, when unemployment was much higher.

In the long run, changes in real wages are linked to changes in workers' productivity, which has grown slowly everywhere since the financial crisis. In the year to the first quarter of 2018, for example, American productivity grew by only 0.4%. But some spy a rebound. For current forecasts of blazing economic growth in America to bear out, productivity must grow faster. In the second half of 2017, productivity in Britain grew at the fastest rate since 2005. The Bank of Japan thinks that firms there are investing heavily to boost productivity so that they do not have to pay for higher wages by raising prices.

Yet even a recovery in productivity would not guarantee good times for workers. In recent decades the share of GDP going to labour, rather than to capital, has fallen because real pay has increased more slowly than productivity. In advanced economies labour's share fell from almost 55% to about 51% between 1970 and 2015, according to researchers at the IMF. A widely heard explanation is that a fall in union membership, combined with rising offshoring and outsourcing, has eroded workers' bargaining power. More recently, economists have suggested that labour's falling share could be linked to the rise of "superstar" firms such as Google that dominate their markets and have low labour costs relative to their enormous profits.

Reversing the fall in labour's share of GDP would require real wages to grow faster than productivity, weighing on firms' profit margins. Continued tightening in labour markets might yet boost workers' bargaining power enough for that to happen, as was the case during the late 1990s and late 2000s, two unusual periods in which labour's share of GDP rose across the rich world. There is still room for improvement. For instance, even where unemployment rates are low, the number of part-time workers who want full-time jobs remains unusually high. This continues to weigh on wage growth, according to an analysis by the IMF late last year.

Some countries, such as Italy, still suffer from unemployment rates that are far higher than they were before the financial crisis. Such pockets of slack might constrain wages everywhere now that goods are produced in international supply chains and sold on global markets. In a recent working paper, Kristin Forbes of the Massachusetts Institute of Technology concluded that the influence on inflation of global slack and commodity prices has grown in the past decade, while local economic conditions have become less important. Philip Lowe, the governor of Australia's central bank, told the audience in Sintra that when he asks firms that are struggling to find workers why they do not pay more, they "look at me as if I'm completely mad" and deliver a lecture on how competitive the world has become.

If slack were eliminated everywhere, pay might rise faster. The question is whether inflation continues to rise in tandem as companies find that, when push comes to shove, they can pass higher costs onto their customers. If they can, there is little hope for much improving workers' lot in real terms. The Federal Reserve has been raising interest rates in response to a perceived inflationary threat. The European Central Bank, too, is tightening, saying that it will probably stop asset purchases at the end of the year. Mario Draghi, its president, points to growth in hourly pay of 1.8% as a justification for the move.

That seems a little hasty, given workers' lamentable fortunes in recent decades. But hawks think there is little room to boost real wages by running labour markets hotter. If they are proved right, it will be hard to refute the argument that structural changes in the economy, rather than weak demand alone, have stacked the deck against workers. Governments will then have to find novel ways to respond—or hope for another crash in the oil price.

This article appeared in the Finance and economics section of the print edition under the headline "The real story"

Investment wars

The Trump administration plans to crack down on Chinese investment

For once, this goes with the grain of American policymaking

Print edition | Finance and economics Jun 28th 2018

PRESIDENT Donald Trump's view of investment depends on who is doing it. On June 22nd he railed against Europeans exporting cars to America, demanding that they "build them here!" On June 26th he tweeted that all Harley-Davidson motorcycles should be made in America (see article). But when it comes to Chinese investors buying American technology, Mr Trump would prefer a frostier approach.

Investors have feared a clampdown since March, when the administration concluded that China's unfair actions against American companies merited retaliatory restrictions on Chinese investments in "industries or technologies deemed important to the United States". Mr Trump directed Steven Mnuchin, the treasury secretary, to come up with options. On June 24th it appeared policy might tighten dramatically, with reports of plans to limit investment in America in the sectors targeted by China's "Made in China 2025" development policy, from aerospace to robotics.

Those plans were quickly shelved, perhaps because of market falls on June 25th. On June 27th the White House confirmed that there would be no new China-specific restrictions. Instead, it would rely on the Committee on Foreign Investment in the United States (CFIUS), an intra-agency committee that reviews inbound investment. Mr Trump also told the Commerce Department to review export controls.

What might look like a non-event is in fact an attempt to avoid a duplication of effort. Both America's inbound-investment restrictions and its export controls are being beefed up by the Foreign Investment Risk Review Modernisation Act (FIRRMA), a bill with bipartisan support that should become law in the coming months. It would expand CFIUS's scope of review and strengthen controls on exports of technologies deemed particularly sensitive. A version was approved overwhelmingly by the House of Representatives on June 26th.

Economist.com

So the Trump administration's decision not to set up new constraints does not signal a change of heart towards China. Rather, it reflects a desire shared with Congress to block Chinese cash. China's share of direct investment into America is still small, but has risen quickly (see chart). Of $137bn in the ten years up to 2017, 24% was invested by state-owned enterprises, fuelling widespread concern that the purchases are part of a Chinese government strategy to dominate America economically.

That concern has been reflected in CFIUS's activities. Of the 387 transactions it reviewed between 2013 and 2015, 74 involved Chinese investors. Of the five transactions it has ever recommended to be blocked, four involved Chinese buyers. Investment from China has already fallen from its peak in 2016, pulled down by Chinese capital controls and tougher American scrutiny. Since FIRRMA was drafted with China in mind, opportunities for such scrutiny will only increase.

Historically, Congress has not been shy about calling for a tough approach towards America's economic rivals. CFIUS was set up in the 1970s in response to concerns that members of OPEC, the oil producers' cartel, were hoovering up American assets for political ends. Congress granted the president authority to review investments in the 1980s, amid fears over Japan's economic rise and its firms' attempts to buy up American makers of semiconductors. The first set of concerns has since faded; the second now focuses on China.

But policymakers have tried to avoid discouraging investment in America. In the 1980s Ronald Reagan fought against broadening the scope of CFIUS to include "essential commerce" as well as "national security". Handing the power of approval to the president rather than Congress was supposed to depoliticise the process, and so protect ordinary businesses.

Today, as Mr Trump seems eager to hit China where it hurts, these roles may be reversed. Congress has softened the most draconian parts of the bill. An earlier version of FIRRMA would have led to CFIUS being able to review any outbound transfer of intellectual property between companies in joint ventures or licensing deals. But it was pared back after companies voiced fears that this could interfere with their everyday operations, by leaving even the most vanilla transactions exposed to a cumbersome review process.

New, vaguely worded China-specific restrictions from the administration could have increased the uncertainty swirling around multinationals. In the run-up to June 27th, some had worried that ordinary cross-border business could be hit. Could an engineer sharing information with another in a foreign subsidiary count as a transfer of America's intellectual resources? The news that Mr Trump's push for investment restrictions had narrowed to CFIUS and FIRRMA, therefore, was a relief to some. When it became public, the S&P 500 ticked up.

This article appeared in the Finance and economics section of the print edition under the headline "Safe and secure"

Mama's love

China starts easing monetary policy. Or does it?

The challenges of interpreting the central bank's latest move

Print edition | Finance and economics Jun 30th 2018

CHINESE investors often refer in jest to the central bank as "central mama". The idea is that it can be counted on to provide tender love—that is, policy easing—when market conditions are rough. But during the past couple of years it has been more of a disciplinarian, taking cash away from reckless investors. Its latest move, a cut of banks' required reserves, has triggered a debate about which school of parenting it subscribes to these days. Is central mama turning soft again, or is she still cracking the whip?

On June 24th the People's Bank of China said it would reduce the portion of cash that most banks must hold in reserve by 50 basis points. This was equivalent to deploying 700bn yuan ($106bn) in the financial system, or nearly 1% of GDP, which might sound like a healthy dose of liquidity to shore up growth. But the central bank insisted that it was not easing policy.

Many analysts take the central bank at its word. In the past, when it focused on the quantity of money in the economy, reducing required reserves could be seen as a form of loosening. But in recent years it has placed more emphasis on interest rates. Its most important target is banks' short-term cost of borrowing from each other. That remained stable over the past week at about 2.8% in annual terms, proof that the announcement had little discernible impact.

Moreover, the main weapon in the central bank's arsenal this year has not been monetary tightening but stricter regulation. It has, for example, forced banks to bring off-balance-sheet loans onto their books. There is no sign that officials are about to reverse these policies, which are at the heart of their campaign to rein in debt. E Yongjian of Bank of Communications, a Chinese bank, says cuts in required reserves can, over the long term, be viewed as policy normalisation. China used to rely on reserves to neutralise the inflationary effect of money flowing in from its whopping trade surplus. Even after the latest cut, banks must park 15.5% of their assets at the central bank as reserves, earning meagre interest. But with China's current-account surplus steadily shrinking, the central bank has started to release this pent-up liquidity.

The counterargument is that, despite the central bank's protests, the timing and manner of these cuts matter. The latest move stood out. In April it also cut the reserve requirement ratio, and by twice as much: 100 basis points. Yet that was more of a technical adjustment. The cash injection was mostly cancelled out by the central bank's withdrawal of liquidity from another channel. This time, all of the 700bn yuan freed up was available for banks to use. The central bank specified that it wanted them to step up the pace of swapping corporate loans into equity stakes (part of China's strategy for paring its debts). But as Julian Evans-Pritchard of Capital Economics, a consultancy, notes, this amounts to a "convenient excuse", allowing China to inject large amounts of liquidity without abandoning its commitment to tackling financial risks. Analysts with Nomura called it a “clear signal of policy easing”.

The stockmarket, in so far as rationality can be ascribed to it, came down on the side of those saying that the central bank has not really started to ease. Prices continued to fall, taking the benchmark Shanghai index down more by than 20% since January. Technically, that makes this a bear market. Should the tumbles continue, it may not be long before central mama puts her more indulgent side on full display.

This article appeared in the Finance and economics section of the print edition under the headline ”Mama’s love”

Roaring away

Harley-Davidson shifts some production out of America

An isolated response to Donald Trump's trade war, or the first of many?

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AMERICAN companies "will react and they will put pressure on the American administration to say, 'Hey, hold on a minute. This is not good for the American economy.'" So said Cecilia Malmström, the European Union's trade commissioner, on news that Harley-Davidson plans to move some production out of America to avoid tariffs imposed by the EU on motorcycles imported from America. Those tariffs had themselves been introduced in retaliation for American duties on steel and aluminium imports.

President Donald Trump showed no signs of absorbing this salutary lesson. In one of many splenetic tweets about Harley, he said: "If they move, watch, it will be the beginning of the end." Other American firms are no doubt watching. Will any follow?

Harley is unusually vulnerable to Mr Trump's escalating trade war. Not only have its inputs, namely metals, risen in price, but it makes a fair chunk of its sales, 16%, in Europe. It puts the cost of absorbing the EU's tariffs up to the end of this year at $30m-45m. It has facilities in countries unaffected by European tariffs that can ramp up relatively quickly. (Some think it may have been considering the shift anyway, and wanted to pin blame on the dastardly Europeans.)

Other American industries have fewer options. Mexico and Canada, as well as the EU, have targeted foodstuffs, from pork and apples to cheese and orange juice. American farmers will have to find other markets, lower prices or cut production. The EU has also put tariffs on whiskey; Jack Daniels is made only in Lynchburg, Tennessee and is going nowhere in a hurry. But jeans, another target, are made all over the world. Textiles firms may be able quietly to siphon production away.

Carmakers are worth watching. Mr Trump is seeking to rework supply chains within the North American Free-Trade Agreement (NAFTA), in order to bring more production to America. But Mexico, NAFTA's lowest-cost location, has many preferential trade agreements with other countries—and, thanks to NAFTA, plenty of spiffy car factories. Rather than react as Mr Trump wants, auto manufacturers may expand in Mexico and make less in America for sale abroad.

But most firms will want to wait for greater clarity before making fundamental changes to supply chains. That, at least, is the lesson of Brexit. It has taken two years since Britons voted to leave the EU for manufacturers to say loud and clear that they will pull out unless Britain retains seamless trade links with the EU. Although many foreign firms have scaled back on investment in Britain, none has actually shut up shop.

So Harley-Davidson may not presage an immediate wave of similar announcements. If the tariff war drags on, however, more will follow. Mr Trump believes that no country can afford to lose access to the mighty American consumer. Some businessmen are less sanguine, fearing that other countries will act in concert against America. Ironically, Harley is behaving just as Mr Trump wants, "tariff-hopping" to be on the right side of trade barriers. Just not in the direction he wanted.

This article appeared in the Finance and economics section of the print edition under the headline "Roaring away"

Grand Theft Petro

Fighting the resource curse through online gaming

Welcome to Petronia

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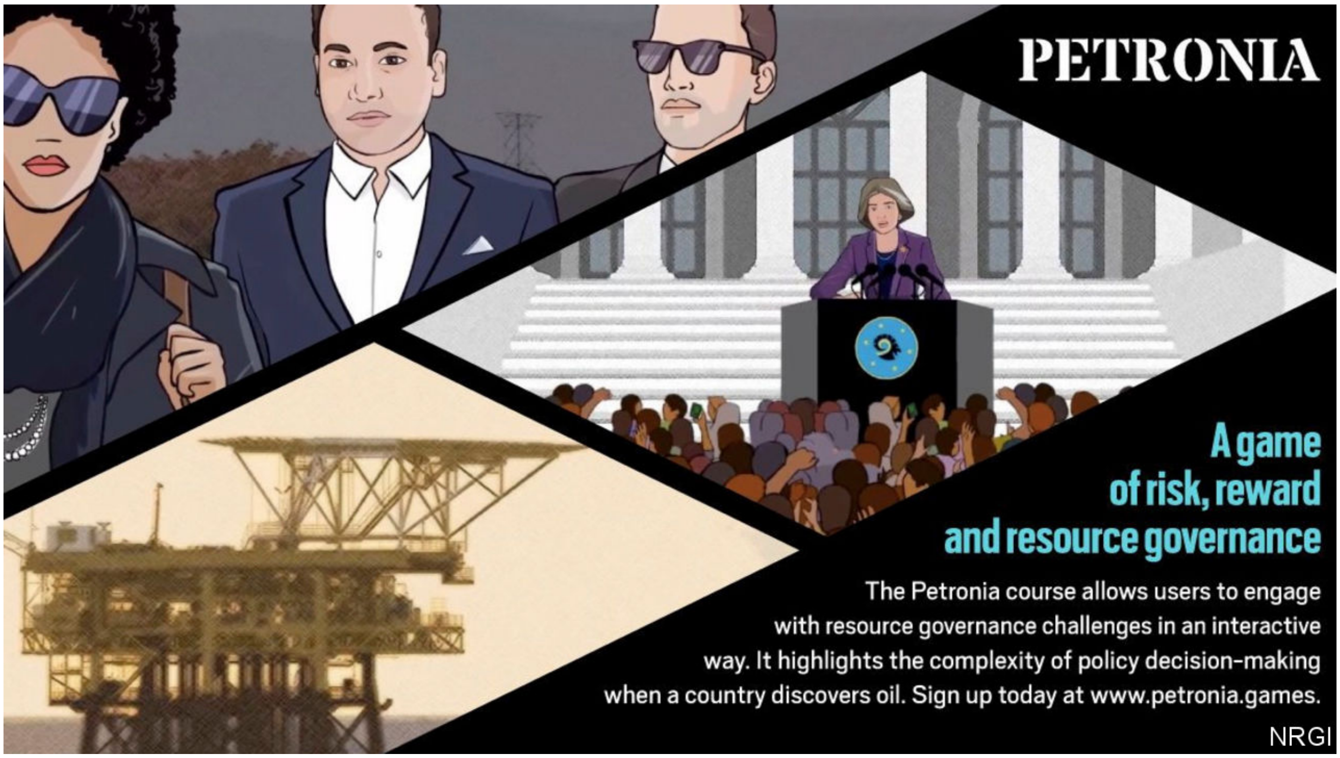


ALAIN LILLE is not pleased. His wildcat oil firm spent a fortune looking for oil in Petronia, a former colony known for cashmere wool, long before anyone else was willing to take the risk. After sealing a deal with the long-ruling government, he was poised to reap the rewards. But in last year's election, a new president came to power, promising a better deal for the people. Mr Lille fears she will reopen negotiations, further delaying any profits for the company or revenues for the country. She has invited four foreign "experts", who have never set foot in the country before, to advise her. As he shares these concerns at a drinks reception at Hôtel Capitale, Mr Lille notices one of these foreign advisers sidling up to listen in.

Mr Lille does not exist. Neither does the country, Petronia. They appear instead in a new online game created by the Natural Resource Governance Institute (NRGI), a think-tank based in New York and London that seeks to improve the management of oil, gas and mineral wealth in developing countries. As a player, you take on the role of that pesky foreign adviser eavesdropping on Mr Lille. As well as the drinks reception, your adventures will take you to the presidential palace, the capital city's cafés and markets, and the coastal district of Neftala, where the oil was discovered.

In its training courses NRGI has long experimented with role-playing. It hopes that the game, which took £130,000 ($170,000) and three years to produce, will reach a wider audience, including activists in countries that see a lot of themselves in Petronia. A former employee, Jed Miller, has described it as "grand theft petro".

In truth, it is more educative than addictive. The freedom that players enjoy is necessarily constrained, says Katarina Kuai of NRGI. Even perverse decisions will not take you too far from the main plotline. The game does little to disguise the priorities of its makers. (In Petronia, even the taxi drivers talk about the need for transparent data on revenues.)

The game nonetheless conveys the dilemmas faced by countries like Petronia. Should the government lock in a stream of revenues through royalties, or take a riskier equity stake? Should it seek to build up local staff and expertise, or tap foreign firms and outside know-how? Saving revenues for the future will help stabilise the economy, but could also frustrate voters and leave the president's successor with money to squander.

Even experts will learn something. And they will enjoy the inside jokes scattered throughout the game. One of the foreign advisers is tediously eager to promote his new book ("Big Bang Growth"). Another is modelled on Nicola Woodroffe, a lawyer at the NRGI. And Mr Lille, the shady French oil man, is the spitting image of Robert Pitman, the upstanding head of the institute's work on transparent contracts.

NRGI is not alone in venturing into this kind of "serious gaming". Petronia's launch event featured Elizabeth Newbury of the Wilson Centre, who has helped create games out of American government policy. In "The Fiscal Ship", for example, players try to cut America's public debt while meeting national goals they can choose (or copy from President Donald Trump). Ms Kuai thinks that films like "Avatar" and "Black Panther" show that the politics of natural resources has broad cultural resonance. "We wanted to catch this wave," she says.

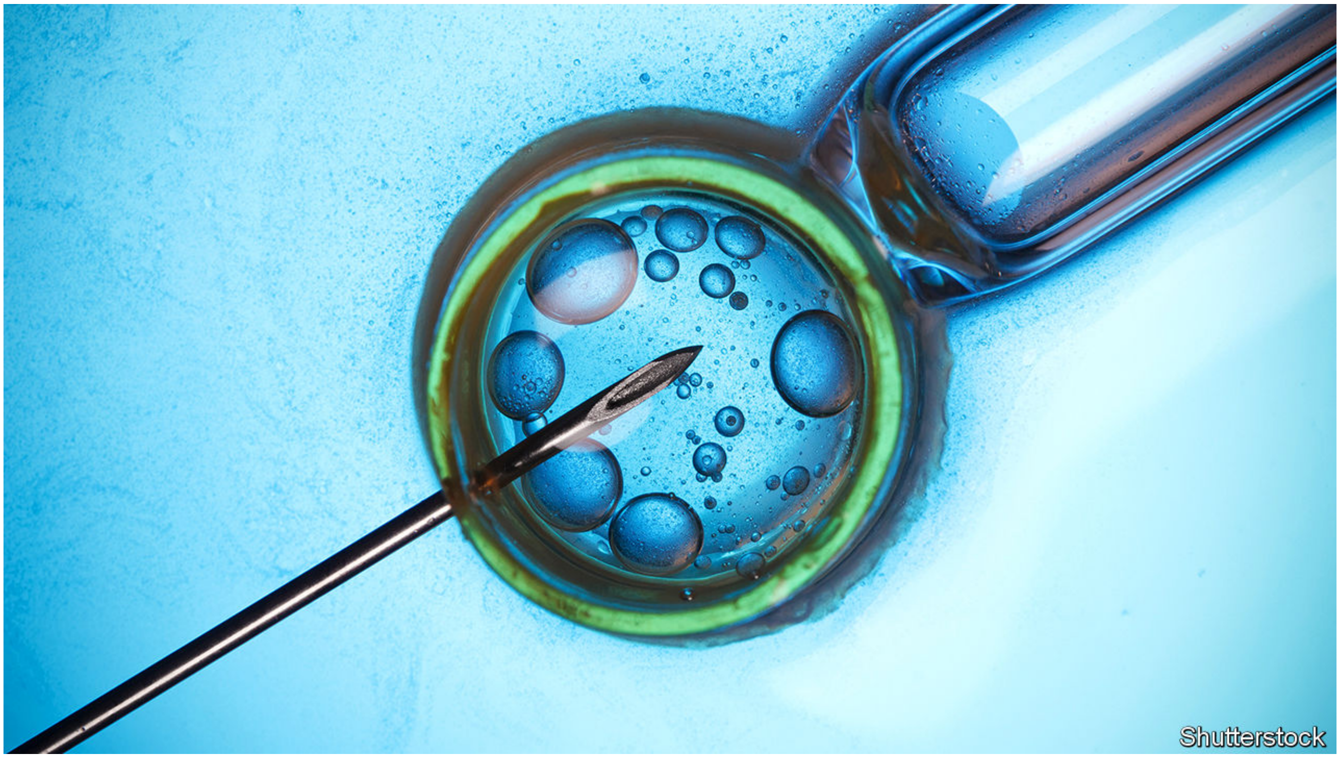
This article appeared in the Finance and economics section of the print edition under the headline "Grand Theft Petro"

An embryonic idea

Carrot, a Silicon Valley startup, takes a novel approach to funding IVF

Fertility treatment is too expensive for many. And insurance often does not pay

Print edition | Finance and economics Jun 28th 2018



IN 2016, 71,000 babies were born in America after in vitro fertilisation (IVF), triple the number two decades earlier and 1.8% of all births. The share of births that are by IVF varies around the world, rising as high as 4% in Denmark, Israel and Spain. One consistent trend, however, is growth. Fertility technology is steadily improving and women are choosing to delay child-bearing, meaning more couples need medical help to conceive.

For many would-be parents the main impediment to conception is now not science but finance. Data for 2017 gathered by ICMART, an international non-profit organisation, show vast variation in prices. A single IVF attempt costs around $3,000 in Japan, $4,000 in Cameroon and up to $10,000 in Europe. In America it costs more. The countries with the highest IVF birth rates are those where taxpayers pay for treatment. (There are a few exceptions, such as Croatia, where medical tourism pushes the IVF birth rate up.)

A three-year-old startup, Carrot, is taking a novel approach to helping with the costs. It was born out of the experience of its co-founder and CEO, Tammy Sun, who was startled to realise that the health-insurance plan offered by the technology firm where she worked would offer no support for her own efforts at conception. After $35,000 yielded a dozen fertilised eggs, one of which will, she hopes, one day make her a mother, she decided to think through the funding of fertility treatment from first principles. What was needed, she concluded, was not only help paying for it but also certainty upfront about how much money she would get.

Such transparency is unusual for American health insurance, which requires a muddle of out-of-pocket payments, if it offers coverage at all. Patients do not know how much they will get back from insurers until much later. It is also different from public health-care systems, which often restrict coverage in other ways. In Britain, for example, eligibility rules vary from place to place and waiting-lists are long. Patients rarely know they will not be covered until they have asked and been turned down.

Carrot’s answer is to act as an intermediary for fertility-related medical-service providers to American companies and their foreign operations in 22 countries; Poland and Singapore are next on its list. Carrot collects and shares information on costs and results, which companies use to set up benefits, and employees to shop around. It charges firms an administrative fee, and they offer their employees a fixed sum, ranging from $2,000 to $100,000, averaging $10,000, that can be used for IVF and related services. (In most countries, corporate benefits can be claimed by any employee regardless of sex, sexual orientation or marital status, as long as they are used for eligible services; the exceptions are where that would break national law, such as a French ban on IVF for same-sex couples and a Japanese ban on IVF for unmarried couples.)

Since users can be certain of their benefits, they know exactly how much treatment they can afford. The same applies to firms: they know how much they will be on the hook for. Carrot's clear cap on payments means that would-be parents may run out of money before they conceive. But at least it is transparent about it—unlike many alternative systems.

This article appeared in the Finance and economics section of the print edition under the headline "An embryonic idea"

Buttonwood

Why foreigners are keen buyers of Chinese government bonds

A bet on the yuan's dominance or a snare for the unwary? Actually neither

Print edition | Finance and economics Jun 28th 2018

IN MAY 1945 John Maynard Keynes wrote a memo on the post-war economy. In it he argued that Britain should seek to be in the mainstream of global commerce. It would suit finance as well as industry to have the whole world as a playground, he wrote. "We built up the pre-war sterling area because we were bankers amiable to treat with and having a long record of honouring our cheques."

He passed over how Britain's economic muscle had helped sterling's dominance—perhaps because by then that muscle was wasting. Yet it is implacable economic might that leads many today to conclude that the yuan, China's currency, will supplant the dollar, just as sterling gave way to the dollar after 1945. The yuan is already one of five constituents of the Special Drawing Right, a basket of reserve currencies created by the IMF. And China is opening up to capital flows. This year foreigners have been the biggest buyers of Chinese government bonds.

It is tempting to see this as another milestone on the way to the yuan's preordained supremacy. But it is an error to interpret current events in the light of an imagined future. Foreign buyers of Chinese bonds are not swept along by an unseen law of history. Rather they are spurred by more prosaic considerations.

To start with, it has become a lot easier to buy the bonds. Foreign institutional investors with a presence in China have been allowed to buy them for more than two years (see chart). Last July Beijing established a bond-trading link between Hong Kong and the mainland. Since then the number of foreign asset managers with trading accounts in Hong Kong has mushroomed. In March Bloomberg-Barclays said it would add China to its main bond index next year.

The bonds have intrinsic merits, too. A year ago the yield on a ten-year Chinese government bond was around 1.5 percentage points higher than the yield on an equivalent US Treasury bond. The spread has since narrowed. Yet at 3.6% yields are still attractive, especially in comparison with the yields of under 1% offered by the safest European bonds.

Chinese bonds have many other useful qualities, notes Jan Dehn of Ashmore, a fund manager. Prices have been less volatile than those of other emerging-market bonds. Chinese bonds are valuable to portfolio managers because they tend not to move in synch with other assets. They are thus prized as diversifiers. And—yes—China's scale is a draw. Given the size of the market, the world's third-largest, foreigners still own rather few of its bonds.

Safety first

Still, there are dangers for the unwary. The ratio of debt to GDP in China has risen to 260%, from 160% in 2008. In other places, such a surge in credit has led to souring loans and, sometimes, financial crisis. There is a natural suspicion that China is opening its bond market so that foreigners can share in the inevitable losses. Yet so far, foreign buyers have trodden carefully, mostly buying government bonds and steering clear of riskier municipal and corporate bonds, says Zhenbo Hou of BlueBay

Asset Management. The raciest bets that foreigners have made are on the bonds of policy banks, such as the China Development Bank, and on short-term paper issued by biggish provincial banks. It is telling that foreigners hold less than 2% of the overall market, but 7% of the stock of safer government bonds.

The gradual opening of the bond market is part of a step-by-step approach to financial reform. China is thus proving a little more amiable to foreign capital. And by letting foreign money in, albeit still with some hurdles, it might hope to let some domestic money out and still keep the yuan stable. The big test will be whether China will always honour its cheques—can foreigners get their money out when they want to? It has kept control of both its exchange rate and its domestic monetary policy through capital controls. But if it allows foreign bondholders to move capital in and out more freely, it must either lose control of the yuan or use interest-rate policy to support it and not the economy. Faced with this trilemma, most rich countries let the currency float freely. A volatile yuan would be a marked change—for China and its bondholders.

Perhaps in a decade or two historians will look back and point to this policy or that event as the turning-point in China's emergence as a financial hegemon. If so, they will be kidding themselves. China is likely to open up in fits and starts. There will be mistakes, accidents and reversals. In the meantime, investors will, as always, respond to incentives. For a growing number, for now at least, the case for buying China's bonds seems to add up.

This article appeared in the Finance and economics section of the print edition under the headline "Aim and amiability"

Rich pickings

Italy's resilient savers are driving consolidation in asset management

Intesa Sanpaolo is said to be in talks with BlackRock, the world's biggest asset manager

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THE rumour mill is grinding again. In early 2017 reports swirled of a possible merger between Generali, Italy's biggest insurer, and Intesa Sanpaolo, the country's second-biggest bank. That deal came to nothing. But Intesa is still looking for a partner. Now it is said to be in talks with BlackRock, the world's biggest asset manager, about a stake in Eurizon, the bank's asset-management unit. Deal or no deal, two things are clear. Italy's asset-management industry is consolidating. And though investors fret over a populist government and towering public debt, its pool of private savings will keep them keen.

Last year Amundi, a French asset manager, bought Pioneer, the fund-management arm of UniCredit, Italy's biggest bank. Over half of assets under management are owned by 10% of Italians, which makes the wealthier end of the business especially appealing. Mediobanca, an investment bank, last year opened a private bank and bought 69% of RAM Active Investments, a Swiss investment manager. And in May Indosuez, the wealth-management arm of Crédit Agricole, a French bank, acquired Leonardo, a private bank.

There is lots to fight for. Although Italy's savings rate has fallen by more than half since the 1990s, at 10% of personal income it still beats Britain's or Spain's. The financial crisis a decade ago saw assets under management contract by €290bn ($335bn) in a year; Italian GDP has not yet returned to its pre-crisis level. Yet those assets have since more than doubled to over €2trn.

Both supply and demand are shifting. With interest rates at rock-bottom, banks are scrambling for fees. Savers meanwhile understand that they must diversify from cash and bonds to make a return. Cash and deposits account for a third of households' portfolios. Bonds still accounted for 7.6% of invested assets in the third quarter of 2017, far more than the 1.2% in France and 2.6% in Germany. That is down from 19.6% in 2010.

The share of banks' bonds has shrunk from 10% to 2.5%. Buyers were scared off by haircuts in the past few years on some of the debt issued by several struggling regional banks, which had sold those bonds to their own clients as safe investments. (The government later repaid retail investors, declaring them victims of mis-selling.)

Santo Borsellino of Generali Investments, which manages a quarter of Italians' savings, suggests that some may have been burnt by do-it-yourself investing, creating greater demand for funds offered by asset managers. If recent crises have a silver lining, it may be that they made Italians more financially literate, according to Deloitte, a consulting firm.

Italy has not seen the same expansion of equity products as the rest of Europe, says Tommaso Corcos, Eurizon's boss. But some are on offer, such as *piani individuali di risparmio* (PIR), individual savings accounts that offer favourable tax treatment for investments in listed firms. Italian companies must account for 70% of the funds invested. PIR have raised over €11bn since they were introduced last year. Intermonte SIM, an investment bank, suggests that could surpass €55bn by 2021.

Alternative investments, such as venture capital, private equity and hedge funds, are growing in popularity, too, though from a low base. Crédit Agricole is due to open a startup incubator in Milan this autumn, partly to present new investment opportunities to clients. Ditto ethical investment. Deloitte notes that this accounted for less than 5% of the average Italian portfolio at the end of 2016. But retail ethical funds grew by 26% between 2014 and 2016, according to Eurosif, an association that promotes them. Mr Borsellino says he has seen attitudes shift in the past 18-24 months, particularly among institutional investors.

New European regulation may both make Italian investors more demanding and hasten dealmaking. The Markets in Financial Instruments Directive (MiFID 2), which came into effect in January, aims to make costs more transparent, especially for retail investors, which in Italy account for 85% of the market. Its real impact will be felt in 2019, says Cinzia Tagliabue of Amundi, when clients begin to see a breakdown of charges—which are among Europe's highest. Banks, which account for 70% of distribution, will seek to work with selected asset managers to negotiate lower fees. More consolidation is coming.

This article appeared in the Finance and economics section of the print edition under the headline "Rich pickings"

Easier money

The changing world of work

Women' are much happier at work than in 1950. Men have fared less well

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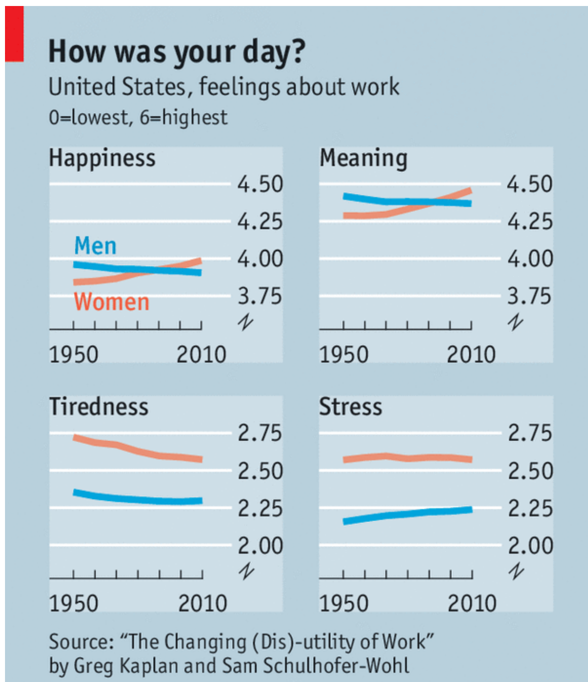
"MONEY often costs too much," quipped Ralph Waldo Emerson. But a new study suggests that since 1950, the price of buying it with labour in America has fallen. Greg Kaplan of the University of Chicago and Sam Schulhofer-Wohl of the Federal Reserve Bank of Chicago have linked measures of how Americans today feel about various jobs to changes in employment.

Both men and women are less likely to be farmers, for example, now than in 1950, and more likely to be in management. Women are less likely to be secretaries, and men more likely to be in service-sector jobs. Assuming that people in 1950 felt the same way about particular jobs as people do now, workers today are less sad, less tired and in less pain.



But changes in other measures of well-being, and a separate analysis of men and women, are less uniformly positive (see chart). The economists find that modern employment patterns probably mean that today's workers are more stressed. And although the jobs women have moved into are ones they associate with more happiness and a greater sense of meaning, the opposite holds for men. Some of this is because women and men seem to view similar jobs differently. Both have moved away from working as a "machine operator, assembler or inspector", which is associated with happiness below the average for women, but above for men.

The study has limitations. Differences between the sexes could be concealed if, within a category, they are doing different work. Attitudes to jobs might depend on status, pay (in absolute or relative terms) or the kind of people who do them, all of which could have changed over time.

It also leaves a puzzle. Research by Betsey Stevenson and Justin Wolfers of the University of Michigan has found that women in the 1970s reported being happier than men and that the gap has since narrowed. If the assumptions in both studies are right, well-being away from work could be worsening for women relative to men. Worrying stuff.

This article appeared in the Finance and economics section of the print edition under the headline "Easier money"

Free exchange

User-rating systems are cut-rate substitutes for a skilful boss

The management of a growing share of workers is outsourced to strangers

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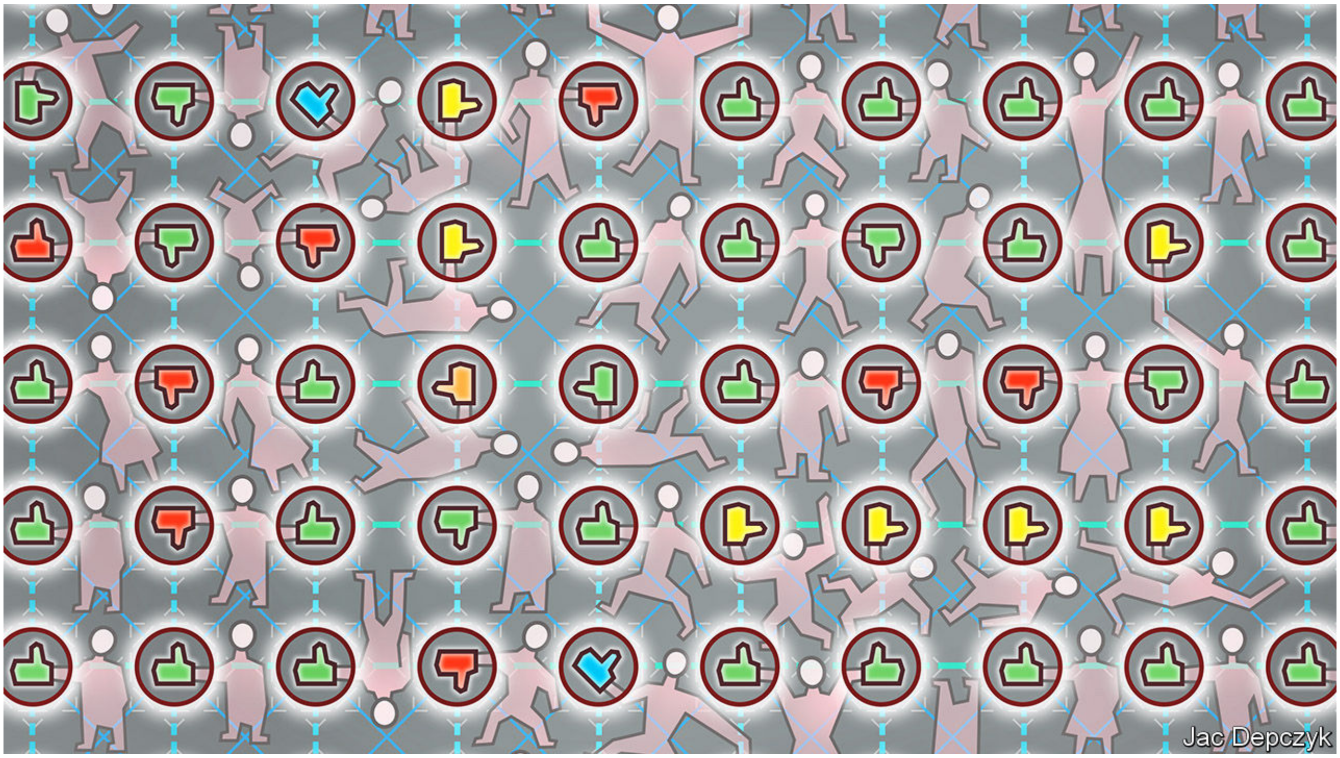

IT OFTEN arrives as you stroll from the kerb to your front door. An e-mail with a question: how many stars do you want to give your Uber driver? Rating systems like the ride-hailing firm's are essential infrastructure in the world of digital commerce. Just about anything you might seek to buy online comes with a crowdsourced rating, from a subscription to this newspaper to a broken iPhone on eBay to, increasingly, people providing services. But people are not objects. As ratings are applied to workers it is worth considering the consequences—for rater and rated.

User-rating systems were developed in the 1990s. The web held promise as a grand bazaar, where anyone could buy from or sell to anyone else. But e-commerce platforms had to create trust. Buyers and sellers needed to believe that payment would be forthcoming, and that the product would be as described. E-tailers like Amazon and eBay adopted reputation systems, in which sellers and buyers gave feedback about transactions. Reputation scores appended to products, vendors and buyers gave users confidence that they were not about to be scammed.

Such systems then spread to labour markets. Workers for gig-economy firms like Uber and Upwork come with user-provided ratings. Conventional employers are jumping on the bandwagon. A phone call to your bank, or the delivery of a meal ordered online, is now likely to be followed by a notification prompting you to rate the person who has just served you.

Superficially, such ratings also seem intended to build trust. For users of Uber, say, who will be picked up by drivers they do not know, ratings look like a way to reassure them that their ride will not end in abduction. Yet if that was once necessary, it is no longer. Uber is a global firm worth tens of billions of dollars and with millions of repeat customers. Its customers know by now that the app records drivers' identities and tracks their route. It is Uber's brand that creates trust; for most riders, waiting for a driver with a rating of 4.8 rather than 4.5 is not worth the trouble.

Rather, ratings increasingly function to make management cheaper by shifting the burden of monitoring workers to users. Though Uber regards its drivers as independent contractors, in many ways they resemble employees. The firm seeks to provide users with a reasonably uniform experience from ride to ride. And because drivers are randomly assigned to customers, it is the platform that cares whether rides lead to repeat business and which therefore bears the cost of poor behaviour by drivers. Ordinarily a firm in such a position would need to invest heavily in monitoring its workers—hiring staff to carry out quality assurance by taking Uber rides incognito, for instance. A rating system, however, reduces the need for monitoring by aligning the firm's interests with those of workers. (Drivers with low ratings risk having their profile deactivated.)

Outsourcing management like this appeals to cost-conscious firms of all sorts; hence the proliferation of technological nudges to rate one service worker or another. To work as intended, however, ratings must provide an accurate indication of how well workers conform to the behaviour that firms desire. Frequently, they do not. Raters may have no incentive to do their job well. They may ignore the prompt to rate a worker, or automatically assign the highest score. They may adhere to social norms that discourage leaving a poor rating, just as diners often leave the standard tip, however unexceptional the service. Uber's customers often award drivers five stars rather than feel bad about themselves for damaging a stranger's work prospects. And even when users are accurate, their ratings may reflect factors beyond a service provider's control, such as unexpected traffic. Systems that allow users to leave more detailed feedback (as Uber's has begun to) could address this, but at the cost of soaking up more time, which could mean fewer reviews.

When the quality of a match between a worker and a task is particularly important, the problem of sorting the signal from the noise in rating systems grows. Skilled managers can tell when a worker struggling in one role might thrive in another; rating systems can capture only expressions of customer dissatisfaction. Such difficulties also affect gig-economy platforms. Poor ratings on a job-placement site could reflect an inappropriate pairing between a worker with one set of skills and a firm that needs another, rather than the worker's failure of effort or ability.

Platforms can reduce the potential for such errors by including more information about tasks and the workers who might tackle them. Yet they may discover to their chagrin that more information also provides users with more opportunities to discriminate. An analysis of Upwork, for example, found that employers of Indian descent disproportionately sought Indian nationals for their tasks. True, this particular sort of information could be concealed—and conventional management permits plenty of discrimination. But firms typically have a legal obligation not to discriminate, and to train managers accordingly.

Overrated

Management is underappreciated as a contributor to success. Recent work by Nicholas Bloom, John Van Reenen and Erik Brynjolfsson suggests that good management matters more than the adoption of technology for a company's performance. Even so, the use of ratings seems sure to grow. They are, as "Left Outside", a pseudonymous blogger, puts it, a genuine disruptive technology: cheap enough to be adopted widely even if inferior to established practice. Further advances could improve such systems, as is common with disruptive technology. Artificial-intelligence programs may one day know how much people enjoyed a taxi ride better than they do themselves. In the meantime, management risks being left to the wrong sort of stars.

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This article appeared in the Finance and economics section of the print edition under the headline "Barely managing"

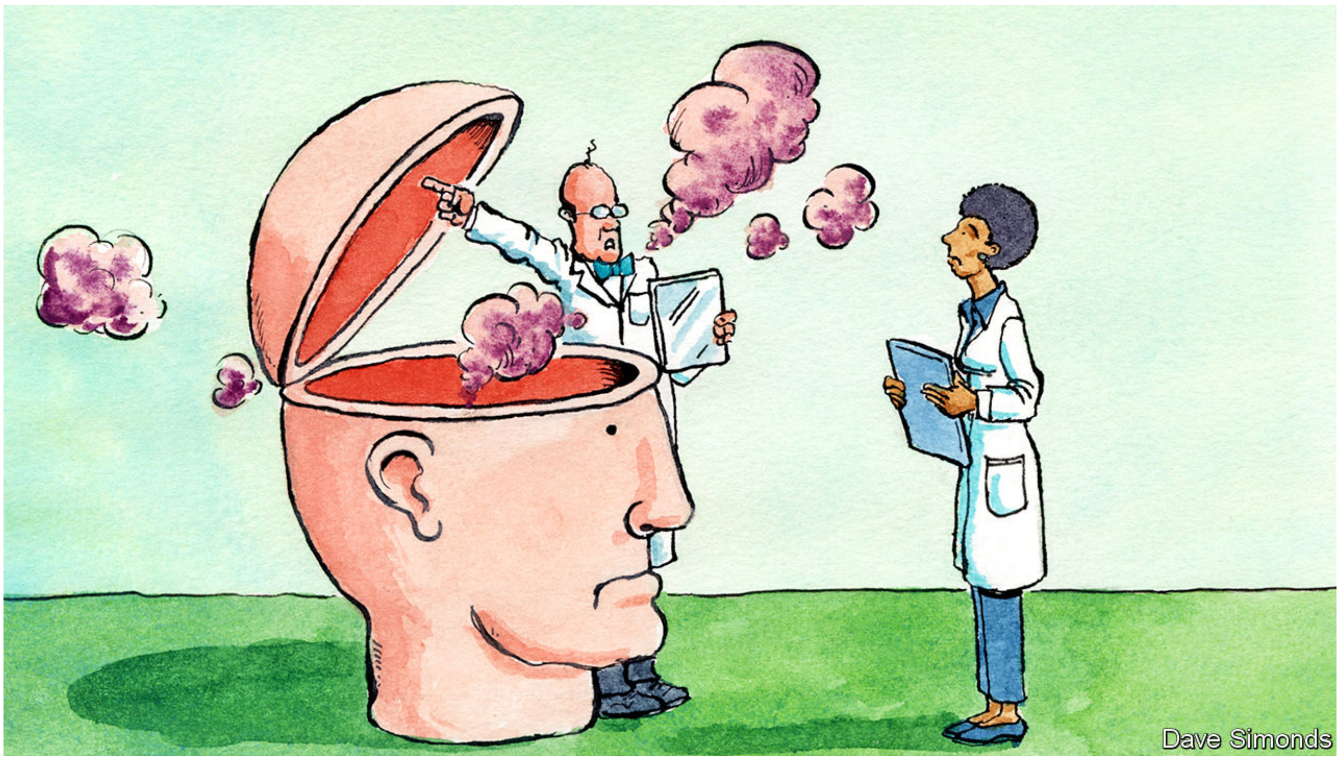
Psychiatric illness
Who is to decide, when doctors disagree?

Psychiatric illness

A big collaboration is trying to understand diseases of the psyche

Researchers have just made some interesting genetic discoveries

Print edition | Science and technology Jun 28th 2018



DISEASES of the psyche have always been slippery things. Schizophrenia, bipolar disorder, major depression and a host of others have no visible markers in the brain. Their symptoms overlap sufficiently that diagnoses may differ between medical practitioners, or even vary over time when given by a single practitioner. In this they are unlike neurological diseases. These either leave organic traces in the brain that, though not always accessible before a patient's death, are characteristic of the condition in question, or cause recognisable perturbations of things such as electroencephalograms.

The impulse to categorise, though, is enormous—as witness the ever greater number of conditions identified in successive editions of the Diagnostic and Statistical Manual of Mental Disorders, published by the American Psychiatric Association. That is because diagnosis and treatment go hand in hand. But if diagnostic categories are misconceived then treatment may be misapplied. In this context a paper published recently in *Science*, by a group calling itself the Brainstorm Consortium, is helpful. The consortium has brought together many research groups who work on various psychiatric diseases, as well as on neurological diseases, and has run their collective data through the wringer.

In particular, the consortium's researchers have looked at what are known as genome-wide association studies, or GWASs. In these, thousands of genomes are searched in order to identify places where differences between people's DNA seem associated with the presence or absence of particular diseases or symptoms. Past GWASs, comparing pairs of diseases, have shown overlapping genetic involvement in some psychiatric illnesses. But, by pooling the work of so many groups, the Brainstorm Consortium was able to go beyond this and cross-correlate the putative genetic underpinnings of 25 psychiatric and neurological problems. In all, the consortium looked at 265,218 cases of different brain disorders and 784,643 healthy volunteers who acted as controls.

Metamorphoses

Of the 25 conditions in question, ten are conventionally classified as psychiatric. Besides schizophrenia, bipolar disorder and major depression, these include obsessive-compulsive disorder, anorexia nervosa and Tourette's syndrome. Neurological problems, the remaining 15 conditions, include Alzheimer's disease, Parkinson's disease, various forms of epilepsy, strokes and migraines.

There were many underlying genetic correlations between pairs of psychiatric disorders. Assuming these are in part causative of disease, such overlaps go a long way to explaining the slippery nature of psychiatric diagnosis, by providing a genetic explanation for shared symptoms.

There were also, however, observable patterns in the data that might help refine the process of classification. Major depression has at least some positive genetic correlation with each of the other nine conditions. Schizophrenia, bipolar disorder, anxiety disorders and attention-deficit hyperactivity disorder (ADHD) are strongly correlated with one another, as well as with major depression. Anorexia nervosa, obsessive-compulsive disorder and schizophrenia also cluster, as do Tourette's syndrome and obsessive-compulsive disorder. The only psychiatric illness that showed no significant correlation with the others was post-traumatic-stress disorder.

Such clustering was absent from most neurological disorders. In particular, Alzheimer's disease, Parkinson's disease, multiple sclerosis and epilepsy all stood independent from each other. Nor, with the exception of migraine, which clustered with Tourette's, major depression and ADHD, did neurological disorders show much correlation with psychiatric ones. This study therefore confirms genetically the idea that the set of diseases dealt with by psychiatry is indeed distinct from that dealt with by neurology and explains why psychiatric disease is a hydra-headed monster that is difficult to pin down.

Going from the sorts of GWASs on which the consortium relied to an underlying understanding of psychiatric illness will, though, be a long haul. The genetic differences picked out are often things called single-nucleotide polymorphisms (SNPs), which are places in the genome where a lone pair of bases, the chemical letters in which genetic messages are written, can vary between individuals. Frequently, such SNPs are not even in the bits of the genome that directly encode proteins. Rather, they are in what was once called junk DNA, because its function was unknown.

Recent research suggests that much of the junk serves to regulate when genes are translated into proteins, and how much protein is thus produced. That, in turn, determines how cells grow and what sorts of cell they turn into. With luck, analysing the genetic patterns exposed by studies such as this will eventually point out where to look in the brain's microanatomy to find whatever miswiring is causing psychiatric disease. For, though that may not be visible at the moment, even the psyche must somehow be manifested physically in the brain and its debilitations must thus be recognisable. When that moment of understanding occurs psychiatry will truly have taken a great leap forward.

This article appeared in the Science and technology section of the print edition under the headline "Who is to decide, when doctors disagree?"

Human behaviour

At any given time in their lives, people have two dozen regular haunts

Oh, the places you'll go!

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WHEN it comes to habitat, human beings are creatures of habit. It has been known for a long time that, whether his habitat is a village, a city or, for real globe-trotters, the planet itself, an individual person generally visits the same places regularly. The details, though, have been surprisingly obscure. Now, thanks to an analysis of data collected from 40,000 smartphone users around the world, a new property of humanity's locomotive habits has been revealed.

It turns out that someone's "location capacity", the number of places which he or she visits regularly, remains constant over periods of months and years. What constitutes a "place" depends on what distance between two places makes them separate. But analysing movement patterns helps illuminate the distinction and the researchers found that the average location capacity was 25. If a new location does make its way into the set of places an individual tends to visit, an old one drops out in response. People do not, in other words, gather places like collector cards. Rather, they cycle through them. Their geographical behaviour is limited and predictable, not footloose and fancy-free.

The study demonstrating this, just published in *Nature Human Behaviour*, does not offer any explanation for the limited location capacity it measures. But a statistical analysis carried out by the authors shows that it cannot be explained solely by constraints on time. Some other factor is at work. One of the researchers, Sune Lehmann of the Technical University of Denmark, draws an analogy. He suggests that people's cognitive capacity limits the number of places they can visit routinely, just as it limits the number of other people an individual can routinely socialise with. That socialisation figure, about 150 for most people, is known as the Dunbar number, after its discoverer, Robin Dunbar.

Dr Lehmann says he expects that the group's finding will inform urban planning and be useful in predicting human behaviour more generally. Understanding the nature of restricted location capacity might be of particular use to advertisers. On seeing someone start to spend a lot of time in a new place, an advertiser might reasonably assume that the person in question was now in the market for new services in that area. Dr Lehmann says he is unsure whether Facebook and Google, the most obvious beneficiaries of this insight, are, as yet, aware of it.

The group's findings also show the importance of a new scientific instrument: in this case, the smartphone. Such phones, now ubiquitous in the rich world, mean many human beings have, in essence, voluntarily radio-collared themselves. That gives social scientists (who might reasonably relabel themselves as "human zoologists" in this case) a new and affordable lens through which to study their subjects.

The bulk of the data Dr Lehmann used came from an app called Lifelog, a phone-based activity tracker developed by Sony, an electronics firm. About 36,000 people contributed in this way. The other 4,000 were monitored through behaviour-tracking programmes at several universities. All these sets of data show the same pattern of 25 preferred locations.

As with Dr Dunbar's work, which showed predictable, nested circles of acquaintances, so Dr Lehmann and his colleagues found several levels of location capacity—meaning that the number of places where people spend just a few minutes a week is just as predictable as the number where they spend dozens of hours. Dr Lehmann says his group is now in search of similar data from other primates, in an attempt to work out where human patterns of mobility have their roots. For those, though, they will have to rely on old-fashioned methods of zoological observation—unless they can work out a way to get chimpanzees to carry smartphones.

This article appeared in the Science and technology section of the print edition under the headline "Oh, the places you'll go!"

Cognitive decline

The eye's structure holds information about the health of the mind

It is a window to the brain

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BECAUSE it is locked away inside the skull, the brain is hard to study. Looking at it requires finicky machines which use magnetism or electricity or both to bypass the bone. There is just one tendril of brain tissue that can be seen from outside the body without any mucking about of this sort. That is the retina. Look into someone's eyes and you are, in some small way, looking at their brain.

This being so, a group of researchers at Moorfields Eye Hospital in London, working with others around the world, decided to study the structure of the eye for signs of cognitive decline. Changes in the brain, they reasoned, might lead to changes in the nervous tissue connected to it. They focused on a part of the eye called the retinal nerve-fibre layer (RNFL). This is the lowest layer of the retina and serves to link the light-sensitive tissue above to the synapses which lead to the brain. The team's results, published in *JAMA Neurology* this week, show that people with a thin RNFL are more likely to fail cognitive tests than those with a thick one. They are also more likely to suffer cognitive decline as they age.

To discover this, the researchers relied on Britain's Biobank, a repository of medical data from half a million volunteers. Of these, 32,000 aged between 40 and 69 had provided information pertinent to the study, namely ocular scans and relevant scores from cognitive tests. None of these people had been diagnosed with diabetes or a neurodegenerative disease, both of which could have interfered with the results.

The eye scans had been conducted using a technique called optical coherence tomography. This employs long-wavelength light to penetrate into and scatter from biological tissues, building up a three-dimensional picture of that tissue. Comparing the scans and the cognitive tests showed that those people whose RNFL was in the thinnest fifth of the group were 11% more likely to fail at least one cognitive test than those with an RNFL in the thickest fifth. A small portion of the original cohort sat a second cognitive test three years later. This showed that those in the bottom two-fifths of RNFL thickness were twice as likely to have suffered a decline in cognitive function as those in the top fifth.

Although these results show only a correlation between eye structure and brain health, without an underlying explanation, they do suggest that scanning eyes is a fruitful road to diagnosing and even predicting cognitive decline. That would be warmly welcomed, especially for dementia, which currently lacks any form of predictive test.

In the future, then, a visit to the opticians might also lead to a diagnosis about mental health. Poets say that the eyes are the window to the soul. Perhaps. But this work suggests they are surely a window to the brain.

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The economics of gifts

A paradox at the heart of gift-giving

Recipients react more positively to things of less long-term satisfaction

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A FORMER editor of this newspaper once said that "a gift is a sale at a price of zero". In strict monetary terms this is true. But most people do expect to be paid for gifts, albeit in the non-monetary currency known as "gratitude". This has many denominations: words of appreciation, hugs and kisses and, particularly, smiles. The wider point our ex-editor was making, though, is pertinent. A gift will cause a misallocation of resources if the recipient would have preferred something else that would have been no more expensive for the donor to acquire.

In this context, a study just published in *Psychological Science*, by Adelle Yang at the National University of Singapore and Oleg Urminsky at the University of Chicago, looks illuminating. Dr Yang and Dr Urminsky have studied the currency of gratitude and think it may be creating poor incentives. Their hypothesis is that the reason gift-givers sometimes appear to make bad decisions (that is, choose gifts the receiver would not have chosen him or herself) is not always that they do not know what the recipient wants. Sometimes it is that the receiver rewards the giver with signals of gratitude that do not seem to correspond with a gift's long-term utility.

To test this idea, Dr Yang and Dr Urminsky framed an experiment around St Valentine's day. They picked three pairs of appropriate gifts: a dozen roses in full bloom versus two dozen rose buds that were about to blossom; a bouquet of freshly cut flowers versus a bonsai; and a heart-shaped basket of biscuits versus a similar basket of fruit. In each pair they hypothesised that the first, with its immediate visual appeal, strong scent or flavour, was more likely to induce a powerful appreciative response in the recipient but that the second, because of its greater quantity, durability or wholesomeness, was likely to be more satisfying in the long term. They also checked that these beliefs were not mere personal prejudice by confirming them with 104 volunteers recruited online.

They then recruited a further 295 online volunteers on February 13th, the day before St Valentine's, in order to catch people in an appropriate mood for the experiment. Volunteers were required to be in a romantic heterosexual relationship and were paid $2 each to evaluate the pairs of gifts. Men were asked which of each pair they would prefer to give to their inamorata. Women were asked which they would prefer to receive. Both sexes were also asked to predict how much of an "affective reaction", as psychologists label such things as smiles and hugs, the receiver would show in response to a particular gift and which would create the greater long-term satisfaction.

As far as affective reaction and satisfaction were concerned, this second group of volunteers agreed with the first group about which gifts would elicit what response. Even so, men went for the smiles and hugs more often than it would seem that women would have wished. Specifically, 44% of them said that they would prefer to give roses in full bloom while only 32% of the women said they preferred that gift to the two dozen buds. Similarly, with the bouquet and the bonsai, 40% of the men preferred to give the bouquet but only 28% of the women preferred to receive it. Both of these results are in line with Dr Yang's and Dr Urminsky's hypothesis. The case of the biscuits or the fruit, though, is more complicated. As predicted, men preferred to give the biscuits more often than women preferred to receive them. But the relevant numbers were 73% and 61%. In other words, unlike the other two cases, a majority of women did also prefer the gift with immediate, sugary appeal rather than long-term wholesomeness, despite what they had said about the long-term value of fruit.

None of this, however, explains why recipients should be willing to pay more enthusiastically in the currency of gratitude-displays for short-term pleasure rather than long-term satisfaction. If the gratitude market were working correctly, buds would trump flowers, bonsais bouquets and fruit cookies. Yet they don't.

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Poliomyelitis

Polio has been reported in Papua New Guinea

This time it's real

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ON JUNE 8th reports of a suspected case of polio came from Venezuela. Fortunately, it turned out to be a false alarm. The report that came from Papua New Guinea on June 22nd, though, is no fiction. It was issued by the World Health Organisation and concerns not one, but three children who have tested positive for a threatening polio virus.

Around the world, polio is in full retreat. A mere three countries are still known to harbour wild polio viruses. These are Afghanistan, Nigeria and Pakistan. In 2017 only 22 cases of polio caused by such wild viruses came to the attention of the authorities. Unfortunately, the reason for this success, which is the extensive vaccination against polio of children throughout the world, can occasionally backfire and itself cause polio outbreaks.

In many countries polio vaccine includes live, attenuated viruses which breed in the recipient's intestines and then enter the bloodstream, thereby triggering a protective immune response. An attenuated virus is one that has been weakened to a form which is not hazardous to health but remains potent enough to provoke the immune system into providing lifelong cover against real infection. Occasionally, though (less than once in every 17m vaccinations), the replication of such an attenuated virus throws up a mutation which creates a new strain. And because the vaccine-virus is present in someone's faeces for six to eight weeks after inoculation, this new vaccine-derived polio virus (VDPV) can be released into the environment.

When such cases arise and the population is under-immunised (meaning that there are many susceptible children in it) then the vaccine-derived virus can circulate and, over the course of a year or so, reacquire virulence though additional mutations. That means it has the capacity to cause disease. These new strains are called circulating vaccine-derived polio viruses and have, in the past, caused outbreaks of polio in places such as Syria and Congo.

They are also culpable in Papua New Guinea. In April a six-year-old boy with paralysis, the most serious symptom of polio, but one that can have other causes, was confirmed to have a VDPV. Since then, two other children, who are not paralysed, have been found to be carrying the same VDPV, which is thus now categorised as a circulating virus.

The usual way for polio to spread is by people drinking water contaminated with faeces containing the virus. This seems to be what has happened in Papua New Guinea. Less than half of the country's population has access to clean water and 81% do not use proper toilets. Moreover, in Morobe province, where the three children involved live, just 61% of children have received the recommended course of vaccinations. Perfect vaccination coverage in any country is rare, but leaving more than a third of the population unprotected is dangerous. At least 80-85% must be fully immunised to ensure that polio cannot spread among unvaccinated individuals if it is ever reintroduced.

A coalition of international health organisations therefore descended on Morobe province when the first case was confirmed, to conduct immunisations and improve surveillance in order to contain the spread of the virus. These groups are right to be vigilant. The longer a vaccine-derived polio virus is permitted to circulate unabated, the more people it can infect and the more time it has to evolve into a properly adapted pathogen.

The rapid reaction to the situation in Morobe province means this outbreak might soon be contained, with few additional instances of paralysis. But for a preventable disease with no cure and crippling symptoms, even a handful of cases is serious. And there are many other places in the world where a lack of proper sewerage and inadequate vaccination might allow something similar to happen. Sanitation and hygiene, unglamorous though they are, rank highly among development goals for good reason.

This article appeared in the Science and technology section of the print edition under the headline "This time it's real"

A new antibacterial coating

Making medical clothing that kills bugs

Using copper nanoparticles

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AROUND the beginning of the 20th century the medical profession underwent an image makeover. Doctors swapped their traditional black coats for white ones, similar to those worn by scientists in laboratories. This was meant to bolster a physician's scientific credibility at a time when many practising healers were quacks, charlatans and frauds. As the importance of antiseptics became more widely understood, white was also thought to have the advantage of showing any soiling.

Nowadays many doctors are likely to wear everyday clothes, or blue or green "scrubs", which are said to reduce eye strain in brightly-lit operating theatres. White coats are reckoned to be capable of spreading diseases as easily as clothing of any other colour, especially when long sleeves brush against multiple surfaces. Many clinics and hospitals now have a "bare below the elbows" policy for staff, whether in uniform or their own clothes. This is also supposed to encourage more thorough handwashing.

What, though, if the clothes worn by medical staff could actively help prevent bugs being passed around? Some metals, such as gold and silver, have natural antibacterial properties and are used to coat certain solid items, such as medical implants. But putting metallic coatings onto stretchy and foldable fabrics is tricky, and those coatings can quickly be swept away in a washing machine. What is needed, reckons Liu Xuqing of the University of Manchester, in England, is a way to make antibacterial coatings for fabrics that, quite literally, hold tight.

Instead of gold or silver, Dr Liu's metal of choice is copper. This exhibits the same bug-killing properties but has the benefit of being an awful lot cheaper than those two precious metals, making a commercial coating process easier to devise.

Working with colleagues from two Chinese institutions, Northwest Minzu University in Lanzhou and Southwest University in Chongqing, Dr Liu has been treating samples of fabric with a chemical process that grafts what is called a "polymer brush" onto their surfaces. As the name suggests, when viewed at a resolution of a few nanometres (billionths of a metre) through an electron microscope, the polymer strands look like tiny protruding bristles. That done they use a second chemical procedure to coat the bristles with a catalyst.

After this, they immerse the fabric in a copper-containing solution from which the catalyst causes the metal to precipitate and form tiny particles that anchor themselves to the polymer brush. Indeed, they bond so tightly that Dr Liu compares the resulting coating to reinforced concrete. Yet the process takes place at such a minute scale on the surface of the fabric that it should not affect the feel or quality of the finished material.

Dr Liu and his colleagues were able to use the process on both cotton and polyester. A test of the cotton samples for their antibacterial properties has shown that the new material is just as effective as silver, if not more so, at killing two bugs, *Escherichia coli* and *Staphylococcus aureus*, which can cause serious infections. The antibacterial effects were persistent, too. They survived more than 30 washes.

The chemistry involved, which is pretty straightforward, means the method should be reasonably easy to scale up. The researchers are already talking to firms about the possibilities of doing so. And work is continuing to improve the process and to treat the surfaces of other materials. Besides medical clothing, the coating might, for instance, be employed for garments worn in industries such as food processing, which need to avoid bacterial contamination.

Dr Liu is considering other uses for his invention, as well. One of his thoughts is to make conductive threads that could form part of electrical circuits woven into clothing. Such circuits might, for instance, link sensors that monitor the body. They might even carry current and signals to other fibres, treated to change colour in response, to produce fabrics that vary in hue and pattern—maybe to reflect, as detected by sensors, the wearer's mood. A doctor could then have a coat of many colours.

This article appeared in the Science and technology section of the print edition under the headline "Copper-bottomed ideas"

Revisiting the cold war
The thaw

The thaw

The death of the archetypal Russian villain

The cold war is once more a subject of interest for film and television. Jingoistic caricatures are not

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Alamy/Fox

THE cold war was fought as much in the imagination as on the battlefield. Each side sought to project images of social and cultural superiority; stories of people corrupted by the decadent West or persecuted by the KGB were turned into weapons. This struggle was largely waged on screen, in shows and films that were subject to varying degrees of government involvement. When the Berlin Wall fell, and the Soviet Union followed, writers and directors put down their arms. Barely any films about the cold war were made in the years immediately following its end.

Nearly three decades later, American drama is revisiting the period with a vengeance. There were occasional cold-war films in the early 21st century, such as “Charlie Wilson’s War” (released in 2007), but the revival began in earnest with “The Americans”, a TV series that from 2013 followed deep-cover KGB agents in Washington. Its finale aired last month. “Bridge of Spies” (2015), a film directed by Steven Spielberg, told the story of a lawyer instructed to defend a Soviet spy. The drive for scientific dominance forms the backdrop for both “Stranger Things”, one of Netflix’s biggest shows, and “The Shape of Water”, winner of this year’s Oscar for best picture. “The White Crow”, currently in production, is a biopic of Rudolf Nureyev, a Russian ballet dancer who defected in 1961. A new six-part adaptation of John le Carré’s “The Spy Who Came in from the Cold”, about a British spy’s assignment in East Germany, is also in the works.

These productions diverge strikingly from the Manichean tone of many blockbusters made during the conflict, especially those from the tub-thumping Reagan era (Mr le Carré was always a subtle exception). For example, Ivan Drago, the antagonist of “Rocky IV” (1985), was an emotionless brute: “If he dies,” he memorably says of a defeated American boxer, “he dies.” So was Podovsky, a Russian torturer, in the “Rambo” series. In “From Russia With Love” (1963), the assassin Rosa Klebb relished inflicting pain on both her compatriots and her enemies. In his book “Hollywood’s Cold War”, Tony Shaw, a historian, summarises the celluloid Soviets of yore: “the male of the species normally sported a cheap suit, a black hat and an ugly face...the rare female communist was either a nymphomaniac or frigid and repressed.”

Brothers in arms

"They" were cold-blooded criminals, subversives and deviants; "we" were enlightened defenders of democracy and freedom. Even in grittier, more realistic works, the motivations of communist characters were rarely explored. They existed mostly as "foils against which the men of the West demonstrated their superior skills," says Michael Kackman of the University of Notre Dame.

These hard-faced psychopaths have now been ousted by richly textured Soviet citizens. "The Americans" is concerned as much with the marriage of Philip and Elizabeth Jennings, the Russian agents (pictured), and the trials of raising their children in America, as with espionage. The pair grapple with guilt and the meaning of freedom. Flashbacks to their country's Stalin-era suffering help explain their devotion to their mission; even so, doubts and disillusionment with the Soviet cause creep in. Supporting roles are thoughtfully rendered, too, such as a Soviet diplomat who is willing to commit treason for the greater good.

So human are these characters, in fact, that viewers are persuaded not only to empathise with them, but to hope they evade capture—even as they kill and blackmail Americans. The hope cultivated by "Bridge of Spies" is that Rudolf Abel, the affable Soviet agent, will not be executed after he is sent home. In "The Shape of Water", Dimitri Mosenkov, an undercover Soviet scientist, is an ally in saving the Amphibian Man. Mosenkov's survival is vital for the creature's own safety and its relationship with Elisa, the heroine.

In these stories, the idea of Western superiority—either moral or professional—is questionable. In the case of "The Americans", it can be laughable: one of the series' funniest moments comes when the head of counter-intelligence at the FBI discovers that his secretary has secretly married a KGB officer. The villain of "The Shape of Water" is not Mosenkov but a repulsive American colonel. In "Stranger Things", the bad guys are scientists on the American government's payroll, who use the cold war as a pretext for dangerous and exploitative experiments.

The richness of these new storylines in part reflects the intellectual dividend of the Soviet Union's fall. The overseers of "The Americans"—Joe Weisberg, himself a former CIA officer, and Joel Fields—based details and plot points on archive material that was previously inaccessible. They enlisted Masha Gessen, a Russian-American writer, to ensure their Russian dialogue would feel idiomatic. Likewise, Simon Cornwell, Mr le Carré's son and a producer on the new version of "The Spy Who Came in from the Cold", says it will incorporate documentary evidence that was unavailable when the novel was written in the early 1960s. "For a writer whose work is so grounded in reality—he had no access to that reality," he says of his father. Now the production team has been "able to spend time in the Stasi archives, to spend time with people who were on the East German side," Mr Cornwell says. "There is room in the six-hour format to explore both sides."

But the political mood in Britain and America has also played a part. Confidence in Western intelligence services was never unqualified. In Mr le Carré's novel, Control, a British intelligence chief, blithely acknowledges that "You can't be less ruthless than the opposition simply because your government's *policy* is benevolent, can you now?" But faith in Western spooks has drastically decreased in the wake of the Iraq war and recent surveillance scandals. Moreover, for all the talk of a "new cold war", and despite Vladimir Putin's election-meddling and revanchism, most English-speaking viewers no longer feel they face an existential threat from Russia. The imperative to deflect criticism outward, so conspicuous in the 1980s, no longer applies. The dissipating fear has made it easier to focus on the personal side of the stand-off.

Above all, perhaps, these nuanced narratives reflect the evolution of audience tastes. Used to navigating moral minefields in shows such as "The Wire" and "The Sopranos", viewers have outgrown simplistic tales of good and evil. Proof was offered by "Red Sparrow", a film released earlier this year that starred Jennifer Lawrence as a Russian seductress targeting a CIA agent. It was "designed to make Americans feel good about [themselves] by showing how much nicer [their] spies are than their Russian counterparts," says Denise Youngblood, a historian of Russian and Soviet cinema. Judging by its box-office performance, the formulaic plot was a turn-off.

Bringing Soviet characters in from the cold, mapping their private conflicts with geopolitical ones, makes more compelling drama. And it reminds viewers to doubt generalisations about history that occlude the experiences and complexities of individuals. "Because Russia has always been a land of villains," Rodric Braithwaite, a former British ambassador to Moscow, once wrote, "it is also a land of heroes and saints." Hollywood is at last imaginative enough to make room for all of them.

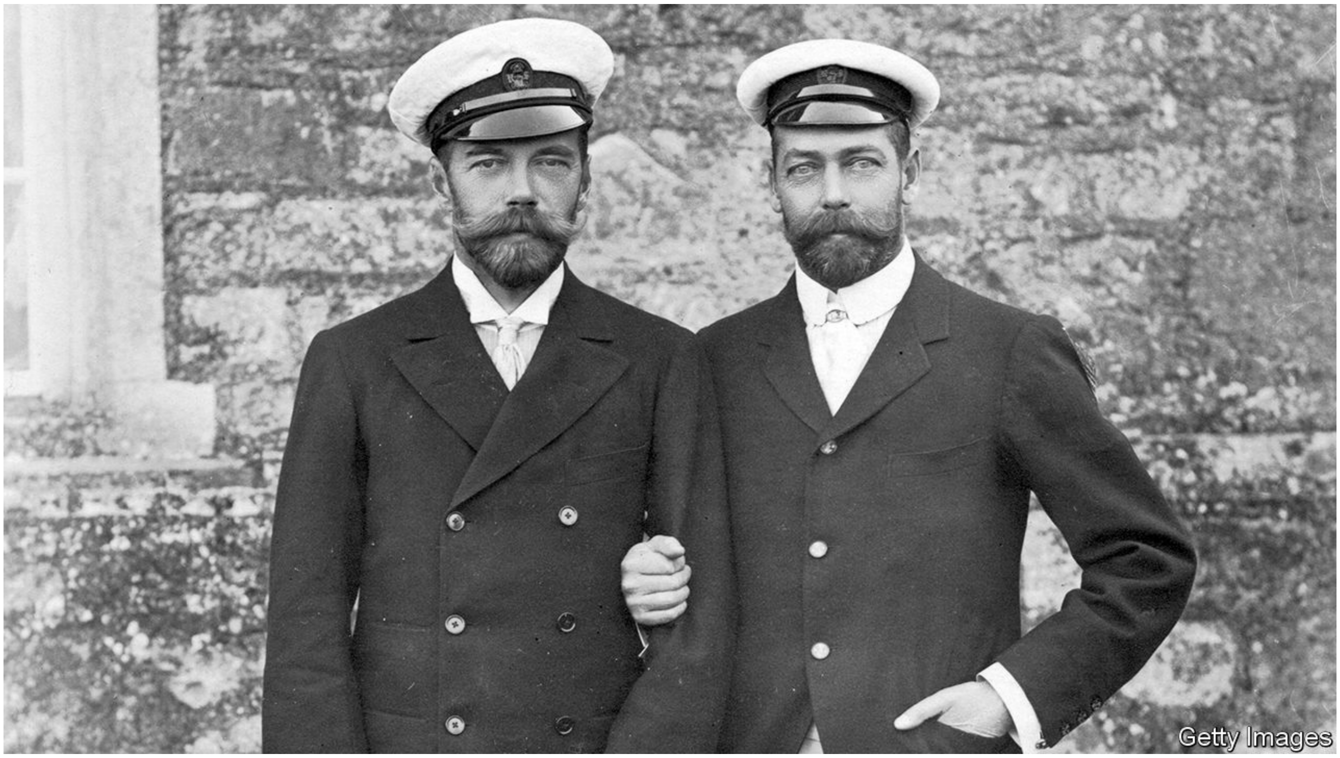
This article appeared in the Books and arts section of the print edition under the headline "The thaw"

Family values

How the royal houses of Europe abandoned the Romanovs

They were all related but, as Helen Rappaport shows, nationalism prevailed over sentiment

Print edition | Books and arts Jun 28th 2018



The Race to Save the Romanovs: The Truth Behind the Secret Plans to Rescue Russia's Imperial Family. By Helen Rappaport. *St Martin's Press; 400 pages; $28.99. Hutchinson; £25.*

IN LATE July 1918, as British forces slogged through the last months of a terrible war, King George V decreed that his court should wear mourning clothes for a month—not for his own country's dead, but for a foreign sovereign whose demise in a remote place had just been confirmed. As Helen Rappaport vividly describes in "The Race to Save the Romanovs", King George and Queen Mary then attended a memorial service at London's only Russian Orthodox chapel. Amid the swirling incense and Slavonic chants, the royal couple visibly shared the mostly Russian congregation's grief, not just for one slain monarch but for a dynasty and an era.

The British king (pictured right) must have felt guilt as well as family bereavement. He was lamenting his first cousin, Tsar Nicholas II (left), to whom he bore an uncanny resemblance. The Bolsheviks had by then acknowledged killing "Nicholas Romanov", but they suppressed the news that Empress Alexandra and their five children, plus four loyal retainers, had been slain simultaneously, on July 17th. That unpleasant truth only emerged several months later; rumours that one or more children had survived persisted for years.

So by the late summer of 1918, efforts to save whatever might remain of the family—pointless, as it turned out—were intensifying. The predicament was not the king's alone. Royal and aristocratic houses all over Europe were linked to the Romanovs by a dense matrix of blood ties; they shared both the grief for the tsar and the inchoate urge to help. But could they ever have saved their Russian cousins? That is the question Ms Rappaport tackles, combing intelligently through the often bowdlerised archives of several countries, and trying to get past the romantic tone of much previous writing on the subject.

She confirms that in March 1917, after the tsar's abdication, there was discussion in high British places about the Russian royals' future. George V was soon convinced that receiving his cousin in Britain, along with the tsar's allegedly pro-German wife, would not only compromise the national interest but harm the British monarchy. Britons might feel that their king had put family feeling before matters of state. The Provisional Government in Petrograd would have collaborated in an evacuation of the Romanovs, but in London it was keenly hoped that some other place of exile would be found.

As Ms Rappaport recounts, Germany's Kaiser Wilhelm had an equally strong sentimental concern for the Russian royals; he was godfather to the sickly heir Alexei, and was fond of the other royal children. During the Romanovs' final months of incarceration in Yekaterinburg, many observers felt that if anybody could save the Romanovs, it must be Germany. After all, the Germans had already come to terms with the Bolsheviks and sealed a treaty that knocked Russia out of the war.

But as the kaiser learned whenever he tried to raise the fate of his kin, Germany was playing a complex game, parleying with all the forces vying to prevail in the chaos engulfing Russia and Ukraine. A spectacular evacuation of the Romanovs would not have helped. Another problem was the tsar's unwillingness, as a Russian patriot, to let the Germans rescue him.

Few people showed real, disinterested concern for the Russian royals. One was King Alfonso of Spain, who was himself toppled by anti-monarchist fury in the 1930s. Another was Empress Alexandra's sister, the Marchioness of Milford Haven, who had the pragmatic idea that even if the imperial couple and their son were doomed, the princesses might settle quietly on the Isle of Wight.

There is bitter irony in the story Ms Rappaport skilfully tells. Posterity finds something horrifying about the sovereigns of Europe, who virtually formed a single extended family, sending their subjects to slaughter one another. But in the end, nationalism also constrained the family loyalties of the continent's monarchs, who could or would not save their Russian relatives from murder—the centenary of which will be commemorated in Russia next month. The rites will be solemn, but the massacre was a gruesome mess.

This article appeared in the Books and arts section of the print edition under the headline "Family values"

Black, white and grey

Some of Issac Bailey's family have done well. Some have done time

Everyone makes mistakes. In America, some cost more than others

Print edition | Books and arts Jun 30th 2018

My Brother Moochie: Regaining Dignity in the Face of Crime, Poverty and Racism in the American South. By Issac J. Bailey. *Other Press; 304 pages; $25.95 and £21.99.*

ISSAC BAILEY'S first book does not open with the brother of the title. Instead, he is face to face with his son: he is furious, and he wants the boy to know it. The son is guilty of little more than routine teenage mischief. But Mr Bailey is fighting the urge to beat him. His brother Moochie, in prison for murder, is always on his mind. Looking at his son, "my instinct was to crush his soul to save his black body."

Mr Bailey grew up poor and black with ten siblings and a nephew in a trailer in South Carolina. Some of them have done well; some of them have done time. The most dramatic fate is that of Moochie: intelligent, athletic and charismatic, he was his siblings' hero. He killed a white man in a dispute over money Moochie had stolen; Mr Bailey was nine years old.

What went wrong with the half of the men in Mr Bailey's immediate family who went to prison? Some relatives think his mother should have beaten the younger ones as she had the older. That doesn't explain Moochie, the eldest. Is it the lack of a responsible father? That doesn't fit either. Mr Bailey himself repeatedly watched his drunken father batter his mother. And several of the youngest boys, raised by a decent stepfather, go to prison too.

Mr Bailey fought through a stutter—perhaps brought on by the loss of Moochie—to become an award-winning journalist. And yet he knows he was a few small mistakes from ending up as his brothers had. In the South, he rarely encounters personal racism. But race is ever-present anyway; white folk are not shy of telling him that black victims of police violence did something to earn their fate. But Mr Bailey does not call them racists. He reminds the reader that, like Moochie, they are more than their worst impulses.

His book poses a hard question: to what extent are people victims of forces beyond their control, such as racism and poverty? Conversely, how far are their mistakes their own? Mr Bailey rattles off evidence of systemic racism, but, looking at his youngest brothers, he sees their failings, not black or white America's. He wants to give his country the benefit of the doubt. Still, he is reduced to fury and despair by repeated news stories of ghastly, public violence against unarmed black men. Everyone makes mistakes, runs one of Mr Bailey's themes—but black men's cost more.

This is an uneven but often beautifully written book. Its author will inevitably be compared with Ta-Nehisi Coates, recently hailed as the essential voice of black America. But Mr Bailey's writing has much more concrete detail on lives lived one misjudgment away from prison. He offers few policy solutions, and is not striving to be the voice of his people. He is trying to be a good husband and father.

And a brother. One day, he gets a stunning text message. After countless unsuccessful parole hearings and 32 years in jail, Moochie will be freed. Can America, a country that prizes new beginnings, give a black man in his 50s with a murder conviction a second chance? Mr Bailey's book leaves its reader hopeful that he will have more, and happier, stories to tell.

This article appeared in the Books and arts section of the print edition under the headline "Black, white and grey"

On State Street, that great street

The birth of the skyscraper on the streets of Chicago

For Dan Cruickshank, a British historian, the Reliance Building is the apotheosis of the form

Print edition | Books and arts Jun 30th 2018

Skyscraper. By Dan Cruickshank. *Head of Zeus; 301 pages; £9.99.*

MARK TWAIN was dazzled by the Windy City. "It is hopeless for the occasional visitor to try to keep up with Chicago," he wrote in 1883. "She outgrows his prophecies faster than he can make them." From mail-order to the remote control, the Ferris wheel to the drive-in bank—Chicago was the birthplace of them all. And while the term "skyscraper" has come to connote New York landmarks such as the Flatiron, Woolworth and Empire State buildings, it was first used to describe towers that rose on the shores of Lake Michigan.

Dan Cruickshank's "Skyscraper" takes a single Chicago building as the apotheosis of the form. Mr Cruickshank, a British architectural historian, calls the Reliance Building (pictured) "the most architecturally consistent, functionally excellent, visually restrained, structurally rational and technologically innovative high-rise then built" and "the key prototype for high-rise architecture of the coming century." When the 200-foot-tall building opened in the spring of 1895, *The Economist* hailed it as "the most elegant [building] yet erected in Chicago for business purposes".

Construction began in 1890 as part of the great renewal of the city after the devastating fire of 1871. The project had an unusual start. Tenants in the five-storey building that occupied the site on North State Street refused to give up their leases; work started on the lower floors of the new building while the upper storeys of the old one—and their recalcitrant occupants—were raised on jackscrews until those pesky leases expired.

The first architect was John Wellborn Root, who as a boy had fled Sherman's march on Atlanta during the civil war. After his untimely death in 1891 at the age of 41, his colleague Daniel Burnham (who would design the Flatiron Building) enlisted Charles Atwood to help. Later Atwood further distinguished himself with his work for Chicago's World's Columbian Exposition of 1893—the "White City" built to celebrate the 400th anniversary of Christopher Columbus's arrival in America.

"Skyscraper" is not a tale of architects' egos and the trials of grand construction projects, which is a shame. A little more detail about the characters involved, and the scents and sounds of a great city at the dawn of the 20th century, would have enlivened its pages. But Mr Cruickshank does develop a convincing case for the Reliance Building—which today looks almost wholly unexceptional—as the forerunner of groundbreaking work by later architects such as Walter Gropius and Mies van der Rohe. Mr Cruickshank shows the debt owed to the Reliance's elegant lines by successors such as the Seagram Building in New York and Chicago's own Sears Tower (now called the Willis Tower).

The radical became quotidian; such is the history of modern design. In the same way, the Brooklyn Bridge, the Eiffel Tower and the Lloyds Building were unprecedented achievements which now blend into their landscapes, while the risks taken to build them, and the rows over whether they should be built at all, vanish into the past. A structure is most successful when it almost seems to disappear. Mr Cruickshank does a valuable service in making the nearly invisible visible once again.

This article appeared in the Books and arts section of the print edition under the headline "On State Street, that great street"

The art of pouncing

Capturing the voice of a brilliant, unorthodox teacher of literature

Eric Griffiths cared too much about his students' potential to let them wallow in sloppy thoughts

Print edition | Books and arts Jun 28th 2018

Jenny Polak

If Not Critical. By Eric Griffiths. Edited by Freya Johnston. *Oxford University Press; 272 pages; $35 and £25.*

DRESSED in a leather jacket and a shoelace-thin tie, or with Armani trousers flapping around his trainers, Eric Griffiths would begin as soon as he reached the lectern. He spoke, as Hamlet instructed the actors, "trippingly", pausing only to take small sips of a drink that looked like water, or one that looked like apple juice. His lectures were packed; they were such a hot ticket at Cambridge in the 1980s that *Varsity*, the student newspaper, listed them in its entertainment guide. When Robert Douglas-Fairhurst, now a professor of English at Oxford University, first attended, he asked the student next to him, "Are these going to be any good?" "Don't bother taking notes," she said, "just enjoy the show."

The performance was electrifying. Not just because the audience was uncertain whether, at any moment, Mr Griffiths (pictured) might hurl a book or jump off the stage or produce a drum to beat out the rhythm of a line of poetry. Or because his voice might rise into a pinpoint impression of Dame Edna Everage, or of a character from "EastEnders", a British soap-opera, speaking cod-Shakespearean pentameters. Because it seemed as if he had something fresh to say about every word in European literature and the spaces between them.

A selection of Mr Griffiths's lectures has now been published as "If Not Critical". It would be heretical to say their wit, vitality and acumen leap off the page, because Mr Griffiths does not think words work that way. In the "Printed Voice of Victorian Poetry", his only full-length book, he argued that written texts are knotted with ambiguity because they lack the cues of speech—tone, gesture, facial expression and so on. The greatest works of literature are thus latent with possible readings.

"If Not Critical" covers writers he prizes such as Shakespeare, Dante and Racine. The word "Divina" of the "Divina Comedia", Mr Griffiths says, is a publisher's puff that "means something like 'fabulous poem, darling, loved it loved it loved it'." He is one of the most skilful practitioners of close reading, an approach to criticism indigenous to Cambridge. His attention to detail is never pedantic, but provides clues to attitudes and beliefs. For example, the epithet "Kafkaesque" is often lazily applied to any situation with a tingle of bureaucratic menace; Mr Griffiths shows how the mood is produced by small words such as "if" and "but", around which Kafka's sentences twist and pivot.

Mr Griffiths attracts superlatives. The *Guardian* once declared him the "cleverest man in England". Donald Davie, a poet and critic, called him the "rudest man in the kingdom". And for many of the pupils he taught over 30 years at Trinity College, Cambridge, he was the greatest teacher they ever had. From today's perspective, his approach was, to say the least, unorthodox. He would tease and mock, provoke and scorn. Colin Burrow, who was taught by Mr Griffiths before becoming a colleague, recalls that "he had the enormous art of pouncing on what looked like a minor infelicity of phrasing and then teasing out from that the gross conceptual error that lay beneath it. One would sit there…feeling a bit like a terrified mouse confronted by a devastating feline opponent."

But his ferocity was a sign that he cared. He cherished his students' potential too much to let them wallow in sloppy thoughts. He examined their work with as much scrutiny as he devoted to T.S. Eliot and Wordsworth. Simon Russell Beale, an actor, remembers that he would write his essays on one side of the paper and Mr Griffiths would respond with an essay of his own on the back. A tick in the margin was gold-dust. "I left every lecture and every class thinking that I had learned more about trying to be a better human being," says another acolyte.

He was one of the last generation of fellows to live in college, and his life was entwined with his students' lives beyond the confines of lessons. He held parties ("Come and be louche", read the invitations), where poetry was read, and Wagner and the Pet Shop Boys were played at full blast. He flirted. A trip to Tennyson country in Lincolnshire ended with whiskey being swilled in a ditch. Not everyone enjoyed the tutelage of a charismatic teacher who was part exacting literary conscience, part Pied Piper. Especially after a drink, Mr Griffiths's tongue could be harsh. He once dismissed a female student's contribution as "mildly decorative".

Such asperity came back to bite him. He thrived as a media don in the 1980s, when TV schedulers enjoyed the sight of highbrows feasting on pop culture; he filmed a documentary about Talking Heads, one of his favourite bands. But his career was derailed after he sniped on-air that A.S. Byatt's Booker-winning novel, "Possession", was "the kind of novel I'd write if I was foolish enough not to know I couldn't write a novel". In 1998 he was embroiled in a scandal after a state-school applicant claimed that, during her interview, Mr Griffiths pointed to some words in Greek and said, "being from Essex you wouldn't know what these funny squiggles are."

Alas and alack

He disputed that account, but the college stopped him interviewing. The press portrayed him as a snob, though he was the son of a Liverpool docker and himself state-educated. As it turned out, 1998 was a watershed for British education more widely. The Labour government introduced tuition fees, which made the relationship between students and universities more transactional. Mr Griffiths's bracing style was not in keeping with the era of student-satisfaction surveys. He carried on teaching, but was calmer and more self-contained. His belief that you could mould the mind of an 18-year-old dwindled. A blackboard in his rooms bore the words, "How the fuck should I know?"

In 2011, after being hospitalised for a heart-attack, Mr Griffiths suffered a stroke. He was 57; he has since spoken only in stutters. It was as if he had been struck down with the vengeful precision of Greek myth: if a special circle of hell were constructed for him, he once said, it would involve having his tongue cut out. But the voice—precise, interrogatory and sarcastic, and also, in private, generous and encouraging—can still be heard. "I can only read 'If Not Critical' in small bits", says his friend, the poet Alice Goodman, "because it's his voice." From his hospital bed, he told a friend that "if that was the last lecture I give, I'm glad it was on the important semantic differences between 'alas' and 'alack'."

This article appeared in the Books and arts section of the print edition under the headline "The art of pouncing"

Economic and financial indicators

Trade, exchange rates, budget balances and interest rates

Trade, exchange rates, budget balances and interest rates

Print edition | Economic and financial indicators   Jun 28th 2018

Trade, exchange rates, budget balances and interest rates

	Trade balance	Current-account balance		Currency units, per $		Budget balance	Interest rates	
	latest 12 months, $bn	latest 12 months, $bn	% of GDP 2018†	Jun 27th	year ago	% of GDP 2018†	3-month latest	10-year gov't bonds, latest
United States	-830.6 Apr	-465.5 Q1	-2.6	-	-	-4.6	2.34	2.88
China	+382.7 May	+121.0 Q1	+1.1	6.60	6.81	-3.5	4.24	3.44§§
Japan	+42.2 Apr	+196.2 Apr	+3.9	110	112	-4.7	-0.04	0.01
Britain	-186.9 Apr	-106.7 Q4	-3.8	0.76	0.78	-1.8	0.66	1.41
Canada	-24.1 Apr	-53.8 Q1	-2.6	1.33	1.32	-1.9	1.70	2.09
Euro area	+283.9 Apr	+485.5 Apr	+3.2	0.86	0.89	-0.8	-0.32	0.32
Austria	-5.5 Mar	+7.7 Q4	+2.3	0.86	0.89	-0.6	-0.32	0.44
Belgium	+24.7 Apr	-0.8 Dec	-0.3	0.86	0.89	-0.9	-0.32	0.74
France	-70.4 Apr	-5.3 Apr	-1.0	0.86	0.89	-2.4	-0.32	0.66
Germany	+292.8 Apr	+322.8 Apr	+7.9	0.86	0.89	+1.1	-0.32	0.32
Greece	-22.6 Apr	-2.9 Apr	-1.2	0.86	0.89	-0.3	-0.32	4.05
Italy	+56.1 Apr	+53.5 Apr	+2.7	0.86	0.89	-2.0	-0.32	2.83
Netherlands	+64.4 Apr	+91.2 Q1	+9.7	0.86	0.89	+0.8	-0.32	0.51
Spain	-31.3 Apr	+24.3 Mar	+1.8	0.86	0.89	-2.2	-0.32	1.29
Czech Republic	+19.4 Apr	+0.9 Q1	+0.7	22.3	23.3	+0.9	0.93	2.20
Denmark	+6.6 Apr	+20.9 Apr	+7.7	6.43	6.59	-0.7	-0.30	0.34
Hungary	+9.4 Mar	+4.6 Q1	+1.9	282	275	-2.6	0.26	3.54
Norway	+21.8 May	+22.8 Q1	+6.5	8.15	8.43	+4.9	0.98	1.84
Poland	-1.3 Apr	-0.8 Apr	-0.7	3.74	3.74	-2.2	1.50	3.23
Russia	+132.2 Apr	+41.7 Q1	+3.3	62.9	59.0	+0.3	6.07	8.13
Sweden	-1.7 Apr	+16.8 Q1	+3.4	8.93	8.65	+0.8	-0.35	0.53
Switzerland	+31.6 May	+72.9 Q1	+9.2	1.00	0.96	+0.8	-0.73	nil
Turkey	-87.1 May	-57.1 Apr	-5.5	4.60	3.51	-2.8	19.3	16.7
Australia	+6.8 Apr	-36.8 Q1	-2.5	1.35	1.32	-1.0	2.10	2.64
Hong Kong	-66.8 May	+14.2 Q1	+3.7	7.85	7.80	+1.9	2.09	2.23
India	-161.1 May	-48.7 Q1	-2.2	68.6	64.5	-3.5	6.50	7.87
Indonesia	+3.1 May	-20.9 Q1	-2.2	14,178	13,328	-2.5	7.10	7.58
Malaysia	+28.4 Apr	+12.2 Q1	+2.7	4.03	4.29	-3.3	3.69	4.22
Pakistan	-36.5 May	-16.7 Q1	-5.8	121	105	-5.4	6.92	8.95†††
Singapore	+47.3 May	+61.7 Q1	+20.4	1.36	1.39	-0.7	na	2.55
South Korea	+87.3 May	+69.2 Apr	+4.8	1,118	1,137	+0.9	1.68	2.58
Taiwan	+18.3 May	+84.8 Q1	+13.5	30.4	30.3	-0.9	0.66	0.95
Thailand	+11.3 May	+50.2 Q1	+9.8	33.0	34.0	-2.9	1.16	2.55
Argentina	-11.3 May	-33.8 Q1	-4.6	27.3	16.4	-5.1	29.4	8.47
Brazil	+62.1 May	-13.0 May	-1.1	3.84	3.31	-7.1	6.53	9.50
Chile	+10.2 May	-3.1 Q1	-1.1	646	662	-2.0	0.44	4.58
Colombia	-6.8 Apr	-9.8 Q1	-3.0	2,928	3,021	-2.0	4.56	6.61
Mexico	-11.5 May	-15.9 Q1	-1.7	20.0	17.9	-2.3	8.10	7.71
Venezuela	-36.2 Oct~	-17.8 Q3~	+2.4	95,850	10.2	-15.5	14.5	8.24
Egypt	-37.0 Apr	-9.3 Q4	-3.2	17.9	18.1	-9.6	18.0	na
Israel	-20.1 May	+9.7 Q1	+2.6	3.64	3.52	-2.4	0.10	2.00
Saudi Arabia	+87.3 2017	+15.2 Q4	+7.0	3.75	3.75	-4.4	2.58	na
South Africa	+3.8 Apr	-12.2 Q1	-2.7	13.7	12.9	-3.5	6.96	8.95
Estonia	-2.1 Apr	+0.7 Apr	+2.3	0.86	0.89	-0.3	-0.32	na
Finland	-2.4 Apr	+1.5 Apr	+1.0	0.86	0.89	-0.7	-0.32	0.57
Iceland	-1.6 May	+0.8 Q1	+4.1	107	104	+1.2	4.70	na
Ireland	+53.0 Apr	+42.8 Q4	+7.8	0.86	0.89	-0.2	-0.32	0.87
Latvia	-3.0 Apr	-0.2 Apr	-0.2	0.86	0.89	-1.2	-0.32	na
Lithuania	-2.8 Apr	nil Q1	+0.8	0.86	0.89	+0.6	-0.32	1.05
Luxembourg	-7.5 Apr	+4.6 Q1	+5.7	0.86	0.89	+1.1	-0.32	na
New Zealand	-2.6 May	-5.7 Q1	-2.9	1.47	1.37	+1.0	2.02	2.92
Peru	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	na

The Economist commodity-price index

Print edition | Economic and financial indicators Jun 28th 2018

The Economist commodity-price index

2005=100

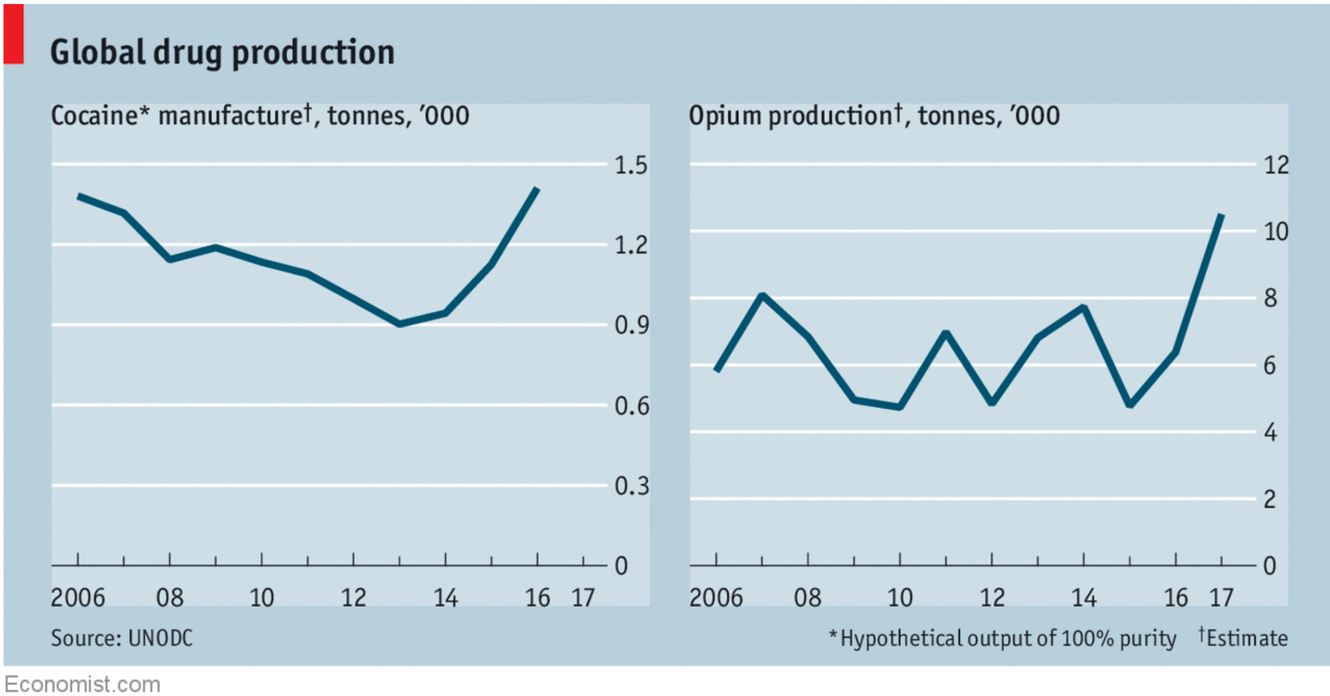
	Jun 19th	Jun 26th*	% change on one month	% change on one year
Dollar Index				
All Items	149.2	147.3	-5.9	+5.2
Food	147.9	146.5	-8.1	-2.2
Industrials				
All	150.6	148.0	-3.5	+13.9
Nfa†	141.7	142.4	-3.7	+9.0
Metals	154.4	150.5	-3.5	+16.0
Sterling Index				
All items	206.1	202.4	-5.6	+1.5
Euro Index				
All items	160.4	157.0	-6.7	+1.7
Gold				
$ per oz	1,274.1	1,260.8	-3.2	+1.1
West Texas Intermediate				
$ per barrel	65.1	70.5	+5.7	+59.4

Sources: Bloomberg; CME Group; Cotlook; Darmenn & Curl; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Thomson Reuters; Urner Barry; WSJ. *Provisional
†Non-food agriculturals.

Economist.com

Global drug production

Print edition | Economic and financial indicators Jun 28th 2018



Production of plant-based illicit drugs has surged in recent years, according to the UN Office on Drugs and Crime. Global opium production rose by 65% in 2017, to 10,500 tonnes, the highest level since records began. Most of it was grown in Afghanistan, where political instability and rural poverty helps to explain why production reached 9,000 tonnes. Global cocaine manufacture also reached record levels in 2016 (the latest year for which data are available), rising by 25% year on year to 1,410 tonnes. More than half of this amount came from Colombia, where coca-bush cultivation has significantly increased. Unsurprisingly, global drug seizures are also on an upward trend.

Markets

Print edition | Economic and financial indicators   Jun 28th 2018

Markets

	Index Jun 27th	% change on one week	% change on Dec 29th 2017 in local currency	% change on Dec 29th 2017 in $ terms
United States (DJIA)	24,117.6	-2.2	-2.4	-2.4
United States (S&P 500)	2,699.6	-2.4	+1.0	+1.0
United States (NAScomp)	7,445.1	-4.3	+7.8	+7.8
China (Shanghai Comp)	2,813.2	-3.5	-14.9	-15.5
China (Shenzhen Comp)	1,575.6	-2.3	-17.0	-17.6
Japan (Nikkei 225)	22,271.8	-1.3	-2.2	+0.3
Japan (Topix)	1,731.5	-1.2	-4.7	-2.3
Britain (FTSE 100)	7,621.7	-0.1	-0.9	-3.0
Canada (S&P TSX)	16,231.3	-1.2	+0.1	-5.7
Euro area (FTSE Euro 100)	1,181.6	-1.5	-2.3	-5.1
Euro area (EURO STOXX 50)	3,397.1	-1.2	-3.0	-5.8
Austria (ATX)	3,264.5	+0.5	-4.6	-7.3
Belgium (Bel 20)	3,729.1	-0.6	-6.3	-8.9
France (CAC 40)	5,327.2	-0.8	+0.3	-2.6
Germany (DAX)*	12,348.6	-2.7	-4.4	-7.1
Greece (Athex Comp)	767.9	+0.3	-4.3	-7.0
Italy (FTSE/MIB)	21,557.9	-2.5	-1.4	-4.2
Netherlands (AEX)	552.2	-0.5	+1.4	-1.5
Spain (IBEX 35)	9,658.6	-1.3	-3.8	-6.6
Czech Republic (PX)	1,051.7	-1.7	-2.5	-6.7
Denmark (OMXCB)	886.6	-1.1	-4.4	-7.2
Hungary (BUX)	35,587.5	+0.6	-9.6	-16.5
Norway (OSEAX)	1,008.1	+0.4	+11.2	+11.9
Poland (WIG)	56,101.8	-0.9	-12.0	-17.8
Russia (RTS, $ terms)	1,124.8	+0.5	-2.6	-2.6
Sweden (OMXS30)	1,540.9	-2.0	-2.3	-9.6
Switzerland (SMI)	8,504.5	-0.6	-9.4	-10.8
Turkey (BIST)	95,954.8	+1.5	-16.8	-31.8
Australia (All Ord.)	6,290.5	+0.3	+2.0	-3.3
Hong Kong (Hang Seng)	28,356.3	-4.5	-5.2	-5.6
India (BSE)	35,217.1	-0.9	+3.4	-3.2
Indonesia (JSX)	5,787.5	-1.6	-8.9	-12.9
Malaysia (KLSE)	1,666.1	-2.6	-7.3	-6.7
Pakistan (KSE)	41,718.0	-3.0	+3.1	-6.3
Singapore (STI)	3,254.8	-1.8	-4.4	-6.2
South Korea (KOSPI)	2,342.0	-0.9	-5.1	-8.9
Taiwan (TWI)	10,701.0	-2.1	+0.5	-1.6
Thailand (SET)	1,618.7	-2.7	-7.7	-8.8
Argentina (MERV)	25,966.0	-10.8	-13.6	-40.0
Brazil (BVSP)	70,609.0	-2.1	-7.6	-18.8
Chile (IGPA)	26,796.5	-2.1	-4.2	-8.0
Colombia (IGBC)	12,250.5	+1.5	+6.7	+8.9
Mexico (IPC)	46,874.4	+0.2	-5.0	-6.2
Peru (S&P/BVL)*	20,005.9	-2.1	+0.2	-0.8
Egypt (EGX 30)	16,176.4	+0.2	+7.7	+7.0
Israel (TA-125)	1,372.7	-1.0	+0.6	-4.1
Saudi Arabia (Tadawul)	8,317.3	+1.8	+15.1	+15.1
South Africa (JSE AS)	55,369.3	-2.3	-6.9	-14.9
Europe (FTSEurofirst 300)	1,486.5	-1.1	-2.8	-5.6
World, dev'd (MSCI)	2,088.4	-1.4	-0.7	-0.7
Emerging markets (MSCI)	1,067.8	-2.3	-7.8	-7.8
World, all (MSCI)	504.9	-1.5	-1.6	-1.6
World bonds (Citigroup)	938.8	+0.2	-1.2	-1.2
EMBI+ (JPMorgan)	785.2	+0.4	-6.1	-6.1
Hedge funds (HFRX)	1,262.8§	-0.5	-1.0	-1.0
Volatility, US (VIX)	15.1	+12.8	+11.0	(levels)

Output, prices and jobs

Print edition | Economic and financial indicators Jun 28th 2018

Output, prices and jobs

% change on year ago

	Gross domestic product				Industrial production	Consumer prices			Unemployment rate, %
	latest	qtr*	2018†	2019†	latest	latest	year ago	2018†	
United States	+2.8 Q1	+2.2	+2.8	+2.5	+3.5 May	+2.8 May	+1.9	+2.5	3.8 May
China	+6.8 Q1	+5.7	+6.6	+6.4	+6.8 May	+1.8 May	+1.5	+2.3	3.9 Q1§
Japan	+1.1 Q1	-0.6	+1.3	+1.2	+2.6 Apr	+0.6 May	+0.4	+1.1	2.5 Apr
Britain	+1.2 Q1	+0.4	+1.4	+1.4	+1.8 Apr	+2.4 May	+2.9	+2.5	4.2 Mar††
Canada	+2.3 Q1	+1.3	+2.3	+2.0	+4.9 Mar	+2.2 May	+1.3	+2.1	5.8 May
Euro area	+2.5 Q1	+1.5	+2.3	+2.0	+1.7 Apr	+1.9 May	+1.4	+1.6	8.5 Apr
Austria	+3.4 Q1	+9.7	+2.9	+2.3	+5.9 Apr	+1.9 May	+1.9	+2.2	4.9 Apr
Belgium	+1.5 Q1	+1.3	+1.7	+1.7	+2.9 Apr	+1.8 May	+1.9	+1.8	6.3 Apr
France	+2.2 Q1	+0.6	+2.0	+1.9	+2.1 Apr	+2.0 May	+0.8	+1.8	9.2 Apr
Germany	+2.3 Q1	+1.2	+2.2	+2.1	+2.0 Apr	+2.2 May	+1.5	+1.7	3.4 Apr‡
Greece	+2.3 Q1	+3.1	+1.8	+1.9	+1.9 Apr	+0.6 May	+1.2	+0.7	20.1 Mar
Italy	+1.4 Q1	+1.1	+1.4	+1.3	+1.9 Apr	+1.0 May	+1.4	+1.2	11.2 Apr
Netherlands	+2.8 Q1	+2.3	+2.8	+2.5	+5.0 Apr	+1.7 May	+1.1	+1.5	4.8 May
Spain	+2.9 Q1	+2.8	+2.7	+2.4	+11.0 Apr	+2.1 May	+1.9	+1.5	15.9 Apr
Czech Republic	+3.7 Q1	+1.6	+3.5	+3.0	+5.5 Apr	+2.2 May	+2.4	+1.8	2.3 Apr‡
Denmark	-1.3 Q1	+1.7	+1.8	+2.0	+6.1 Apr	+1.1 May	+0.8	+1.1	4.0 Apr
Hungary	+4.4 Q1	+4.9	+3.9	+2.7	+2.9 Apr	+2.8 May	+2.1	+2.5	3.8 Apr§††
Norway	+0.3 Q1	+2.5	+1.9	+1.8	-1.3 Apr	+2.3 May	+2.1	+2.2	3.7 Apr‡‡
Poland	+5.2 Q1	+6.6	+4.2	+3.4	+5.3 May	+1.7 May	+1.9	+1.7	6.1 May§
Russia	+1.3 Q1	na	+1.8	+1.7	+3.7 May	+2.4 May	+4.1	+3.0	4.7 May§
Sweden	+3.3 Q1	+2.9	+2.7	+2.4	+3.2 Apr	+1.9 May	+1.7	+1.7	6.5 May§
Switzerland	+2.2 Q1	+2.3	+2.2	+1.9	+9.0 Q1	+1.0 May	+0.5	+0.8	2.6 May
Turkey	+7.4 Q1	na	+4.3	+4.1	+5.1 Apr	+12.1 May	+11.7	+10.9	10.1 Mar§
Australia	+3.1 Q1	+4.2	+2.8	+2.8	+4.3 Q1	+1.9 Q1	+2.1	+2.2	5.4 May
Hong Kong	+4.7 Q1	+9.2	+3.6	+2.8	+1.0 Q1	+2.1 May	+2.0	+2.5	2.8 May‡‡
India	+7.7 Q1	+10.1	+7.3	+7.5	+4.9 Apr	+4.9 May	+2.2	+4.7	5.3 May
Indonesia	+5.1 Q1	na	+5.3	+5.5	+4.7 Apr	+3.2 May	+4.3	+3.6	5.1 Q1§
Malaysia	+5.4 Q1	na	+5.6	+5.5	+4.5 Apr	+1.8 May	+3.8	+1.9	3.3 Apr§
Pakistan	+5.4 2018**	na	+5.4	+5.0	+4.2 Apr	+4.2 May	+5.0	+5.0	5.9 2015
Singapore	+4.4 Q1	+1.7	+3.2	+2.9	+11.1 May	+0.4 May	+1.4	+0.8	2.0 Q1
South Korea	+2.8 Q1	+4.1	+2.9	+2.9	+0.9 Apr	+1.5 May	+2.0	+1.8	4.0 May§
Taiwan	+3.0 Q1	+0.8	+2.7	+2.0	+3.1 Mar	+1.6 May	+0.6	+1.5	3.7 May
Thailand	+4.8 Q1	+8.1	+4.1	+3.6	+3.2 May	+1.5 May	nil	+1.4	1.1 Apr§
Argentina	+3.6 Q1	+4.7	+2.2	+2.5	-0.8 May	+26.4 May	na	+25.1	9.1 Q1§
Brazil	+1.2 Q1	+1.8	+2.2	+2.8	+8.9 Apr	+2.9 May	+3.6	+3.4	12.9 Apr§
Chile	+4.2 Q1	+4.9	+3.7	+3.4	+7.6 Apr	+2.0 May	+2.6	+2.4	6.7 Apr§‡‡
Colombia	+2.8 Q1	+2.8	+2.5	+3.1	+10.4 Apr	+3.2 May	+4.4	+3.3	9.5 Apr§
Mexico	+1.3 Q1	+4.6	+2.1	+2.3	+3.8 Apr	+4.5 May	+6.2	+4.4	3.2 May
Venezuela	-8.8 Q4~	-6.2	-16.0	-4.9	na	na	na	12,615.2	7.3 Apr§
Egypt	+5.3 Q4	na	+5.4	+5.6	+3.7 Apr	+11.5 May	+29.7	+17.5	10.6 Q1§
Israel	+4.0 Q1	+4.5	+3.8	+3.3	+3.8 Apr	+0.5 May	+0.8	+1.5	3.9 May
Saudi Arabia	-0.9 2017	na	+1.0	+2.0	na	+2.3 May	-0.8	+4.4	6.0 Q4
South Africa	+0.8 Q1	-2.2	+1.9	+2.1	-1.6 Apr	+4.4 May	+5.4	+4.8	26.7 Q1§
Estonia	+3.6 Q1	-0.5	+4.0	+3.5	+2.1 Apr	+3.0 May	+3.3	+3.5	6.8 Q1§
Finland	+2.8 Q1	+5.1	+2.3	+2.1	+3.8 Apr	+1.0 May	+0.8	+0.9	9.3 May§
Iceland	+6.6 Q1	+4.4	+4.1		na	+2.6 Jun	+1.5		2.2 May§
Ireland	+8.4 Q4	+13.3	+4.5	+3.6	-4.5 Apr	+0.4 May	+0.2	+0.8	5.3 May
Latvia	+4.0 Q1	+5.4	+3.3	+3.9	+0.9 Apr	+2.3 May	+2.8	+2.5	8.2 Q1§
Lithuania	+3.7 Q1	+3.6	+3.7	+3.3	+4.9 May	+2.9 May	+3.4	+2.9	8.1 May§
Luxembourg	+5.1 Q1	+8.0	+3.4		+4.5 Apr	+1.3 May	+1.7		5.3 May§
New Zealand	+3.0 Q1	+1.1	+3.1	+2.1	+1.4 Q1	+1.1 Q1	+2.1	+1.8	4.4 Q1
Peru	+3.2 Q1	+5.6	+3.7	+4.0	+20.3 Apr	+0.9 May	+3.0	+1.7	7.0 Mar§

David Goldblatt
Black and white and read all over

Photographing apartheid

David Goldblatt died on June 25th

The chronicler of racial segregation in South Africa was 87

Print edition | Obituary Jun 30th 2018


Mads Nørgaard

TWENTY men move as one, chanting. For a split second you think of the elephants' march in "The Jungle Book". *Hup*. Two. Three. Four. Then you start to see what's not there. It's hot. The steel railway track they have hoisted aloft cuts into their shoulders. They have probably been shifting rails for hours. David Goldblatt's first published photograph, taken near his home town west of Johannesburg in 1946 when he was about 16, has all the characteristics that would make him the most famous chronicler of apartheid. It has absence—the heat, the unseen if obvious overseer—and an atmospheric presence. Between the two, between the presence and the absence, which is really what engages the viewer's imagination, the photograph bears witness.

In a country that was ruled after 1948 by a government that needed to control information—to "distort, suppress and pummel it" in order to preserve the regime, as one commentator wrote—the photograph-as-witness became the clincher, an irrefutable way of speaking truth to power.

Goldblatt knew about authoritarianism. In the 1890s his family had fled the Jewish pogroms in Lithuania. His two much older brothers fought against Hitler. Almost 18 when apartheid came in, he grew up in a landscape made by racial segregation and the power of the mining industry. It was what Nadine Gordimer, in an essay accompanying Goldblatt's photographs 25 years later, would call "the black man's baptism by darkness and dust into Western civilisation". His pictures recorded feats of strength and endurance: men huddling together to avoid falling rocks as they sink a shaft more than a mile below the earth's surface; concrete workers' bunks that look like pigpens; a *kopje* (small hill), like so many made of shovelled sand and rock from the mines, but this one built of spades without a worker in sight (again, that power of absence).

Blue sky

In capturing the spirit of an era, Goldblatt followed in the tradition of Dorothea Lange and Walker Evans, photographers of the American Depression. He shot only in black and white, the better to portray the blue sky of the South African tourist brochures as sinister and harsh. His interest spread from the working day to the workers' day: what time segregated labourers had to leave the KwaNdebele Bantustan where they were compelled to live and how they got to work in Pretoria, the capital. He began photographing the half-life of humans made into zombies by being forced to commute eight hours a day, starting at 02:45 and getting home at 22:00. On heavily subsidised buses, men wrapped in blankets struggle to catnap without falling over onto their neighbours, their dreams constantly disturbed, if not by the green and red light bulbs inside the bus, then by the headlights flaring in from the highway.

Goldblatt sold the family clothing store on the Rand in 1963, after his father died. But even as he became a full-time photographer, he never forgot its Afrikaner customers, "austere, upright, unaffected people" who had struggled to tame the land and had lost, at huge cost, the race against the British imperialists. In one picture from 1964, an elderly man stares at the camera. His face is as lined as the bowl of his pipe is smooth. At 15 he had fought the British in the Boer war, then against the Germans in South West Africa (now Namibia), the rebels in 1916, the strikers in Johannesburg in 1922, and, as a major, against the Italians and Germans in the second world war.

Goldblatt worked with a young *New York Times* correspondent, Joseph Lelyveld, who was deported in 1966, after the two collaborated on a photo essay about Coloured (mixed-race) people. Despite the exposure this work gave Goldblatt in America, it took a long time for him to become well-known internationally. Only in 1998, when he was 67, would he have an exhibition at the Museum of Modern Art in New York.

Never a news photographer, Goldblatt did not capture the massacres at Sharpeville or Soweto. American editors complained that they could not see apartheid in his pictures, but it was always there. His fiercest work was reserved for those who could look without seeing, apartheid's enablers, to use a word from another land of denial. One example is of a woman watching over a beribboned white toddler. Her white nappy stretching across her bottom draws your eye as she crawls into a replica of a Zulu hut at the Voortrekker Monument, a bastion of Afrikaner South Africa. Another is "Miss Lovely (white) Legs", a beauty competition at a supermarket in a small town outside Johannesburg. Standing in the crowd, watching, are three black Africans with their arms crossed. Their gaze is not so much bored as mystified.

Goldblatt kept taking stands. He shot President Nelson Mandela on a plain kitchen chair, having once posed Christiaan Heunis, a former constitutional development minister, in one of those squishy, velour *fauteuils* beloved of social climbers everywhere. He founded the Market Photo Workshop to help young photographers. Zanele Muholi, the best known of them, says he was a father to her. In a country where the first thing you notice about someone is the colour of their skin, Goldblatt questioned white people and upheld black people's agency and depth.

This article appeared in the Obituary section of the print edition under the headline "Black and white and read all over"