The Economist

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JUNE 8TH–14TH 2019

Weapons of mass disruption

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Politics this week

Print edition | The world this week Jun 8th 2019

Two days of ceremonies commemorated the 75th anniversary of the Normandy landings of 1944. The queen and Theresa May, Britain's prime minister, were joined by President Donald Trump of **America**, President Emmanuel Macron of **France** and many other national leaders from across the world. The events followed a state visit by Mr Trump to **Britain**, which included a state banquet at Buckingham Palace. However, the visit was also greeted by mass protests on the streets of London. See article .

Honey, honey

Rodrigo Duterte, the president of the **Philippines**, said his former wife had "cured" him of homosexuality. He then accused a critical senator of being gay. Gay-rights groups decried the implication that homosexuality was both a disease and a slur.

Thailand's parliament chose the incumbent, Prayuth Chan-ocha, as prime minister. As army chief, Mr Prayuth launched a coup and disbanded the previous parliament in 2014, before pushing through a new constitution that shores up the junta he heads. One opposition MP likened his selection to "making someone who set fire to a temple the abbot of that temple". See article .

All nine Muslim ministers in **Sri Lanka's** government, as well as two Muslim provincial governors, resigned. Sri Lanka has been suffering from a wave of anti-Muslim violence after jihadist suicide-bombers killed some 250 people in April. A prominent Buddhist monk had demanded that two of the ministers be dismissed, claiming, without any evidence, that they had links to the bombers. The other ministers and governors resigned in sympathy. See article .

Hasta mañana

The Trump administration banned cruises and other tourism trips by American citizens to **Cuba**, in an attempt to press the communist government to stop supporting **Venezuela's** embattled dictator, Nicolás Maduro.

Colombia's constitutional court rejected changes proposed by President Ivan Duque to a tribunal created to prosecute former rebels and military officials for war crimes. The tribunal was created after a peace deal was signed in 2016 with the Revolutionary Armed Forces of Colombia, a leftist rebel group.

A **Canadian** inquiry described the high rate at which indigenous women are murdered, often by their partners, as a "race-based genocide". It denounced the government for failing to protect them.

Under attack

Sudanese security forces slaughtered pro-democracy protesters in Khartoum—by coincidence, just before the 30th anniversary of the Tiananmen massacre in China. At least 100 people were killed; many more were injured. The killings suggest that the military junta that took charge after the ousting of President Omar al-Bashir in April has no intention of allowing free elections. Other Arab autocracies, such as Saudi Arabia, are giving the junta money and encouragement not to back down. See article .

The council that oversees elections in **Algeria** said a presidential poll would not be held as planned on July 4th due to a lack of eligible candidates. Protesters pushed for the delay, fearing the election would prolong the old regime. Demonstrations continue two months after they helped topple Abdelaziz Bouteflika, the long-serving president. It is up to the interim president to name a new date for the vote.

Hundreds of members of **Cameroon's** opposition were arrested during protests against President Paul Biya. The protesters were demanding the release of hundreds of others arrested following previous demonstrations, including Maurice Kamto, the opposition leader. They also called for an end to the fighting between the government and separatists in English-speaking parts of the country.

The authorities in **Bahrain** took their suppression of dissent to a new level, warning that people who "follow" anti-government social-media accounts could face legal consequences. Most of the regime's critics are already in prison or have fled abroad.

Money, money, money

The European Commission found **Italy** in violation of **EU** fiscal rules over a proposed budget that fails to shrink its debt, currently 132% of GDP. The finding could lead to disciplinary action including multi-billion-euro fines. See article .

Turkey said it would go ahead with its purchase of Russian-made S-400 anti-aircraft missiles. America has said it will block the planned export of F-35 fighters to Turkey, a NATO ally, if it does not axe the deal.

Tens of thousands of demonstrators in Prague called for the resignation of Andrej Babis, the **Czech** prime minister, who is a business magnate. The police have recommended charging him with fraud, and a European Commission audit found he had a conflict of interest involving a company he once owned, Agrofert.

Andrea Nahles stepped down as head of **Germany's** Social Democratic Party, destabilising the country's coalition government, led by Angela Merkel and the Christian Democrats. The party may take months to select a new leader. Some in the party want to pull out of the coalition, which would mean new elections this autumn. See article .

Lars Lokke Rasmussen, the leader of **Denmark's** governing centre-right coalition, conceded defeat in the country's general election. The centre-left bloc led by Mette Frederiksen won 91 of the 179 seats in parliament. See article .

She's my kind of girl

China and **Russia** agreed to upgrade their relationship to what they called a "comprehensive strategic partnership of co-ordination for a new era". This was announced after a meeting in Moscow between China's president, Xi Jinping, and his Russian counterpart, Vladimir Putin. Tass, a Russian news agency, quoted Mr Putin as saying the partnership had reached "an unprecedentedly high level". Mr Xi told Russian media that Mr Putin was his "best and bosom friend".

In **China**, censorship of the internet was stepped up and tight security maintained around Tiananmen Square to prevent any attempt to commemorate the crushing of pro-democracy protests in the square on June 4th 1989. The measures appeared largely effective in Beijing, but in **Hong Kong** about 180,000 people joined a candlelit vigil to mark the bloodshed, organisers said. China's defence minister, Wei Fenghe, said the army's "resolute measures" in 1989 were "correct" and had "preserved stability". China has never given an official figure for how many people died.

Business this week

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Reports emerged that America's federal government is preparing to investigate the country's biggest tech firms for anti-competitive practices. The Department of Justice will oversee any potential investigations of **Google** and **Apple**, while the Federal Trade Commission will have jurisdiction over **Facebook** and **Amazon**. Not to be outdone, lawmakers in the House Judiciary Committee said they were planning their own antitrust probe of digital platforms, including the four tech giants. See article .

America continued to fight trade wars on several fronts. President Donald Trump indicated that he would move forward with threats to impose 5% tariffs on imports from **Mexico** in an attempt to pressure the country to stem the flow of migrants crossing America's southern border. While there is little support for the president's proposed tariffs in Congress, even among members of his own party, Mr Trump insisted that attempts to stop him would be "foolish". See article .

Jerome Powell, the chairman of the **Federal Reserve**, reassured financial markets rattled by growing trade tensions. Speaking at a conference in Chicago, Mr Powell said the central bank would "act as appropriate to sustain the expansion" amid growing economic uncertainty. The remarks sparked a rally in American share prices and signalled the Fed's willingness to cut interest rates. Futures markets indicate a 59% chance of a rate cut by July. See article .

China announced plans to create a list of "unreliable" foreign firms, groups and individuals deemed harmful to the interests of Chinese firms. The move follows America's decision last month to place Huawei on its own blacklist, in effect banning American firms from doing business with the Shenzhen-based telecoms giant. China has not provided details about which companies would be included on its blacklist or what measures would be taken against them.

By the same token

A group of 14 financial firms, led by Swiss bank UBS, is preparing to launch a blockchain-based digital currency for use in settling cross-border trade. The bitcoin-like token, called the utility settlement coin, or USC, is expected to reduce risk and make transactions more efficient. The USC will be backed by major global currencies held at central banks. The firms behind the effort—which include banks in America, Europe, and Japan—expect the digital currency to be operational by 2020.

Africa's most industrialised economy shrunk by an annualised 3.2% in the first quarter, its largest decline in a decade. Almost every sector of the **South African** economy was hit, according to the country's statistics office, with manufacturing, mining and agriculture output falling by 8.8%, 10.8% and 13.2% respectively. The contraction can be blamed in part on severe power outages. Eskom, the state-owned utility responsible for supplying nearly all of the country's power, has struggled to meet demand and is now regarded as a significant risk to South African growth.

Blackstone, a private-equity firm, announced that it will buy a portfolio of industrial warehouses in America from GLP, a Singapore-based property investment manager, for $18.7bn. The acquisition, one of the largest private real-estate deals in history, represents a big bet on the continued growth of e-commerce, which has spurred demand for warehouse space by retailers.

Infineon Technologies, a German chipmaker, agreed to acquire a rival, **Cypress Semiconductor**, for €8.4bn ($9.4bn). The deal, which valued San Jose-based Cypress at $23.85 per share, a 46% premium over its share price in the last month, will create the world's eighth-largest semiconductor maker. Infineon investors were dissatisfied with the acquisition, sending shares in the Munich-based firm tumbling more than 9%.

Apple said it will shut down its iTunes music service, replacing it with its Music, TV and Podcasts apps. The decision to phase out the software was announced at the firm's annual developer conference. The change will be rolled out later this year with its latest operating system, macOS Catalina.

Midnight in Paris

Fiat Chrysler withdrew its $35bn proposal to merge with **Renault**. The tie-up, which would have created the world's third-biggest carmaker, was abandoned by the Italian-American firm shortly after midnight on June 5th when the French government, Renault's largest shareholder, requested a delay to a final decision on the merger. Fiat Chrysler blamed "political conditions in France" for the deal's collapse. See article .

A social-media campaign calling for a ban on office dress codes that require women to wear high heels went viral in **Japan**. The effort spread under the hashtag #KuToo, which plays on the Japanese words for shoe (*kutsu*) and pain (*kutsuu*). Asked to comment on the online campaign, Japan's health minister said that such workplace rules are "necessary and appropriate".

KAL’s cartoon

Print edition | The world this week Jun 8th 2019

American power
Weapons of mass disruption

Weapons of mass disruption

America is deploying a new economic arsenal to assert its power

That is counterproductive and dangerous

Print edition | Leaders Jun 6th 2019

WHEN DONALD TRUMP arrived in the Oval Office he promised to restore America's might. His method has turned out to be a wholesale weaponisation of economic tools. The world can now see the awesome force that a superpower can project when it is unconstrained by rules or allies. On May 30th the president threatened crippling tariffs on Mexico after a row over migration. Markets reeled, and a Mexican delegation rushed to Washington to sue for peace. A day later preferential trading rules for India were cancelled. Its usually macho government did not put up a fight and promised to preserve "strong ties". China faces a ratcheting up of tariffs soon, and its tech giant, Huawei, has been severed from its American suppliers. The country's autocratic leaders are enraged, but on June 2nd they insisted they still seek "dialogue and consultation". A tighter embargo on Iran, imposed over European objections, is strangling its economy.

President Trump must view this scene with satisfaction. Nobody takes America for granted any more. Enemies and friends know that it is prepared to unleash an economic arsenal to protect its national interest. America is deploying new tactics—poker-style brinkmanship—and new weapons that exploit its role as the nerve centre of the global economy to block the free flow of goods, data, ideas and money across borders. This pumped-up vision of a 21st-century superpower may be seductive for some. But it could spark a crisis, and it is eroding America's most valuable asset—its legitimacy.

You might think that America's clout comes from its 11 aircraft-carriers, 6,500 nuclear warheads or its anchor role in the IMF. But it is also the central node in the network that underpins globalisation. This mesh of firms, ideas and standards reflects and magnifies American prowess. Though it includes goods traded through supply chains, it is mainly intangible. America controls or hosts over 50% of the world's cross-border bandwidth, venture capital, phone-operating systems, top universities and fund-management assets. Some 88% of currency trades use greenbacks. Across the planet it is normal to use a Visa card, invoice exports in dollars, sleep beside a device with a Qualcomm chip, watch Netflix and work for a firm that BlackRock invests in.

Foreigners accept all this because, on balance, it makes them better off. They may not set the rules of the game, but they get access to American markets and fair treatment alongside American firms. Globalisation and technology have made the network more powerful although America's share of world GDP has fallen, from 38% in 1969 to 24% now. China cannot yet compete, even though its economy is approaching America's in size.

Despite this, Mr Trump and his advisers are convinced that the world order is rigged against America, pointing to its rust-belt and its trade deficit. And rather than mimic the relatively restrained tactics of the last trade conflict, with Japan in the 1980s, they have redefined how economic nationalism works.

First, instead of using tariffs as a tool to extract specific economic concessions, they are being continuously deployed to create a climate of instability with America's trading partners. The objective of the new Mexican tariffs—fewer migrants crossing the Rio Grande—has nothing to do with trade. And they breach the spirit of USMCA, a free-trade deal signed by the White House only six months ago, which will replace NAFTA (Congress has yet to ratify it). Alongside these big fights is a constant barrage of petty activity. Officials have skirmished over foreign washing machines and Canadian softwood lumber imports.

Second, the scope of activity has been extended beyond physical goods by weaponising America's network. Outright enemies such as Iran and Venezuela face tighter sanctions—last year 1,500 people, firms and vessels were added to the list, a record figure. The rest of the world faces a new regime for tech and finance. An executive order prohibits transactions in semiconductors and software made by foreign adversaries, and a law passed last year known as FIRRMA polices foreign investment into Silicon Valley. If a firm is blacklisted, banks usually refuse to deal with it, cutting it off from the dollar payments system. That is crippling—as two firms, ZTE and Rusal, discovered, briefly, last year.

Such tools used to be reserved for times of war: the legal techniques used for surveillance of the payments system were developed to hunt al-Qaeda. Now a "national emergency" has been declared in tech. Officials have discretion to define what is a threat. Though they often clobber specific firms, such as Huawei, others are running scared (see article). If you run a global company, are you sure your Chinese clients are not about to be blacklisted?

The damage to America's economy so far has been deceptively small. Tariffs cause agony in export hubs such as northern Mexico, but even if Mr Trump imposes all his threatened tariffs, the tax on imports would be worth only about 1% of America's GDP. His poll ratings at home have held up, even as they have slumped abroad. His officials believe the experiment in weaponising America's economic network has only just begun.

In fact, the bill is mounting. America could have built a global coalition to press China to reform its economy, but it has now squandered precious goodwill. Allies looking for new trade deals with America, including post-Brexit Britain, will worry that a presidential tweet could scupper it after it has been signed. Retaliation in kind has begun. China has begun its own blacklist of foreign firms. And the risk of a clumsy mistake that triggers a financial panic is high. Imagine if America banned the $1trn of Chinese shares trading in New York, or cut off foreign banks.

In the long run the American-led network is under threat. There are hints of mutiny—of America's 35 European and Asian military allies, only three have so far agreed to ban Huawei. Efforts to build a rival global infrastructure will accelerate. China is creating its own courts to adjudicate commercial disputes with foreigners (see Chaguan). Europe is experimenting with building a new payments system to get round the Iran sanctions, which could in time be used elsewhere. China, and eventually India, will be keen to end their dependence on semiconductors from Silicon Valley. Mr Trump is right that America's network gives it vast power. It will take decades, and cost a fortune, to replace it. But if you abuse it, ultimately you will lose it.

This article appeared in the Leaders section of the print edition under the headline "Weapons of mass disruption"

Foreign-investment disputes

Why the European Union should not ditch bilateral investment treaties

With populists corrupting courts, foreign investors need safeguards

Print edition | Leaders Jun 8th 2019

AFTER THE fall of the Berlin Wall and before central and eastern European countries began joining the European Union in 2004, officials in Brussels strongly encouraged bilateral investment treaties (BITs) between the bloc's members and their neighbours to the east. BITs are inter-governmental agreements that govern disputes between foreign investors and host states. Their purpose is to protect investors against discrimination and expropriation (disputes between companies are handled separately). The European Commission hoped they would stimulate investment in the region to the benefit of both investors and newly liberated former Soviet-bloc countries. They did. Thanks in part to these treaties, inflows of capital soared. Germany, in particular, became a big investor in Hungary and the Czech Republic. BITs have become a common way to seek redress in bust-ups originating in the region, with 145 cases filed since 1989.

Over time, however, the Eurocrats have grown cooler towards BITs, primarily because they are unhappy with where they are resolved. Arbitration is conducted by the International Centre for the Settlement of Investment Disputes (ICSID), a World Bank body based in Washington. The European Commission argues that this is the wrong forum for all-European investment disputes. It prefers local courts to rule on them, with the European Court of Justice (ECJ) as the last resort. Its stance received a boost in March 2018 when the ECJ decided against Achmea, an insurer that had sued Slovakia for breach of the Dutch-Slovak BIT after a change in Slovak law prohibited the distribution of profits derived from private health insurance. A German court had referred the case to the ECJ, arguing that the arbitration clause in the treaty was incompatible with EU law. In the wake of the Achmea ruling the commission proclaimed that all of the more than 190 intra-EU BITs must end by December this year.

The desire to resolve disputes at home rather than in an obscure court across the Atlantic would be understandable if courts across the EU could be trusted. But they can't. In parts of central Europe the domestic judicial system is neither fair nor equitable, because it is increasingly under the influence of politicians. In Poland the governing Law and Justice party has subjugated courts by stacking the Constitutional Tribunal with its cronies and by letting parliament, rather than other judges, choose members of the National Council of the Judiciary, the body that handles judicial appointments. In Hungary the prime minister, Viktor Orban, has amended the constitution to cow the country's judges. Last week he shelved plans to create a parallel judicial system, which would have handled cases brought against state bodies, only because he worried it would lead to his party's expulsion from the EU parliament's European People's Party (it is already suspended). And the Czech prime minister, Andrej Babis, recently replaced the justice minister with a loyal foot soldier who he hopes will prevent or delay his indictment for the misuse of EU funds.

In light of the politicisation of the judiciary in much of central Europe, the thought of BITs being dismantled at the end of the year fills many investors with dread. If the treaties disappear, so will much of the investment from western neighbours on which the region still heavily relies. Not surprisingly, Germany, France and Austria—all countries whose firms have big investments in central Europe—are opposed to the abolition of intra-EU BITs, whereas Poland, the Czech Republic and Hungary are all for it.

One solution would be the establishment of an EU body, modelled on the ICSID, to specialise in investment disputes. But this would take years to set up. In the meantime, the EU should stick with BITs. If it does not, investors will either steer clear of countries with unreliable judicial systems or structure their deals from countries outside the bloc that have bilateral treaties with those within it. Either way, Europe would lose.

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The internet's next act

The second half of humanity is joining the internet

They will change it, and it will change them

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IN 2007 MORE humans lived in cities than outside them for the first time. It was a transition 5,000 years in the making. The internet has been quicker to reach the halfway mark. Over 50% of the planet's population is now online, a mere quarter of a century after the web first took off among tech-savvy types in the West. The second half of the internet revolution has begun. As our briefing describes, it is changing how society works—and also creating a new business puzzle.

Most new users are in the emerging world; some 726m people came online in the past three years alone. China is still growing fast. But much of the rise is coming from poorer places, notably India and Africa. Having seen what fake news and trolling has done to public discourse in rich countries, many observers worry about politics being debased, from the polarisation of India's electorate to the persecution of Myanmar's Rohingya minority. On the positive side, charities and aid workers talk endlessly and earnestly about how smartphones will allow farmers to check crop prices, let villagers sign up for online education and help doctors boost vaccination rates.

Less well appreciated is that the main attractions of being online are the same for the second half as they were for the first. Socialising and play, not work and self-improvement, are the draw. Porn is popular. Messaging apps help friends stay in touch, and let migrant workers say goodnight to their children back home. People entertain their friends—and strangers—on social media with goofy home-made videos on YouTube or TikTok, an app focused on short, humorous clips. Cheap data plans and thumb drives bring pirated films to millions who may never have been to a cinema. Dating apps are more popular than farming advice; video games are more popular than either. Such boons are unlikely to make their way into many UN development reports. But they are a boost to the stock of human happiness.

For businesses, the second half of the internet offers a vast pool of customers. It also brings a headache—most of these new users are too poor to spend very much. Tens of billions of dollars in venture-capital money have flowed into internet startups in emerging markets, excluding China. The Silicon Valley giants have built up big user bases—over 1.5bn Facebook users are in developing countries. YouTube, a video site owned by Google, is increasingly dominated by non-Western users. Last year Walmart spent $16bn buying Flipkart, an Indian e-commerce giant. Jumia, an e-commerce firm with 4m customers in Nigeria and 13 other African countries, floated in New York in April.

Despite these firms' punchy valuations, they are still looking for sustainable business models. Reliance Jio, an Indian firm, has sunk $37bn into building a high-speed mobile network and acquiring a big base of mostly poor users. Each Facebook user in Asia generates only $11 of advertising revenue a year, compared with $112 for a North American one. The combined revenue of all the internet firms in emerging markets (excluding China) is perhaps $100bn a year. That is about the same size as Comcast, America's 31st-biggest listed firm by sales.

Nonetheless, the impact of these firms on business will get bigger in two ways. First, they will grow fast—although whether fast enough to justify their valuations remains to be seen. To maximise their chances, many are offering not just a single service (such as search or video), as Western firms tended to in their early years, but a bundle of services in one app instead, in the hope of making more money per user. This approach was pioneered in China by Alibaba and Tencent. Go-Jek in Indonesia offers ride-hailing, payments, drug prescriptions and massages. Facebook is pushing a digital payments system in India through its chat service, WhatsApp (see article).

The second is that in the emerging world, established firms are likely to be disrupted more quickly than incumbents were in the rich world. They have less infrastructure, such as warehouses and retail sites, to act as a barrier to entry. Many people, especially outside the big cities, lack access to their services entirely. Beer, shampoo and other consumer-goods firms could find that as marketing goes digital, new insurgent brands gain traction faster. Banks will be forced to adapt quickly to digital payments or die. Viewed this way, there is a huge amount of money at stake—the total market value of incumbent firms in the emerging world, outside China, is $8trn. If you thought the first half of the internet revolution was disruptive, just wait until you see the second act.

This article appeared in the Leaders section of the print edition under the headline "You ain't seen nothing yet"

Head south, young Chinese

How China's government should help its backward regions

It should focus on helping people, not building more infrastructure

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IT HAS BEEN a tense few days for the Communist Party in Beijing. Officials were afraid that dissidents would try to commemorate the 30th anniversary of the crushing of the Tiananmen Square protests on June 4th. Censors scrubbed any allusion to it within the Great Firewall. Police kept activists under close watch, escorting some of them out of the capital for an enforced "holiday" during the sensitive period.

But what is extraordinary about the decades since Tiananmen is how the party has largely succeeded in erasing the massacre from the public's consciousness. About 40% of the population was not even alive then. Most Chinese would say that the economic boom, which began three years after the bloodshed, has had a far bigger impact on their lives. China's defence minister, Wei Fenghe, recently said the army's "resolute measures" in 1989 had "preserved stability" and that "earth-shattering changes" in China showed it was correct. That view has much support in China. Few dare to disagree openly.

Just as remarkable is that the boom has continued for so long without itself creating much unrest. Consider how uneven it has been. Coastal cities have attained almost rich-world standards of living. Deeper inland, vast swathes of the country, especially rural areas, lag far behind. Schools and hospitals are shabby and life expectancy is low. Many people have moved from the countryside to urban areas in search of work. They typically earn more than they would have done in a village, but are often marginalised. Their urban neighbours, and Chinese laws, treat them as second-class citizens. Compared with the gaping regional divides in China, the rich world's increasingly visible geographical inequality seems almost trivial.

One reason why there has not been more grumbling in China is that the government has poured huge sums into poor places. It has used tax benefits to get firms to invest in western and central areas. In 2000 the construction of things such as roads, railways and factories accounted for roughly a third of local GDP in all China's regions. By 2015 that had risen to more than 40% along the wealthy south coast, but to nearly 70% in the west. For years this spending spree worked. By 2013 GDP per person in inland provinces had risen from just one-third of coastal levels to about one-half.

Since then however, the government's efforts have proved less effective. The gap has started widening again. Many cities in the interior are still prospering. But coastal regions, especially in the south, are powering ahead and are likely to widen their lead (see article). Indeed, the government's intervention is increasingly counter-productive. Its heavy-handed approach threatens both growth and social stability.

First, look at the poorer regions' economies. Pouring lots of concrete has naturally been a boost. But the regions have far less need now of new infrastructure. It is reasonable to ensure poor places are not starved of public investment, but too often China ignores market signals entirely. It is particularly important that China spends wisely because of its enormous domestic debt, much of which relates to unnecessary building in the interior. It would be better to direct cash at hospitals, schools and job training than to squander it on more empty expressways.

Then look at the people who live inland—well over half the population. One reason place-based policies are in vogue in the rich world is that many workers have stayed in failing places. The same is true in China—but by design. The government has been maintaining barriers to migration to booming coastal cities and lowering them to inland ones. Far better to let workers move freely by abolishing the pernicious *hukou* system that restricts migrants' access to public services outside their home towns. As coastal areas age rapidly, they will need young migrants to keep them as dynamic as they are today. The government should make it easier to move to them, not least by building more affordable housing that anyone, not just locals, can buy.

A big reason why China has remained relatively stable since Tiananmen is that most Chinese have had hope that their lives will improve. But the next 30 years will be tougher, as the population ages and growth slows. It will become harder for some to sustain their dreams. Putting obstacles in the way of those who wish to seek their fortunes in coastal megacities will needlessly hinder China's development.

This article appeared in the Leaders section of the print edition under the headline "Head south, young Chinese"

Mushroom clouds

Magic mushrooms should be decriminalised

Research into their therapeutic uses should not be bogged down in legal difficulties

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"IT WAS LIKE when you defrag the hard drive on your computer. I experienced blocks going into place, things being rearranged in my mind. I visualised, as it was all put in order, a beautiful experience with these gold blocks going into black drawers that would illuminate and I thought: 'My brain is being defragged! How brilliant is that!'" said Patient 11 in a small trial carried out at Imperial College, London, into the effects of psilocybin, the active compound in magic mushrooms, on people with depression resistant to available treatments. Six months on, the experience had left its mark. "My mind works differently. I ruminate much less, and my thoughts feel ordered, contextualised."

The rehabilitation of psychedelic drugs, banned in most countries, is under way (see article). Oakland, California, in effect decriminalised psychoactive plants and fungi this week; a Republican state senator wants to do the same in Iowa; Denver decriminalised magic mushrooms last month; and campaigns in California and Oregon demand ballots to decriminalise psychoactive plants and legalise the therapeutic use of psilocybin, respectively.

Half a century ago, the therapeutic potential of psychoactive drugs inspired around 1,000 studies of their impact on various mental ailments. The research was shut down amid the moral panic sparked by Timothy Leary, a psychologist and evangelist for psychedelic drugs, who urged America's young to "turn on, tune in and drop out" of whatever respectable futures their parents had mapped out for them. Slowly, impeded by the drugs' legal status, research on psychedelics has started again—mostly on psilocybin, because it is easy to synthesise and does not suffer from the same stigma as LSD (Leary's favourite). Around a dozen small studies have been carried out at American universities and at Imperial College. They hint that psilocybin, along with supportive psychiatric care, may be an effective treatment for depression, addiction, obsessive-compulsive disorder and the anxiety that often afflicts people when death is approaching.

At present this is no more than a possibility, but an exciting one. Around 300m people suffer from depression. Around 8m people die from the effects of tobacco every year. America is suffering an opioid epidemic. There has been no major breakthrough in depression medication for 30 years. The only drug recently licensed is a version of another controlled drug, ketamine, which is effective for no more than a week. The world needs more tools to deal with depression and addiction. America's Food and Drug Administration is interested enough to have given psilocybin "breakthrough" status, which means it wants to expedite its passage through the approvals system. Any resulting drug will have to be administered in controlled settings. Much of its efficacy is likely to depend on the support given by doctors. But the way psilocybin works on people's brains suggests that it may have a broad potential for addressing mental illness.

Few will oppose the careful process leading up to the licensing of the drug. But there are worries, even among some of psilocybin's proponents, about decriminalisation. The drug, it is argued, has a powerful effect on the brain, and not enough is yet known about it. Some people—those with a familial history of schizophrenia, for example—should not take it at all. Researchers fear that a few spectacular accidents involving the drug will reignite the moral panic that slammed the door on the first wave of research.

Accidents will surely happen. They always do when people mess with their brains. Depending on the country, 12-34% of recreational users of psilocybin have a disturbing experience, and sometimes these have lasting effects. But a large-scale study of Americans showed no association between taking psychedelic drugs and mental health problems. Psilocybin has potential both to heal people's ills and to give them pleasure. A third of volunteers in a study rated the mystical experience it induced as the most profound of their lives, and another third put it in the top five. It is also, by the standards of other mood-altering substances, pretty safe. It is not addictive, there is no known lethal dose, and—unlike alcohol—any damage is usually restricted to those who take it.

Certainly, moves to decriminalise psychedelics should be accompanied by campaigns to educate people about the risks. Those who take them should get the setting right—a safe place, with benevolent people and a sober friend around. But humanity should celebrate the fact that it has such powerful medicine available to it, rather than jailing people for taking it.

This article appeared in the Leaders section of the print edition under the headline "Let magic into the daylight"

Letters to the editor
On climate change, Uber, foreign policy, abortion, David Cameron, labour markets, Unilever, sheep

On climate change, Uber, foreign policy, abortion, David Cameron, labour markets, Unilever, sheep

Letters to the editor

A selection of correspondence

Print edition | Letters Jun 8th 2019

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

Climate and conflict

" How climate change can fuel wars " (May 25th) focused on one direction of the connection between conflict and global warming, and not the most direct.

The primary concern of the International Committee of the Red Cross is that people living in places already affected by conflict are among those most vulnerable to climate risks. This is true in countries such as Nigeria, Somalia, South Sudan and Yemen through the heightened consequences of droughts and floods in conflict areas.

At the same time, discussions on climate finance in the context of the Paris agreement are intended to consider the most vulnerable, but in practice exclude conflict settings. International support for adaptation must increase, but also avoid marginalising people living in conflict areas. Humanitarian systems must adjust.

YVES DACCORD
Director-general
International Committee of the Red Cross
Geneva
PROFESSOR MAARTEN VAN AALST
Director
Red Cross Red Crescent
Climate Centre
The Hague

Taxing drivers

Your comprehensive analysis of loss-making companies in the ride-hailing industry (Free exchange , May 11th) ignored one significant factor: the actual income drivers get to keep after expenses. Recent studies show the typical Uber driver in America receives net income of $9 an hour before income tax. This barely meets the legal minimum wage. In new markets like India, drivers are staging protests over their low (and falling) income. And yet you identified payments to drivers as "the juiciest target" for these companies to cut costs.

The ride-hailing industry's strategy of predatory pricing cannot be maintained for long. Investors' goodwill (and deep pockets) will dry up sooner rather than later, and fares will have to rise. The real answer lies in mass-transit systems.

ACHAL RAGHAVAN
Visiting professor
Indian Institute of Management Udaipur

Always with us

Though Lexington 's evidence on the prospects for America's Middle East peace plan was solid, his conclusion was questionable (May 11th). It is true that Saudi-Iranian tensions and the rise of China should have American foreign-policy wonks looking in different directions. But the Israeli-Palestinian conflict will remain centre stage for politicians, simply because of the number of interests at play.

For the Republicans, Israeli-backed lobbyists will continue to play an important role in crafting political strategy. On the Democratic side, the rise of the social-justice movement and a morals-backed foreign policy, espoused by Elizabeth Warren in a recent article in *Foreign Affairs,* will keep the plight of the Palestinians in the spotlight. As they say, all politics is local.

EVAN NEBEL
Bethesda, Maryland

Contrary to your article on the Democrats' new thinking on foreign policy, there is nothing radical or fresh in their ideas (" There's something happening here ", May 4th). At best, calls for a foreign policy of "greater restraint" and focus on inequality and corruption are a reversion to Barack Obama's strategy of leading from behind and the human-development priorities presented in his speech in Cairo. In reality, the desire for restraint and rational goals reflects the strong isolationist strand that cuts across party lines and has marked debates about America's role in the world since the earliest days of the republic.

There is room for a healthy debate about America's strategic role post-Donald Trump. But to the degree that discussion is in need of original ideas because the old ones have been found wanting, I suppose nobody's right if everybody's wrong.

KAMAL SIDHU
Singapore

The people v the courts

Regarding the "law" on abortion in America (" Supremely wrong ", May 18th), many conservatives have a problem with *Roe v Wade* precisely because the courts, and not the legislature, have set the policy. As the late Antonin Scalia once said: "You want a right to abortion? Persuade your fellow citizens and enact it". However imperfect the political system may be, at least Alabama's abortion law has been passed by the state legislature.

DAN BRENDEL
Alexandria, Virginia

A man for all seasons

Denis MacShane suggested that David Cameron donned Nigel Farage's mantle and blames the former prime minister for conceding ground to "simplistic anti-Europeanism" (Letters , May 18th). It was not Mr Cameron's job to sacrifice his career in the cause of protecting the EU from the voters. I certainly think a comparison with Lord North is unfair. Perhaps Cardinal Wolsey would be better, for a prime minister ultimately blown ashore by a European headwind impossible to tack against.

WILLIAM PALFREMAN
Leeds

Oddly satisfying

" Working it " (May 25th) toys briefly with David Graeber's idea of "Bullshit Jobs" before deciding that it isn't useful in explaining low unemployment. To make your case you use two examples which might symbolise inefficiency; not to be confused with bullshit.

The suitcase-straightener at Haneda airport can immediately see what they contribute: they could also surmise what would happen without them. Second, the three bartenders mixing an outstanding gin martini together and then watching the customer drink it. Talk about witnessing the fruits of one's labours! The scale of bullshit jobs might still be unclear, but the glee with which you seized upon these examples, muddling efficiency with notions of usefulness and value, suggests that there might well be some bullshit involved after all.

SUNIL MITRA KUMAR
Lecturer in economics
India Institute and DFID
King's College London

Who makes what?

Schumpeter stated as an apparent fact that Unilever's "pursuit of environmental and social responsibility", which is admirable, "helps win customers" (May 4th). Is there evidence of this? I would confidently hazard a guess that more than 95% of those who buy Unilever's variously branded products have no idea of the conglomerate behind them, nor do they care.

PETER EDWARDS
Harpenden, Hertfordshire

The shear cheek

I was about to complain that the "shear madness" that people will pay for fancy lambs in Senegal (" Golden fleeces ", May 18th) was a spelling error, when I realised it was probably an intentional pun. As was the reference to armed men who "rammed into" a friend's house". I'm now feeling a little sheepish.

ROLLO PRENDERGAST
Berkhamstead, Hertfordshire

"Shear madness"? How do ewe sleep at night?

JOE JENKINSON
Bristol

This article appeared in the Letters section of the print edition under the headline "On climate change, Uber, foreign policy, abortion, David Cameron, labour markets, Unilever, sheep"

The second half of the internet
A global timepass economy

A global timepass economy

How the pursuit of leisure drives internet use

Movies, not grain prices, are bringing the poor world online

Print edition | Briefing Jun 8th 2019

THE CHIEF of Madhogarh, a picturesque village nestled beneath a 17th-century fortified palace in the heart of Rajasthan, came to Indra Sharma three years ago to ask if she would attend a workshop. “Something about the internet,” Ms Sharma, a 40-year-old child-care worker, recalls. She had no particular interest in this internet thing. But she liked the idea of learning something new, so she went along. She and a handful of women from nearby villages were all given a smartphone and some basic lessons in how to use it.

“First we had to learn how to turn it on and off,” says Santosh Sharma (no relation), a 24-year-old schoolteacher from the neighbouring village. Once they had mastered that, they got down to the essentials: “How to take a selfie, WhatsApp, Facebook, YouTube, how to search.”

That was in September 2016, when nobody in the villages had a phone. “Now everybody has one,” says Ms Sharma of Madhogarh. “You see old people walking around watching ‘Mahabharat’,” a television series based on a Hindu mythological epic. Down the road from her home three men sit in the shade of a rohida tree, playing a game of ludo on one of their phones.

According to India’s telecoms regulator, subscriptions for mobile-broadband services more than doubled between the end of 2016 and the end of 2018, from 218m to 500m. At about 3,500 rupees ($50) for a low-end model, smartphones remain dear for an Indian villager’s pocket. But, says Ms Sharma, “everyone has been bitten by the bug; nobody cares how expensive it is.”

For those who do care, at least a bit, a smartish phone from Reliance Jio—one with app-running cleverness, but no touchscreen—can be had for just 1,500 rupees. Jio, backed by the muscle of the Reliance group, has subsidised not just handsets but also, more importantly, data transmission. Competition between it and the incumbents has seen the price of a mobile-data package slashed by 94%, and consumption has duly exploded ten-fold to 8.8GB per subscriber per month. Indians now gobble up nearly three times as much data on their phones as Americans. They seem on course to become the world’s biggest consumers of mobile-phone data.

The size and speed of India’s growth spurt owes a lot to the price war Reliance Jio set off. But the global trend it embodies does not. At some time in 2018 the proportion of the global population using the internet rose above half, according to the International Telecommunications Union, a UN agency. The second half of the internet will not come online as quickly as the first half was doing in the early 2010s; exponential growth cannot continue in a finite world. But if the 710m new internet users expected to come online in the next seven years is only half the number that arrived in the past seven years, it is still a mighty throng. The chances that a child born today will not have a phone as a teenager are already slim, and quickly growing slimmer.

And almost all this future growth will be in developing countries. The 81% of the developed world—a billion people—online is unlikely to increase its number by much. China, at 58%—800m people—has more room for growth. But internet users elsewhere, who already handily outnumber those in the developed world and China put together, make up only 39% of their countries’ populations. Those are the countries where most of the next billion will come from, and the billion after that, and the billion after that (see chart 1). And as they swell the internet’s numbers, they will change its character.

Theory of the leisure class

The second half of the internet will for the most part speak languages other than English and Mandarin. It will have little to no experience with other digital media. It will also come online almost entirely on mobile devices. Hotstar, launched by Rupert Murdoch’s Star India in 2015, became India’s most popular streaming app because it foresaw that the second screen in Indian households would be a smartphone. Increasingly, the first screen will be, too. The idea of a big screen with a fixed connection will be as alien to the second half as landlines and cathode-ray tubes are to today’s youngsters.

Better, cheaper hardware explains part of this. An entry-level smartphone today packs more power and features than the first iPhone in 2007, often at a tenth or less of the price. But poor people are not coming online because another core in the processor or megapixel in the camera matters to them. According to Ajit Mohan, Facebook’s new India chief and the former boss of Hotstar, it is the services that drive demand: the consumers want messaging, video and storytelling, all of which the mobile internet is far better at providing than it was a decade ago.

People want to stay in touch with each other, to be entertained and to express themselves, whatever their income and wherever they call home. This is true in the rich word and in China. It will be true everywhere else, too. And the poorer people are, the more a phone outperforms all the other options they can afford as a way of fulfilling these needs. For many people the phone offers an unsurpassable opportunity for turning otherwise empty time into something enjoyable. According to Payal Arora, a professor at Erasmus University in Rotterdam, the internet is the leisure economy of the world's poor.

Until recently, talk of connectivity in the poor world has almost invariably been clothed in the pragmatic and well-meaning language of development. Aid agencies, international bodies and big tech companies told themselves and their funders that poor people needed an internet connection to lift themselves out of misery. They extolled farmers looking up grain prices, women seeking information on maternal health or pupils diligently signing up for online courses. The website for Facebook's internet.org, an arm of the company focused on bringing unconnected people online, is a classic of the genre: "Imagine the difference an accurate weather report could make for a farmer planting crops, or the power of an encyclopedia for a child without textbooks...The more we connect, the better it gets." In her book "The Next Billion Users", Ms Arora finds that Westerners assume that poverty "is a compelling enough reason for the poor to choose work over play when they go online."

The poor do not see it that way. Years of fieldwork across the globe have led Ms Arora to conclude that when it comes to getting online, "play dominates work, and leisure overtakes labour." Where people planning development strategies imagined, metaphorically at least, Blackberries providing new efficiencies and productivity, consumers wanted the chat, apps and games of the iPhone. Worthier uses tend to follow. But they are the cart not the horse.

The pattern has been repeated in country after country. When Brazil opened thousands of subsidised cybercafés in the late 2000s it brought internet access to 60% of poor neighbourhoods. The cafés were a huge success—because people used them to watch movies and play computer games. They liked to hang out with each other, too. Orkut, Google's first attempt at social networking, was a huge success in Brazil in the early 2010s; Brazilians are now the world's third-largest national population on Facebook, after India and the United States. According to Latinobarometro, a pollster, of the Latin Americans who eat only one meal a day, one out of three still contrives to use a smartphone. Juliano Spyer, an anthropologist who studies Brazilians' internet use, found that the reason poor people in the north-eastern state of Bahia pay for connectivity is that they see it as a form of social mobility—not because they use it to earn more, but because they use it to be more connected.

Chillin' by the billion

In Angola, Wikipedia and Facebook "zero-rate" their services: people using the approved versions of their apps pay no network charges for data from them. They do not get all the internet's goodies—but they get an internet that is deemed both good and good-enough. This resulted in users finding new ways to piggyback pirated movies on to the free services. A wide-ranging 2015 study of digital lifestyles by Caribou Digital, a consultancy, points to research from Zambia which shows that "entertainment is the first thing that [users] demand, and then other things come around this." A survey of online activity in sub-Saharan Africa by Pew Research Center, a pollster, saw 85% of respondents saying they used the internet to stay in touch with friends and family. Only 17% said they used it to take classes.

Global as the trend is, though, India is the best place to observe it—and perhaps profit from it. It has a relatively open market and a newbie population that is large, linguistically diverse and poor, which makes it a proxy for the second half worldwide. The extraordinary speed of its boom is forcing companies to come up with new products and services that fit what the second half wants at a breakneck pace.

Back in Madhogarh, Ms Sharma uses her phone to video-chat with her son in Jaipur, three or four hours away by bus. The younger Ms Sharma uses her phone mostly for WhatsApp, Instagram and Facebook, and for watching videos on YouTube and TikTok, a Chinese-owned social app that has been downloaded a billion times since its launch in 2017, largely by people outside the world's big cities. Her smartphone does allow her to look up coursework for the classes she teaches. But mostly, she says, "it is a way to do timepass", using the Indian-English word for killing time.

"Timepass" is the essence of the internet. The vast majority of the top 25 apps by revenue in both Google's and Apple's app stores are games (and both companies announced new paid gaming services this year). Tencent became one of China's internet giants because of games. Facebook grew into the world's sixth-most valuable company by giving people a place to "do timepass". YouTube is the gateway to several lifetimes' worth of timepass. The fastest-growing new apps of recent years have all been aimed at timepass: Fortnite, WhatsApp, Instagram, Snapchat. TikTok, which consists of 15-second videos, is timepass in its essence, made by bored kids in mofussil towns who have found vast audiences by doing silly things.

Timepass is a pleasure to both rich and poor (see chart 2). But the business model it can support depends on which of those markets you are looking at. If the timepassers have sufficient money, you can sell their attention on to advertisers who want them to consume other goods, too. If the timepassers are poor, you need to get them to pay for what they are doing.

The most striking thing they are doing is watching videos—which they are also making, in great abundance. In 2016 there were only 20 Indian YouTube channels with more than 1m subscribers. Today there are 600. This year T-Series, a Bollywood studio and record label, became the most subscribed channel on YouTube, dethroning PewDiePie, a Swedish entertainer who had topped the charts for several years. Perhaps even more surprising, one of YouTube's top 50 channels worldwide is largely in Bhojpuri, a language spoken only in some of India's least-developed states. Google reckons that three-quarters of all mobile traffic in India is video.

Video offers its users whatever their lives need. Ms Sharma of Madhogarh uses YouTube to look up recipes, among other things. Recipes were a selling point for the menfolk of the village. They were reluctant to allow their wives to have smartphones until they were told that it would help the women cook new dishes. The kitchen is not the only site of consumption. A lot of Indians use phones to look at pornography with a level of privacy not previously easy to come by. PornHub, a large website, says 90% of its traffic from India is on mobile, compared with 75% from America.

Though not all countries have data plans as cheap as India's, the trend to video is universal, says David Shapiro, the business head of Google's "Next billion users" unit. Where mobile broadband is pricey, people download videos on Wi-Fi connections to view offline later on.

Timepass built the TikTok star

It is not just that video is easily available on the internet. To many in the second half video more or less is the internet. Anecdotally, it seems that YouTube is a more common Indian home page than Google. It is used to search not just for entertainment but for everything else. Snigdha Poonam, a journalist, says that when she mentions a book she wrote a few years ago to people she is interviewing in rural India, it is on YouTube that they search for it.

The preference for video is partially explained by the fact that the next half of the internet speaks a very wide range of languages—but may not read any. Video in another language works better than text; video is easier to post to your peers than writing is. And speech beats typing—as can be seen from the use of WhatsApp to send voice messages rather than texts. Though usually associated with pricey first-world gadgets such as the Amazon Echo, voice-input systems have found enthusiasts in the poor world, too. New internet users in India routinely use voice commands to operate their phones, including for such tasks as making calls. When Gaana, a big Indian music-streaming app, underwent a recent redesign, its product managers made voice the primary way to search. "I was very weirded out that they made voice search more prominent than text search," says Satyan Gajwani, the Silicon Valley-based boss of Times Internet, the part of the Times of India media conglomerate which owns Gaana. But "voice search is now almost as big as non-voice search."

What works for leisure can also work for work. Mukesh, an illiterate cab driver in Mumbai, uses Uber's ride-hailing app through a combination of voice input and audio direction. When he has to send messages, he speaks into a voice-to-text app, copies what turns up on the screen onto a messaging app and sends it to his waiting passenger-to-be, hoping it makes sense. Mostly, it does. Low-income internet-users are not uninterested in its work-related possibilities. But these tend to be a later consideration, and one that is a bonus.

Ways of making money out of other people's internet use have not yet come to grips with the timepass of the almost entirely unwealthy. In the most recent full year, 46% of Google's revenues came from the United States and 6% from the rest of the Americas. Asia contributed 15%. A Facebook user in North America generates 12 times more in revenue than one in Asia, and most of today's Facebook users in Asia are better off than most of those who are on the way. But nearly 90% of Facebook's growth in the next four years is expected to come from South-East Asia, Latin America, the Middle East and Africa. It is not just that these people will have less money with which to buy the things advertisers want to sell them. There are fewer things to advertise to them in the first place. Mr Shapiro at Google describes the question of how to be important to the second half as "existential" for his company.

Google, which owns the Android operating system used by 86% of the world's smartphones, is trying to shift its thinking to build products for Mumbai, not Mountain View. The workshops in Rajasthan were part of a Google initiative called "internet saathi", or "internet buddy", aimed at women. Mr Shapiro's unit sends teams to developing countries to better understand how people there use the internet, and what they might want from it next.

Learning that a third of Indian phone users wake up every day to an alert warning that their phones are running out of storage space, Google created an app, Files, that helps them clear out the junk. It proved a hit worldwide. A for-profit tie-up with Indian Railways to install Wi-Fi at stations has spread to six other countries.A Google paper on new product design notes that in poor countries "engagement with the immediate environment through multiple senses (visual, aural, olfactory, and tactile) may be more pronounced." It advises product designers that "Western aesthetics, such as minimal use of colour, sound, and text, and stylised visual elements often fade out in these environments."

Yet even a company with the financial and technological resources of Google may not always see all the angles that the new internet offers. Unlike iPhones, many Android devices have ports for external storage, such as memory cards. When it learned that many users were carrying lots of data on such cards, Google's solution was to produce Files to free up storage. That made people happier with their phones.

But Indians do not just use memory cards because their phones have run out of room. They get them loaded with pirated movies and music for a small fee at a local corner shop, often packaged with an app called MX Player. The app is installed on 1.2m Android phones every day, and two-thirds of those installs are sideloaded from memory cards, rather than downloaded from Google's Play store, which is the way most Western Android users get their apps.

To Times Internet, this looked like an opportunity to reach a new market. Last year it bought MX Player for $140m and built a movie- and music-streaming service into it with which it can now reach a great many people who it knows like cheap video. It was an opportunity others might not have seen. As Mr Gajwani says, the strategies for growth in non-metropolitan India are going to be very different from those applied in the cities, and they will be hard for firms based in Beijing or San Francisco—or even the nicer bits of Mumbai—to pull off. Price-sensitivity is only one element of it. Understanding the culture matters too.

Or consider Jio. Chris Lane of Sanford C. Bernstein, a research firm, estimates that Reliance, a conglomerate with fingers in everything from power generation to retailing, invested $37bn to get its network up and running. In so doing, it has built a user base which it hopes eventually to tap for more than just its current very low data charges. The mobile network has set up movie, music, television and sports streaming services; news and content aggregators; chat, cloud storage and payment services; its own app store; and an annual subscription service called Jio Prime. It aims to be the tollgate for all timepass.

It is not a unique strategy. As a report by the GSMA, a trade organisation for mobile network operators, recently argued, content is the "natural next move for telecoms operators" with pay-TV "a clear opportunity". What distinguishes Jio is that it has been able to spend tens of billions to build a network towards that end from scratch. Few enjoy that luxury. But some aspects of Jio's strategy—a focus on network speed, an enticing introductory offer of free data, a level of infrastructure ownership—can be drawn on by those with shallower pockets, says Mr Lane.

I have a stream

The other, crucial aspect of understanding the second half is that seemingly unlikely things can have value. When you call an Indian mobile phone, it is not uncommon to hear a song instead of the traditional ringing tone. That song, a "caller ring back tone" in the jargon, is chosen by the user you are calling, who pays for the privilege. Until the rise of smartphones and social networks, caller tunes were a big money-spinner for Indian mobile operators, contributing 82bn rupees in revenue in the three years to March 2012. All this for music only others would hear.

The urge driving people to pay a monthly fee for something they do not themselves consume is self-expression, which may be a key to coming up with new sustainable business models for the low-income internet. Times Internet is experimenting with "themes", where users pay a small fee to personalise the appearance of an app on their phone. Another idea is paying one rupee or so to include a personal message with a song before sharing it with a friend or loved one. Such business models will have to be based around tiny amounts of money on a massive scale.

Entertainment, communication and self-expression go hand in hand. Households in India and countries like it tend to have a single television shared by large families. The ability to consume media of your own choice is a step change from having to watch whatever granny had chosen. Daniel, a Ugandan who took part in Caribou's big survey, said: "At home I have a lot of siblings, there is a TV set and a radio which is kept by an auntie. Whenever she is leaving she says, 'this radio is for Bujingo' [pastor]... so I wouldn't get time to listen to music because of the fights at home but now whenever I feel like listening to music, I control it."

Smartphones and social media are, for many in the second half, arenas with a semblance of privacy. While Western internet users fret about the privacy implications of big tech companies hoarding their data, young internet users in the towns and villages of the developing world are delighted to have, for the first time, a way to communicate and express themselves away from the prying eyes of family, neighbours and other busybodies. In Asia and the Middle East smartphones open up a world of romance, enabling people to flirt and date despite social constraints. All over, they allow people who may never travel abroad to make new friends around the world—and people who are travelling, often as migrant workers, to stay in touch.

Providing access to entertainment, opportunities for a richer social life and the ability to speak and be heard to hundreds of millions will mark a profound improvement in humankind's aggregate quality of life. It will have risks, as the politicisation of social media and the social mediation of politics in rich countries have shown. But just as they will be facing some of the same risks, the world's rich and poor will be sharing experiences. They will be spending their time doing the same things: chatting on WhatsApp, liking pictures on Instagram, watching videos on YouTube, doing timepass on TikTok. The world's ability to have a little bit of chill time is becoming more equal. ■

This article appeared in the Briefing section of the print edition under the headline "A global timepass economy"

Democratic policies
The Senate, the Senate

The Senate, the Senate

Democratic presidential candidates are making promises they cannot deliver

Even if one of them beats Donald Trump, their most ambitious schemes are bound to be undone by electoral reality

Print edition | United States Jun 8th 2019

TO BE NOTICED in the crowded Democratic presidential primaries, it helps to toss out a sweeping policy proposal or two. Bernie Sanders, the socialist senator from Vermont, who took this approach in his unsuccessful challenge to Hillary Clinton in 2016, would still like free public college tuition and "Medicare for All". After a slow start Elizabeth Warren, the senior senator from Massachusetts, is enjoying a little polling bounce as reward for her proposals to break up big tech firms, impose a wealth tax on the ultra-rich and bring in universal child care. Upstarts have latched onto the strategy, too. Pete Buttigieg, the mayor of South Bend, Indiana, would like to pack the Supreme Court with six more justices. Andrew Yang, an entrepreneur with a large online following, has made a universal basic income his defining issue. Actually accomplishing any of these things will prove much harder than advertised, because even if Democrats were to take the White House in 2020, they look unlikely to take control of the Senate.

It may seem obvious to point out that the eventual Democratic nominee will first have to defeat Mr Trump before remaking the American health-care system. Yet when debating their two dozen (and counting) choices, party activists sometimes sound as if dethroning Mr Trump, whom betting markets now give a 49% chance of re-election, is inevitable. Americans usually like to re-elect their presidents when the economy is doing well. In April the unemployment rate hit a 49-year low. The chance of some presidential meltdown delivering a crushing Democratic victory seems slight. Though Mr Trump remains unpopular—with approval ratings hovering around 42%—his supporters are unyielding. A slew of scandals, from the jailing of his close associates to the caging of migrant children at the border, have had little measurable effect on his popularity.

Even if Mr Trump lost, the Democrats' less-discussed Senate problem would persist. Although it is theoretically possible for a future Democratic president to assemble cross-party majorities to pass legislation, continued partisan trench-warfare seems more likely. It is difficult to imagine a single Republican voting for a wealth tax. For Matt Bennett of Third Way, a centre-left think-tank, chastened Republicans could revert to being "partisan but not preposterous" after Trumpism breaks its hold over the party. The debate might then fall between "kitchen-table" ideas, like gradual expansions of health-insurance coverage, which might stand a chance, and "Brooklyn coffee-shop, thumb-sucker" ones, like Medicare for All or abolishing the country's immigration-enforcement agency, which would not.

Democrats would therefore need a working Senate majority to get more ambitious schemes through. Out of 100 senators, 47 are reliable Democrats. To win back control of the chamber, the party would need to pick up a minimum of three seats and also win the presidency (since the vice-president's vote breaks ties). That does not sound too hard, but even a net gain of three seats looks a stretch because of the way the upper chamber over-represents rural America. Though it is early, betting markets rate Democrats' chances of winning a Senate majority at 31%.

To wrest seats away from incumbents in difficult territory, the party needs high-quality candidates to run. Yet top-tier candidates are instead opting to be second- or third-tier presidential candidates. Beto O'Rourke, who nearly upset Ted Cruz in his run for the Texas Senate, would be the prime candidate to challenge John Cornyn, the state's other Republican senator, but is instead aiming for the White House.

At least Mr O'Rourke is registering a few percentage points in the polls. The same cannot be said of Steve Bullock, the popular Democratic governor of Montana, who is opting to run for president rather than challenging Steve Daines, the state's lone Republican senator. About 69% of Americans do not yet know Mr Bullock well enough to rate his favourability, according to a recent poll from YouGov.

Stacey Abrams, who lost a close contest for governor in Georgia, and who has the diary schedule of someone who is running for something, has said she will not stand for the Senate. Even without the distracting draw of the White House, recruiting troubles persist: Josh Stein, the attorney-general of North Carolina, would be the obvious candidate to challenge Thom Tillis, but he has declined. Tom Vilsack, a prominent former governor of Iowa, has ruled out a challenge to Joni Ernst.

Even if they were to win a narrow Senate majority, that would not automatically result in the kind of new New Deal that Democratic activists seem to dream of. Surmounting the filibuster, which requires a super-majority of 60 votes for legislation, will be impossible without Republican votes. Ms Warren has endorsed eliminating the filibuster, as has Mr Buttigieg. Her Senate colleagues and competitors, Cory Booker, Kirsten Gillibrand and Kamala Harris, are more skittish, even though it is difficult to imagine some of their signature campaign issues—gun control for Mr Booker, paid family leave and abortion rights for Ms Gillibrand, and marijuana legalisation for Ms Harris—attracting eight or so breakaway Republican supporters.

Many current policy debates would be rendered practically meaningless by divided government, or even by a slim Democratic majority in the upper chamber. A hypothetical President Joe Biden and a President Elizabeth Warren would accomplish much the same in legislative terms, which is to say next to nothing. In that scenario, policy differences over foreign affairs and trade, where the president does have a lot of unilateral power, would matter more. But these are hardly being debated.

The people chosen by a President Biden or Warren to run the regulatory agencies would push in the same centre-left direction: reversing rollbacks of environmental protections under this administration, creating more expansive definitions of civil rights and pushing anti-trust regulators to be bolder. These are not insignificant powers. But proposals for sweeping social change, the kind that will be offered by candidates in the primary debates, would probably languish in committees. ■

This article appeared in the United States section of the print edition under the headline "The Senate, the Senate"

@DHSgov WTF

Foreign travellers to America face scrutiny of their online activity

People applying for a visa must disclose email addresses and social-media accounts

Print edition | United States Jun 6th 2019

MOST TRAVELLERS to America know never to joke with immigration officials. Consider the miserable fate of a young Briton, Leigh Van Bryan, who warmed-up for a holiday in Los Angeles seven years ago by posting some excited tweets. Before flying, he trumpeted plans to "destroy America", meaning he would party hard, drink lots of alcohol and possibly wake up with a tiger in the bathroom. He also joked about digging up the grave of Marilyn Monroe.

Dour officials from the Department of Homeland Security who spotted his posts saw nothing to snigger about. On arrival he and a friend were detained and interrogated for hours, as investigators accused them of plotting crimes. Both were expelled, despite protesting their innocence.

In the years since, would-be travellers have grown warier of what they post online. Most western Europeans, for example, may visit without a visa after making an online request for a waiver. In 2017, over 23m travellers did. But since December 2016 applicants have been asked not only to list countries they have visited—woe betide those who have been to Iran—but also to volunteer details of their social-media accounts and usernames. The idea, apparently, is for officials to screen for wrongdoers and terrorist sympathisers.

The Brennan Centre for Justice, a think-tank, has just published a report on officials' scrutiny of travellers' social-media posts. It frets that President Donald Trump's call for "extreme vetting" of foreigners is turning into an ever more intrusive policy regime. It notes that a National Vetting Centre opened in December, describing it as "a presidentially created clearing-house and co-ordination centre for vetting information", mostly for those visa waivers.

This initiative does look troubling. Information once voluntarily provided now becomes obligatory. In May 2017 the State Department made it compulsory for certain types of visa applicants—comprising some 65,000 people a year—to give every detail of their social-media activity, including their usernames on different platforms, over the previous five years. That appeared to be aimed at applicants from Muslim countries affected by a travel ban.

The order has been expanded to almost every visitor. From this month, the State Department now obliges all visitors to offer details of their identities on any of 20 different social-media platforms, as well as any email addresses, phone numbers and other personal contact information. The new process affects some 15m travellers a year, mostly non-immigrant, temporary visitors. It is not clear how officials will store, share and use that information.

Does this amount to unacceptable scrutiny, even an authoritarian turn? It is not new in kind. As the hapless Mr Van Bryan learned, nothing previously stopped officials from checking on visitors' public, online statements. But the new regime is different in scale, so could make such scrutiny easier. Officials retort that a decision to deny anyone entry will never be based solely on social-media statements.

Several worries linger. The Brennan Centre frets that "wholesale monitoring of social media creates serious risks to privacy and free speech". That includes the privacy and speech of Americans, since scrutiny online looks at how foreigners interact with those already inside America. How masses of personal data are shared between security agencies is opaque. It seems likely that foreigners applying for visas will self-censor online, for fear of having their applications rejected.

More practical concerns also exist. Bureaucrats may be ill-equipped to study five years of online posts, in hundreds of different languages, of 15m people each year. Instead, the online activity of certain individuals, such as young Muslim men, could be unfairly targeted. Migration lawyers also say paperwork for applicants coming to America—already long and tedious—is getting too unwieldy. Equally troubling is a fear of retaliation. What stops immigration officials in Russia, Turkey, China or elsewhere demanding that all American travellers give up details of their emails and social-media accounts? ■

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

Experimenting with children

What budget cuts during the Great Recession did to pupils' test scores

A flurry of recent research points to a clear conclusion

Print edition | United States Jun 6th 2019

LAWMAKERS SOMETIMES cut education budgets in the hope of forcing schools to become more efficient. Given the difficulty of measuring the effects of education spending on test scores, it can be hard to know whether this is as bad an idea as, at first glance, it might seem to be. Yet America ran a large, albeit unintended, experiment along these lines in 2007-09, when school budgets were cut during the recession. What happened to the pupils?

According to a study by Kirabo Jackson of Northwestern University and his colleagues, recession-era budget cuts did lead to lower maths and reading scores. Imagine that a school district replaced all its average teachers with near-bottom-quality teachers. Mr Jackson says that the recession had a similar effect on pupil scores. The researchers also found that the budget cuts during the recession reduced graduation rates. A 10% reduction in spending per-pupil in all four years of high school reduced the likelihood of a student graduating by 2.7 percentage points.

America's public schools are paid for with a combination of federal, state and local funding. Most state revenue comes from personal-income and general sales taxes, which decreased during the recession when 8.7m jobs were lost. Wealthier districts can depend on local property taxes to fund schools during economic downturns, but poorer districts mostly rely on state funds. As a result, poor schools that depended heavily on state revenue faced the largest budget cuts.

Since children from racial minorities disproportionately attend low-income schools, they endured the brunt of the consequences. Test scores in poor and minority school districts suffered most, according to Kenneth Shores of Pennsylvania State University and Matthew Steinberg of the University of Pennsylvania. The schools hit hardest by budget cuts were already struggling academically and financially. Although the cuts may have led some schools to trim otherwise wasteful spending, Mr Jackson and colleagues found that many schools were forced to cut funding of core activities.

One of the most noticeable effects was on class size. William N. Evans of Notre Dame University and his co-authors found that nearly 300,000 school personnel, mostly teachers, lost their jobs as a result of the recession. Salaries and employee benefits make up approximately 80% of school expenditures per pupil, so they are often the first cuts made when budgets tighten. Small class sizes improve test scores, future college attendance and future job quality. The cuts increased class sizes in schools that already had the poorest test scores, the lowest college attendance rates and the worst employment rates.

According to the Centre on Budget and Policy Priorities, a think-tank, 29 states had not returned to pre-recession funding levels by 2015. Rebecca Sibilia of EdBuild, a non-profit organisation that advocates more equal funding for schools, reckons that funding cuts during the recession provide one of the clearest examples of how current school-funding formulas have a detrimental effect on the children who need most help. She recommends changing the system, for example by redrawing school districts so that they are more equal. This would require wealthier places with higher property taxes to share their funds with needier schools within the same district. However, redistricting is unlikely. Since 2000, more than 128 wealthy neighbourhoods have agitated to secede from school districts in an attempt to hoard resources. Of those, 73 were successful. ■

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

Nasty, brutish and long

What it's like to spend half a life in solitary confinement

Tony Medina has spent two decades in a concrete box in Texas, alone

Print edition | United States Jun 6th 2019

TONY MEDINA is a polite, burly man with heavily tattooed arms. Like all those confined at the Allan B. Polunsky Unit, he is dressed in white. The prison's squat grey buildings hold 214 death-row convicts. Locked into a tiny booth in a visiting room, handcuffs off, he compares being "out here" to a vacation. It is quiet, save clangs of metal doors. The room is also cooled and, a rarity, he can see through Plexiglas to the face of another human.

He was convicted in 1996, aged 21, for a drive-by shooting that killed two children at a new-year party. Since then, for 23 years, he has been awaiting execution. In Texas the death penalty is applied to those found guilty of a heinous crime who are also judged to be a threat to others. Mr Medina's legal appeals are continuing.

A deafening wall of noise was "my clearest first memory of death row", he says. "It's gates slamming, the steel on steel, prisons are all concrete and steel, so it echoes, echoes, echoes. It never stops." On his first night he was placed in a darkened wing full of shouting inmates, a dumbfounding experience, "like ThunderDome-type noise, yelling and screaming and banging and everything multiplied".

At first he shared a cell. Then, after other prisoners tried an escape in 1998, all death-row inmates were shifted to solitary. He complains that this is agony. "I wasn't sentenced to solitary confinement. I was sentenced to death." Every day since, for 19 years, he has been alone for 23 hours inside a concrete box measuring 7 feet by 11 feet. Guards pass trays of food through a slat in a door. Standing on his bed he can peer from a vent-window, a few inches high, near the ceiling. "Some guys spend all day long" doing so, he says. He never does, shunning "what is out there that I can't touch".

He gets an hour in an enclosed yard, most days, for recreation. Again he is alone. In his cell he reads (at the moment a series about survivalists), writes or sometimes paints. Relations and volunteers, mostly European women, visit and send messages. Inmates shout to each other, cell-to-cell. But Texas, unlike some states, denies solitary prisoners any physical contact, other than frequent body inspections by guards. He says he last touched a relative, hugging his mother, on August 1st 1996.

Other states with the death penalty, and federal prisons, have less strict conditions. In many, young inmates and those with mental-health problems are no longer isolated for long. Even Texas, with more prisoners in solitary than any other state—about 4,000 as of 2017—is reducing its numbers. A report in 2018 by the Liman Centre at Yale estimated that 61,000 inmates were kept isolated in America, including 1,950 who had endured six years or more. That tally is probably lower today.

Mr Medina believes Texas goes on isolating its death-row prisoners out of vindictiveness, not because of security. He calls the practice outright "torture", "cruel and inhumane", a means of "intimidation to break a person mentally" before his execution. (On average a death-row prisoner in Texas waits nearly 11 years before being put to death; the longest wait was 31 years.) It is hard to dispute his claims.

Dennis Longmire, of Sam Houston State University in nearby Huntsville, says prolonged use of solitary cells is costly and needless. The UN and advocacy groups routinely condemn the practice. He has testified at 40 trials that older inmates are not especially violent to others. He recalls that his own visits to death row were deafening and unpleasant. Unsurprisingly, many guards demand to work elsewhere.

Many inmates suffer mental deterioration, and some turn to suicide, says Mr Medina, whose once "solid" immediate neighbour broke after 15 years. Prisoners grow anxious from isolation and sensory deprivation and obsessed by what they see as official petty malevolence. Inmates in Polunsky were refused permission to buy nail-clippers for 17 years. Nor are they supposed to decorate their cell walls.

Some crack while waiting for execution. When close friends are taken away—sometimes noisily resisting—for lethal injections, there is added turmoil. He counts 437 executions in Texas since he arrived on death row, including "guys that I've considered brothers". It is especially distressing, he says, hearing guards chat and joke as condemned men are removed for execution. Many inmates arrive with mental difficulties. One death-row inmate in Polunsky, Andre Thomas, gouged out his own eyes and ate one.

In conversation Mr Medina is articulate and measured, but he says isolated confinement takes a toll. He experiences intense rage, which he calls beneficial, towards "the system—the way I hold onto my sanity is by reminding myself to be angry at the people that put me here." The anger helped him "build a lot of walls very high…in my mind", but "it's not very healthy" for it "can eat at you". He has heard of inmates in Texas, released from solitary, unable to cope among other people.

His response echoes the words of Albert Woodfox, a prisoner kept in solitary confinement in Louisiana for 40 years before being released in 2016, aged 69. Mr Woodfox recently published a book, "Solitary", in which he writes that "the fight for sanity never goes away" and says he "shut my emotional system down" to cope with being locked away alone.

At issue is not whether to punish the guilty—though Mr Woodfox did eventually prove he was wrongfully convicted. It is whether America should treat even its worst offenders like this. "I feel like we're seen in the same light as places like China, Saudi Arabia and Iran. That's the company we keep," says Mr Medina. "Human beings are not meant to be isolated in this way." ■

CORRECTION JUNE 8TH 2019: An earlier version of this article stated that 1,950 inmates in America had endured six months or more of isolation. This has been corrected to six years. Sorry.

This article appeared in the United States section of the print edition under the headline "Two decades in a concrete box"

Lexington

Baseball and American exceptionalism

The national pastime reflects America's easily mocked—but often successful—desire to be different

Print edition | United States Jun 8th 2019

"YOU MIGHT not get this crazy game," warned Tom Heitz, a historian, before attempting to induct a crowd of baseball scholars into the mysteries of town ball. An early form of baseball, played in north-eastern states until around the 1870s, town ball is recognisable to modern Americans by its rounded bat, four bases (or "stakes") and the batsman's need to get around them. Yet the fact that he may hit all around the plate, must run if he so much as foul-tips the ball, and that fielders wear no protective glove was perplexing to some of the scholars. As the crowd divided into two teams, on the grounds of James Fenimore Cooper's garden in Cooperstown, New York, this gave Lexington a sly advantage. Though he had never played baseball, he had played cricket and rounders, two English games to which town ball is closely related.

It follows that baseball is a close cousin to them too—which has been even more confounding to the game's aficionados. Indeed, the Baseball Hall of Fame in Cooperstown, whose annual symposium on baseball and American culture the town-ballers were attending, is testament to the lengths Americans have gone to to deny their national pastime's foreign roots. To this day, many of the thousands who visit the museum—to stand in awe before a bust of Babe Ruth or Jackie Robinson—believe baseball was invented in Cooperstown, one day in 1839, by Abner Doubleday.

The symposium's participants were wise to that hoax, of course, but not entirely to a related myth. Many believed baseball's 19th-century rise to displace cricket—formerly America's most popular game—was propelled by its singularly "American" qualities. That is another sort of nonsense. And both sorts are revealing—as is the way with baseball—of broader national traits.

Baseball's rise, from a village-green activity with tangled roots in English games to one of the first professional sports, was propelled by elite organisers and entrepreneurs in America's growing cities, such as Albert Spalding, the sporting-goods tycoon. They saw the political and commercial gains to be had from promoting a uniquely American game. They therefore raided cricket clubs (of which there were 100 in Philadelphia alone) for talent, while promoting baseball's native qualities. It was "our game—the America game", crowed Walt Whitman, who loved a national myth.

Anglophobia, stirred by Britain's trade with the Confederacy during the civil war and the prominence of Irish-Americans among early ballplayers, assisted this process. So did a flexible view of what baseball's intrinsic qualities were. Mostly, the game was held to be dynamic where cricket was languid. Yet at least one commentator in the 1870s considered baseball less dangerous.

The Doubleday scam completed the mythologising. Alarmed by the persistent claim that baseball evolved from rounders, Spalding bankrolled a commission to produce a better explanation. "Patriotism and research", its chairman declared in 1889, indicated that the game was invented by Doubleday, the soldier credited with firing the first shot for the Union at Fort Sumter. This fiction was wildly popular, and still is. The Hall of Fame acknowledges—on a plaque in its inner sanctum—that the Doubleday myth is untrue. Yet the fact that the plaque also describes Cooperstown as baseball's "spiritual home" helps keep its spirit alive.

There are two major morals to this history. The first is that America is less exceptional—because, like baseball, more of a European-accented hybrid—than it often considers itself to be. And there are costs to that self-deception, including—as the flip-side of American exceptionalism—isolation in sport and otherwise. Few Americans will be aware that ten finalist countries are currently contesting the quadrennial Cricket World Cup, followed by 2bn people in those countries alone. Baseball, which has spread more modestly and remains fundamentally a domestic game, is parochial by comparison. Yet America's belief in its exceptionalism, exaggerated as it may be, is at the heart of the country's achievements. It may be, baseball suggests, their essential feature.

That is not merely because the game reflects the triumphs and tensions of the society that plays it. All national sports do that. Thus, Brazilian football and Indian cricket represent the binding of disparate peoples by a common culture, and the problems that plague them. Brazilian football is riven with inequality, as Brazil is; Indian cricket is factional and corrupt. That American baseball is the story of America over the past 150 years—a common endeavour marred by periodic storms between communities, between capital and labour, inside and outside the ballpark—is in that sense momentous, but unsurprising. What sets it apart is the cultural heights to which the game's mythologising has lifted it.

This is most obvious in its literature, from the novels of Bernard Malamud and Philip Roth to the non-fiction of Roger Kahn and Michael Lewis. American sports-writing is generally superior, because America takes popular culture so seriously. (The gathering of 170 academics to a conference on baseball was another sign of that.) Yet the boundless themes of national identity, striving and becoming, of real and imagined Americas, and more, that flow from baseball's unique status make its canon the richest by far.

Baseness, bastardy, base

They are also reflected in the game's popularity, especially among those with the most detached view of America: the millions of immigrants who have arrived over baseball's history. For Jews, Mexicans, Irish, among others, baseball has been a point of entry to American culture. Roth called it "this game that I loved with all my heart, not simply for the fun of playing it ... but for the mythic and aesthetic dimension that it gave to an American boy's life—particularly to one whose grandparents could hardly speak English."

Baseball is a fun game indeed; and also, as the English say of cricket, more than a game. It is a symbol of Americans' belief in their own extraordinariness. It also represents what a splendidly self-fulfilling prophecy that delusion has often turned out to be. ■

This article appeared in the United States section of the print edition under the headline "Baseball and exceptionalism"

Regicide

FBI files suggest MLK was more complicated than his myth

But can documents from an agency that hounded King be trusted?

Print edition | United States Jun 8th 2019

IN 1991 OLIVER STONE released a terrible film about John F. Kennedy's assassination, filled with conspiracy theories about government involvement. Despite, or rather because of, its awfulness the film contributed to the passage of the snappily named President John F. Kennedy Assassination Records Collection Act of 1992. The law compelled anything related to the assassination to be released 25 years after its passage, a date which fell in October 2017.

The definition of relevance was broad, which meant that a large collection of FBI records from the 1960s was made public, if only you knew where to look for them. David Garrow, a historian who has published a Pulitzer-winning biography of Martin Luther King, "Bearing the Cross", as well as a book about King and the FBI, did know where to look. Last summer he spent two months going through new documents, including summaries of transcripts from the FBI's Stasi-like surveillance of King's private life.

The FBI managed to persuade the attorney-general, Bobby Kennedy, that King had links with communists and that the G-men must therefore wiretap his phones and bug any rooms he stayed in. The agents did not find reds under the bed, but they did overhear salacious stuff about what was happening on top of the mattress. The agency made tapes and transcribed them. Summaries of those transcripts were subsequently made, which included quotations from the transcripts. These are the files that were released in 2017.

Can documents made by an agency that was out to get King really be trusted? Mr Garrow thinks so, and points to a 1977 report from the Justice Department which says that the transcripts accurately reflect what is on the tapes. King, who was married, had a lot of affairs, which was known already. But the documents describe powerful men arranging nights of sex with women and make for uncomfortable reading. One of the documents has a note scribbled in pencil in the margin saying that King was present when a parishioner was raped in a hotel room. That detail is the most controversial of Mr Garrow's findings, because of the nature of the allegation and because it is not clear whether it describes something on tape.

The FBI tried to spread this information around Washington, but in an age when men, including a sitting president, could get away with coercing women into having sex there was little take-up. The agency then tried a more direct route. Agents made a tape and sent it to King with an anonymous note. "You are a colossal fraud and an evil, vicious one at that," the letter said. "You could not believe in God and act as you do." The letter went on to instruct King to commit suicide, or the tape would be released: "King, there is only one thing left for you to do. You know what it is."

By any standards, the discovery of these documents by a reputable historian is newsworthy, because King was probably the greatest American of the 20th century. Yet Mr Garrow says he could not interest a mainstream outlet in publishing his findings, which instead came out in *Standpoint*, a small right-wing British magazine. The tapes themselves will be declassified in 2027, at which point people will be able to hear them and decide for themselves. ■

Correction: *An earlier version of this story states that David Garrow was working from transcripts of the FBI's tape. In fact the files he found were summaries of the transcripts, which included quotations from them. This was corrected on June 6th.*

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

What tariffs mean for Mexico
Waiting for the man

What tariffs mean

Mexico has little choice but to placate Donald Trump

Its economy is too close to America to stand up to him

Print edition | The Americas Jun 6th 2019

POLITICIANS OFTEN like to rally their supporters by railing against foreign menaces. Mexico's president is an exception. Even as Andrés Manuel López Obrador rages against other indignities of modern Mexican life, he dare not criticise Donald Trump too harshly. That is partly because Mr López Obrador, known as AMLO, eschews foreign distractions from his left-wing domestic agenda. But it is mostly because Mexico's economic ties to the United States are so vital that no president would jeopardise them with reckless posturing.

No Mexican president, that is. Donald Trump won office by denouncing Mexico as a place to which good American jobs go and from which evil migrants come. He has threatened to rip up trade deals and close the border. Each time, Mexican officials try to soothe him with compliments and compromise, because they cannot punch back hard. Only about 15% of the United States' exports go to Mexico, but a whopping 80% of Mexico's exports head the other way. "There is nothing we have in our arsenal that is equivalent to what the United States can do to us," says Andrés Rozental, a Mexican former diplomat and minister.

On May 30th Mr Trump retrieved from his arsenal a time bomb of ruinous proportions: a 5% tariff on all imports from Mexico, beginning on June 10th and increasing by five percentage points each month until it hits 25% in October. Unlike past threats, this is an executive order rather than a series of strongly worded tweets (though it was that, too). The news sent the peso into a slump. A Mexican delegation including Marcelo Ebrard, the foreign secretary, rushed off to Washington in search of a solution. AMLO published an open letter to Mr Trump calling for dialogue, signing off as "your friend". Talks continued as *The Economist* went to press.

At issue is the dramatic rise in the number of Central American migrants heading for the United States. In May 4,300 migrants were apprehended on America's southern border each day, around the same number as were being caught each week two years ago. That Central Americans are emigrating is hardly Mexico's fault: the vast majority are fleeing droughts, poverty and violence in Honduras, El Salvador and, especially, Guatemala. Those countries received their punishment in March from Mr Trump, when he cut off aid to all three.

But Mr Trump argues that the migrants are travelling through Mexico with unwarranted ease. Mexico has done little to stop people-smugglers from using legal bus companies to ferry them, for example. The number of Central American migrants deported by Mexico as a ratio of migrants apprehended by America (which America considers a rough measure of whether Mexico is pulling its weight) dipped to 10% at the start of this year before climbing to 20%. That is well below the levels it reached under Enrique Peña Nieto, AMLO's predecessor, whom Barack Obama politely asked to curb migration across his territory. AMLO's administration took office in December boasting that it would end mass deportations and treat migrants better, while slashing spending on border enforcement.

A drop in the exchange rate could soften the blow of a 5% tariff. But a tariff of 25% would be devastating to Mexico's $350bn in exports. Its economy is already struggling: GDP contracted in the first three months of this year. Further falls would hit tax revenue and so derail Mr López Obrador's ambitious spending pledges, says Charles Seville of Fitch, a credit-rating agency.

Little wonder then that Mexico is keen to talk. Mr Ebrard will vow to stiffen controls in the future and boost border-security funding by $250m in the next 12 months. But promises alone are unlikely to sway Mr Trump. The United States wants to see more migration patrols along the 200km-wide southern Mexican isthmus. Mexico has already beefed up its presence there. But it has ruled out accepting safe third-country status, which would allow the United States to refuse any asylum claim from a migrant who passes through Mexico first. A face-saving fudge looks possible, though perhaps not by June 10th.

Many in Mexico feel that the country is the victim of Mr Trump's re-election campaign. On June 3rd an American judge dismissed a lawsuit against Mr Trump's attempt to divert money from the Pentagon to pay for his wall on the US-Mexico border. If he is building that wall during an election year, that would presumably delight his supporters. He may even claim that Mexico is paying for the wall through the tariffs, though it is far more likely that American consumers will pay the price.

Some aides and nearly all economists will advise Mr Trump that tariffs will impede economic growth. The US states that benefit most from trade with Mexico are Republican-voting ones. The Mexican government is drawing up retaliatory tariffs that would target Trump-supporting states, such as Texas and Arizona, if talks fail. Some Republican senators are nervously mulling a vote to block the tariffs.

The new dispute with Mexico could also unravel one of Mr Trump's previous self-proclaimed triumphs. His replacement of NAFTA("perhaps the worst trade deal ever made") with the United States-Mexico-Canada Agreement ("a very, very good deal") may not now be ratified until after the US elections in 2020. It will sail through Mexico's congress, but many will be wondering what the point of it is. Mexicans now know that if they appease this president, the deal they get will only last until he needs a new political boost. Other countries will have noticed this, too. ■

Award: Sarah Maslin, our Brazil correspondent, has won the gold prize for foreign reporting in the Engine MHP 30 to Watch: Young Journalist Awards, for her coverage of gangs in El Salvador, Jair Bolsonaro and refugees from Venezuela.

This article appeared in the The Americas section of the print edition under the headline "Waiting for the man"

A killer, reviled

El Salvador stops honouring the leader of the El Mozote massacre

The new president, Nayib Bukele, renames a military base

Print edition | The Americas Jun 8th 2019

OVER FOUR days in December 1981, soldiers from El Salvador's army shot, stabbed and burned to death nearly 1,000 peasants from the north-eastern village of El Mozote and surrounding rural hamlets. The victims were accused of sympathising with left-wing guerrillas. All were unarmed. Most were women, children and old people. To this day, no one has gone to prison for the massacre, which was the largest in modern Latin American history. Block letters on the outside wall of a military base in San Miguel, 70km (45 miles)away, paid tribute to the commander who led the massacre, Domingo Monterrosa. On June 1st, hours after being inaugurated, El Salvador's new president Nayib Bukele ordered that the army remove them.

El Salvador, a tiny, hilly country of 6.4m people, was once trumpeted as a model for conflict resolution. On January 16th 1992 guerrillas and army commanders signed peace accords that ended a 12-year civil war in which more than 75,000 civilians had been killed and 1.5m people displaced. A truth commission appointed by the UN spent eight months investigating claims of massacres, forced disappearances, rapes and torture. But just five days after the commission's report was published, El Salvador's congress passed a sweeping amnesty. It had been a secret condition of the peace deal, but made it impossible to prosecute those responsible. Over the years, the country's two main political parties—the left-wing Farabundo Martí National Liberation Front (FMLN) and the right-wing Nationalist Republican Alliance (Arena), which emerged from the warring sides—fought over other issues. But on the matter of the amnesty, they always agreed.

Then, in 2016, the Supreme Court declared the amnesty law unconstitutional and ordered a new investigation into crimes like the El Mozote massacre. The elderly survivors trekked to mass graves in the mountains to watch anthropologists exhume their murdered relatives' bones and to a courtroom in a dusty town to testify in the trial of 18 military officers accused of participating in the carnage. On May 21st peasants in house dresses and ranchero hats picketed the halls of congress to protest against an attempt by Arena and the FMLN to pass a new amnesty law. After an outcry and an intervention from the Inter-American Court of Human Rights, the politicians postponed the vote.

Mr Bukele, who was just four months old at the time of the massacre, is the first president since the war to belong to neither political party. He got his start in advertising, and his seven years of political experience—most recently as mayor of San Salvador, the capital—have been characterised by urban regeneration, social-media wizardry and feuds with journalists and political rivals (in 2017, he engineered his ejection from the FMLN by criticising it). Young people and poor people support him but he has few allies in congress. His inauguration speech in a packed plaza in San Salvador offered little in the way of plans to tackle the country's myriad problems: gang violence that drives thousands of refugees to leave each year; a shortage of cash for social programmes; and corruption scandals involving both the FMLN and Arena.

Mr Bukele's order to take down Monterrosa's name—which he announced on Twitter—signals an attempt to break with those parties' legacies. Less than 24 hours after Mr Bukele's tweet, on the afternoon of June 2nd, soldiers inT-shirts and camouflage trousers appeared with ladders outside the barracks in San Miguel. They chipped away at the paint until Monterrosa's name had disappeared. ■

This article appeared in the The Americas section of the print edition under the headline "Monterrosa, erased"

Will you still feed me?

Chile tinkers with its ground-breaking pensions system

Under the current system, those who don't save get very little

Print edition | The Americas Jun 8th 2019

According to José Piñera, its mastermind, Chile's pension system is a "Mercedes-Benz" system. Introduced in 1981 under the dictatorship of Augusto Pinochet, it replaced a pay-as-you-go system of funding pensions (where current workers pay for current retirees) with one where people are required to save a portion of their salaries for their own pensions, and their contributions are invested in private funds. The model was one of the first to try to make public pensions sustainable. But its future is far from certain.

Last month José's brother, Sebastián Piñera, Chile's centre-right president, persuaded congress to debate plans to reform the system, despite not having a majority. The 14 opposition deputies who broke ranks and voted in favour of discussing the government's bill were branded "traitors" by many on the left, who want to bring back a redistributive pay-as-you-go system.

By many measures the system has been a success. Today private pension funds manage around $212bn, equivalent to 75% of Chile's annual GDP. That capital has helped to fuel Chile's economic boom, which has made the country the richest in South America. The trouble is that the payouts have not lived up to many Chileans' inflated expectations.

People were told they would get pensions worth 70% of their final salary if they chipped in 10% of their earnings for 37 years. But on average, Chilean workers contribute for less than half of their working lives, says Fernando Larraín of the fund managers' association. Around 30% of employed Chileans work informally. If paid in cash, they seldom put any of it in a pension pot. Others are unemployed, studying or raising children. As lifespans lengthen, the money they save will have to stretch further. Projections by the OECD suggest that the average Chilean earner will get less than 40% of their final salary in old age.

Attempts have been made to add a safety-net. In 2008 a centre-left government introduced a tax-funded basic pension, now worth $154 a month to 600,000 elderly people who had no savings. A subsidy tops up the pensions of another 900,000. Together they now cover over half of Chile's 2.8m retirees. "We now have a mixed system," says David Bravo of the Catholic University.

But many Chileans want more redistribution. Mass protests have taken place every year since 2016, most recently in March, excoriating the companies that manage the pension pots. Returns have actually been rather good—funds have made 8% per year since the 1980s—but protesters complain that managers have taken too big a cut (administration costs 1.25% of salaries).

Mr Piñera's plan would require employers to contribute, with the money going into a new state-run fund. It would also give incentives to postpone retirement. But it does not raise the retirement age. Nor can pension reform ever solve the deep inequality that lies behind the anger. Half of Chileans earn less than $550 a month. "It's a ticking bomb," says Marta Lagos, the co-founder of MORI-Chile, a pollster. ■

This article appeared in the The Americas section of the print edition under the headline "Will you still feed me?"

Burning up

Justin Trudeau is trapped between eco-warriors and gas-guzzlers

It is tough going green while pumping the black stuff

Print edition | The Americas Jun 8th 2019

AS OMENS GO, it was pretty clear. On May 30th Jason Kenney, the newly-elected conservative leader of Alberta, had planned a celebration. Having successfully scrapped the province's carbon tax, which added about 6.7 cents to each litre of fuel, he was to visit a petrol station in Edmonton, the provincial capital, and watch as the price dropped. Instead, wildfires to the north of the city created smoke so thick that streetlights came on at midday. The press conference was cancelled. "We've always had forest fires," he airily told reporters the next day. "And we always will."

Such single-minded dedication to his cause has made Mr Kenney, who is not a climate-change denier himself but allows them in his United Conservative Party, a formidable opponent to Justin Trudeau, the Liberal prime minister. At stake is the national climate-change plan that Mr Trudeau carefully stitched together in 2016 with eight of Canada's ten provincial leaders (Saskatchewan and Manitoba held out). Alberta's signature was crucial because it emits more greenhouse gases than any other province. The intensity of the battle could affect the outcome of a general election in October.

A major component of the plan was agreement on a national carbon price starting at C$10 a tonne in 2018, rising to C$50 ($37.40) by 2022. Provinces were left to decide the mechanism for pricing carbon, but if they did not, the federal government would impose a tax. With the biggest provinces on board, it finally looked as if Canada might meet its commitment under the Paris agreement to bring CO2 emissions down by 30% from 2005 levels by 2030.

But then Mr Trudeau started losing his friends. In Ontario Kathleen Wynne's Liberals were defeated last year by the Progressive Conservatives led by Doug Ford, who campaigned on scrapping the province's carbon cap-and-trade system. Conservatives took over from the Liberals in New Brunswick soon after. Add Mr Kenney's Alberta, plus the original two holdouts, and that makes five provinces out of ten now opposed to Mr Trudeau's plans.

They are taking their battle to the courts, opposing the federal carbon tax of C$20 a tonne that went into effect on April 1st in provinces which do not have their own levies. That will now be put in place in Alberta "as soon as possible", says Catherine McKenna, the federal environment minister. The provinces argue that Ottawa has no constitutional right to impose the tax. Saskatchewan lost its case on May 3rd but says it is appealing.

Taking on five of the ten premiers on any issue would be difficult enough for a Canadian prime minister. But with climate change Mr Trudeau is fighting with one arm tied behind his back. Since coming to power in 2015 he has maintained that Canada can fight global warming while still pumping lots of oil. Hydrocarbons are Canada's top export. Mr Trudeau says he wants to phase out Alberta's tar sands eventually, but it is not easy to sit on the fence.

Greens mourned the federal government's decision in 2018 to buy the existing Trans Mountain pipeline, which carries oil from Alberta to the west coast. They are still angry about its proposed expansion (the government's final decision is expected by June 18th). Environmentalists and some indigenous groups are also fighting a new oil pipeline that would pass through Alberta and British Columbia. The federal government has proposed a ban on oil tankers sailing off the northern coast of British Columbia, but it has been held up in parliament by senators.

The most absurd battle may be in Ontario, where the operators of petrol stations now face fines of up to C$10,000 a day from the provincial government if they do not display stickers that criticise the federal carbon tax. The federal government has responded by reminding residents in provinces where the national tax has been imposed that they can apply for an income-tax rebate funded by its proceeds.

A real danger for Mr Trudeau is that the Liberals may lose the youth vote that helped push his party to power in 2015. A rise in the vote share of the Green Party or the New Democrats could split the left. Mr Kenney is planning to lend the federal Conservatives a hand by campaigning in the October election campaign. Mr Trudeau is discovering, like many prime ministers before him, that in an oil-producing country like Canada it is not easy being green. ■

This article appeared in the The Americas section of the print edition under the headline "Burning up"

Thai politics
An unequal sequel

An unequal sequel

The leader of the Thai junta tortures the rules to remain in power

A jerry-rigged parliament affirms Prayuth Chan-ocha as prime minister

Print edition | Asia Jun 6th 2019

NO ONE CAN deny his tenacity. More than five years after seizing control of Thailand in a coup and declaring himself prime minister, nearly three years after pushing through a constitution designed to prolong his rule and more than two months after an election his supporters almost managed to lose despite all kinds of unfair advantages, Prayuth Chan-ocha was at last affirmed as prime minister by parliament on June 5th.

As it happens, Mr Prayuth, without any sense of irony, recently urged his fellow Thais to read "Animal Farm". The process that led to his affirmation as prime minister was redolent of the coup-leading pigs of the novel, who declare: "All animals are equal, but some are more equal than others." Take the parliament that selected him at a joint sitting of its two chambers. All 250 members of the upper house were appointed by Mr Prayuth's government. Roughly a third of them have links with the armed forces or the police. The body contains such impartial figures as Mr Prayuth's younger brother.

Or consider the national election in March in which Thais selected the 500 members of the lower house. The country's election commission decided to change the formula by which it apportioned party-list seats *after* the vote had taken place, robbing anti-junta parties of a slim majority in favour of tiny, biddable outfits. The commission and the constitutional court have also helped by disqualifying opposition MPs and, in one case, banning an entire opposition party.

By unpopular acclaim

The party founded last year to support the generals' interests, Palang Pracharat, won 24% of the popular vote in March, just ahead of the Pheu Thai party, linked to Thaksin Shinawatra, an exiled opposition leader, with 22%, and another opposition outfit, Future Forward, which won 18%. To turn its meagre showing into a governing majority, Palang Pracharat has assembled an unwieldy coalition of 19 parties. In addition to the minnows, it will have to keep in line the 53 MPs of the Democrat Party, Thailand's oldest, and the 51 of the Bhumjaithai Party, an openly transactional operation, to maintain its slim majority of 255 of the 500 seats in the lower house.

The price of co-operation varies. The Democrats say they want to shape economic policy, change the constitution and curb corruption. They look set to win a deputy prime minister and three cabinet seats (including the coveted ministry of commerce). Already one of their own, Chuan Leekpai, a former prime minister, has secured the job of speaker of the lower house. But not all its members are keen: its leader until the election, Abhisit Vejjajiva, who had vowed to oppose an extension of Mr Prayuth's tenure, resigned from parliament when the Democrats joined the coalition, along with several democratically minded colleagues.

Bhumjaithai may earn the ministries of transport, health, and tourism and sport. Its boss, Anutin Charnvirakul, says its conditions for working with Palang Pracharat are simple: that the government enact Bhumjaithai's policies. This will include liberalising rules around farming marijuana (which was legalised for medical purposes by the military regime in December). "I'm a political engineer," explains Mr Anutin, "Since we are not ideologues we do things practically."

Those at odds with Mr Prayuth can expect anything but rewards. Thanathorn Juangroongruangkit, the leader of Future Forward party, was picked to stand against Mr Prayuth as prime minister by the parties opposed to the former general. He enjoys particular popularity among young Thais. "We must make parliament a place of honour, not a place where people's faith goes to die," he thundered ahead of Mr Prayuth's inevitable acclamation.

Future Forward and its leadership face at least 16 charges of wrongdoing. Mr Thanathorn has been suspended as an MP by the constitutional court, which is investigating whether he sold all his shares in media companies before registering to stand for parliament, as required by the constitution. Officials have also been asking questions about loans Mr Thanathorn made to Future Forward. In addition, he has been charged with sedition and computer crimes. He denies all wrongdoing and says he is prepared to go to prison.

Mr Thanathorn's political purity terrifies the establishment. The band of self-interested survivors clustered around the prime minister are not paragons of consistency or principle. They are likely to jostle constantly for advantage and favour, making the government unstable.

Mr Prayuth, meanwhile, has not given much inkling of what he plans to do with his mandate. His latest slogan, "Security, Prosperity, Sustainability", does not shed much light. He did not bother to attend the session at which he was chosen or lay out an agenda to MPs, saying—again, without irony—that his actions over the past five years speak for themselves.

The constitution may, as intended, save Mr Prayuth's bacon. It empowers the senate appointed by the junta to intervene to resolve gridlock in the lower house over important legislation, such as the budget, if it stalls for more than 105 days. The junta's supporters argue that the charter allows minority government more broadly. Mr Prayuth also enjoys the crucial support of the king. "While the government is a farce from a democratic perspective, I suspect they have the resources to keep their thin margin together for some time," says Karen Brooks of the Council on Foreign Relations, an American think-tank. ■

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Banyan

Asian countries fear China but many won't side with America

Asian countries may not like China's hectoring, but they have their qualms about America, too

Print edition | Asia Jun 6th 2019

WHAT DO YOU buy the Asian defence minister who has everything? How about a "beautiful" photo-book of North Korean ships illegally transferring oil at sea? Patrick Shanahan, America's acting defence secretary, presented the collection of grainy aerial shots to his Chinese counterpart, General Wei Fenghe, at the Shangri-La Dialogue, an annual gathering of military bigwigs in Singapore from May 31st to June 2nd.

It was an emollient gesture in fractious times. When Banyan asked Mr Shanahan what he planned to say to General Wei in private, the answer was not a tirade about Huawei or the South China Sea. Instead Mr Shanahan said he was "excited" to explore areas of cooperation. North Korean sanctions-busting—which often occurs in Chinese waters—was top of the list. Such collaboration would show that America and China could "compete in a constructive way".

On June 1st the Pentagon published its plans for that competition in an Indo-Pacific strategy. At its heart was the idea of a "free and open Indo-Pacific" (FOIP), a nebulous concept conceived by Japan and enthusiastically taken up by the Trump administration. In essence, FOIP is a rules-based rejoinder to China's vision of spheres of influence, gunboat diplomacy and murky loans. "No one nation can or should dominate the Indo-Pacific," said the Pentagon in its report.

Mr Shanahan's notion of responsible competition—in contrast to the no-holds-barred clash of civilisations favoured by some of his head-banging colleagues—is laudable. It is also savvy. Asian states are likelier to sign up to FOIP if they are persuaded that America is not spoiling for a fight. But on both counts—stabilising the relationship with China, while rallying partners to push back against it—America has an uphill task.

Start with the olive branches. General Wei did not so much ignore them as snap them into pieces. "Arise, all those who do not want be enslaved," he thundered in his speech on June 2nd, quoting China's national anthem. "Let us build the new Great Wall with our flesh and blood." He warned that China's army was "not afraid of sacrifice" and that "we make no promise to renounce the use of force" against Taiwan.

One might think that such bluster would send Asians rushing to sign up to FOIP and into America's arms. In some cases, it has. Narendra Modi will deepen defence ties with America in his second term. Japan is beefing up its armed forces and sending its navy into the South China Sea. Officials from America, Australia, India and Japan—the "Quad"—now confer routinely, most recently on May 31st.

All pay lip service to the idea that the Association of South-East Asian Nations (ASEAN), a club of ten mostly smaller powers, should be at the core of FOIP. The problem is that not all in ASEAN are sold on the idea. For one thing, many are unconvinced that America will truly stick around, as the costs of any war with China grow over time. So why risk China's ire? "The Chinese coast guard is bigger than Malaysia's warships," lamented Malaysia's defence minister.

Mr Shanahan did his best to assuage these concerns. He pointed out that the Indo-Pacific was America's "priority theatre", with four times as many American forces as any other American military command. America's freedom of navigation operations in the South China Sea were also growing more routine: unusually, there were two in May alone.

But muscle is only half of it. The larger issue is that Donald Trump's unpredictably incendiary foreign policy sits uneasily with the principles of FOIP. Tensions with Iran are pulling America's attention back to the Middle East. The compulsive resort to tariffs undercuts a rules-based trading order. Mr Trump's lack of interest in human rights hardly furthers freedom. And to many in Asia, America's war on Huawei or its sanctions against buyers of Russian arms or Iranian oil look an awful lot like China's "toolkit of coercion", as Mr Shanahan put it.

That is unfair. An Asian order sculpted by China would be more capricious and suffocating than anything Mr Trump could devise. General Wei's defence of the crushing of the Tiananmen Square protests—he called it a "correct policy" that gave China the stability to grow richer—was a reminder of the ideological stakes. Australia, India and Japan are on board. Singapore and Vietnam's sympathies are clear. But most ASEAN countries hate the idea of taking sides, despite widespread misgivings about China's intentions. Mr Shanahan reckons they will eventually come round: "I think they're building up their confidence."

This article appeared in the Asia section of the print edition under the headline "Trouble in Shangri-La"

Seoul's silliest sinecure

The South Korean bureaucrats who pretend to run North Korea

Not being able to set foot there makes the job a breeze

Print edition | Asia Jun 6th 2019

IN A LEAFY neighbourhood at the foot of Bukhansan mountain in Seoul's northern suburbs sits a large office building with a stately glass-panelled entrance. Colourful flags flutter in the breeze above the generous but mostly empty car park, which is surrounded by well-tended shrubbery.

This is the office of the Committee for the Five Northern Provinces, South Korea's vestigial bureaucracy for North Korea, over which the South claims jurisdiction. Five of the flags outside represent the provinces lost in 1948, when the peninsula was formally sundered (contemporary North Korea has nine provinces). There is a governor for each province, as well as mayors for their towns and cities and village officials for smaller settlements.

The purpose of the committee's existence is not obvious. Its officials are unlikely ever to set foot in the places they supposedly run. They are not even in charge of relations with the homicidal dictatorship that actually runs the North: that is the job of the (separate) Unification Ministry.

Whatever the committee's officials do, it must be important, since each governor makes a tidy 138m won ($120,000) a year, plus 20m won to cover unspecified expenses. Each has two secretaries as well as a car and driver. The committee as a whole has an annual budget of 10bn won ($8.5m).

A website lists the committee's activities as nurturing exchange among North Korean refugees in the South and elsewhere (and, ideally, their families in the North), researching the North's history and preserving "traditional" (meaning pre-Kim-dynasty) North Korean culture. However, an inquisitive MP recently found no evidence that any research is being conducted. The only obvious sign of exchange with the North is a letter box in the lobby of the committee's offices with a slit for each of the wayward provinces—although it is not clear whether letters placed in it would ever arrive.

The preservation of old culture, at least, seems to be going strong. A museum on the ground floor of the building displays several old-looking masks alongside more contemporary North Korean artefacts such as shoes and cosmetics. During a recent ceremony to celebrate the committee's 70th birthday, the minister for gender equality and family (deputising for the minister of the interior, who was otherwise engaged) stood on a patch of lawn shovelling soil on the roots of a "peace tree" with a gold-effect spade as dignitaries in dark suits looked on. The group soon retired to a banqueting hall on the fifth floor, where they sat at long tables decked with *kimchi* and *makgeolli* (rice wine). They watched a performance by women in colourful *hanbok* (a traditional dress) wielding masks much like those displayed in the museum downstairs. The room filled up noticeably as lunch was served. Pretending to govern North Korea is much nicer than living there. ■

This article appeared in the Asia section of the print edition under the headline "Enemies with benefits"

Fighting hatred with hatred

Sri Lanka responds to Islamist terrorism by terrorising Muslims

The police are doing little to prevent mob attacks

Print edition | Asia Jun 6th 2019

THE CHARGEs sound silly but the consequences are not. One Muslim lady's crime was to wear a shirt printed with a ship's helm. Her accusers said it looked like the wheel of dharma, so she must be mocking Buddhism, the religion of the majority. A young Muslim man was nabbed for having three SIM cards in his pocket, and a broken memory card. True, he worked in a phone shop, but police insisted he must have snapped the memory card to hide nefarious contents. A rich Muslim doctor was accused of having secretly sterilised 4,000 women by pinching their Fallopian tubes. More than 700 of the supposed victims have complained, enraged by rumours of a fertility "jihad" against non-Muslims.

Just over a month ago, on Easter morning, jihadist terrorists killed more than 250 people around Sri Lanka in a series of suicide-bombings. It is not surprising that since the attacks, jittery police have arrested more than 2,000 people, nearly all of them Muslim. But with suspicion among the public running high, calls for extra vigilance soon morphed into harsher demands. A Buddhist monk threatened to fast to death unless three prominent Muslim officials, accused of having links to terrorists, resigned. Instead, on June 3rd, all nine Muslim ministers, as well as two Muslim provincial governors, quit in protest.

Rauff Hakeem, one of the ministers and the head of a largely Muslim political party, describes his constituents as "petrified". He fears that in Sri Lanka's fragile and polarised state it is all too likely that cynical politicians will exploit the nasty mood. Some may want to distract attention from the security services, which failed to heed repeated warnings of a looming terror attack. "The vast majority of right-thinking people cannot be held hostage by a radical fringe," he says. "The problem is when the radical fringe has political patronage."

After decades of civil war (which pitted the ethnically Sinhalese, Buddhist majority against largely Hindu Tamils), one might expect Sri Lankans to be wary of demonising minorities. Alas, many are doing just that. Since the bombings in April, police have not just randomly arrested Muslims, who are about 10% of the population, but responded lackadaisically to repeated mob attacks against Muslims and Muslim-owned businesses. Facebook groups have organised boycotts of Muslim-owned shops; fake pictures of huge weapons caches "found in mosques" have circulated. Landlords have evicted Muslims because of their faith. A taxi firm advertises that its drivers are Sinhalese; that is, not Tamils or Muslims. A big poultry company has destroyed its stocks of packaging, so it can roll out a new version, proudly stripped of halal certificates.

Muslim leaders point out that they had for years warned authorities about the emergence of cult-like radical groups. After the bombings, it was local Muslims who led police to what was believed to be the jihadists' lair. Co-religionists also took it upon themselves to demolish one of the radicals' mosques with sledgehammers.

Some Muslims have called for introspection. The prosperous Muslim elite, they say, has for too long turned a blind eye to creeping extremism. This is partly a product of widespread migration to the Gulf, and partly a reflection of a global trend among Muslims to abandon "diluted" local forms of Islam in favour of a "purer" Arabian kind. At the same time Buddhist groups with similarly narrow-minded inclinations have also gained ground. And just when Sri Lanka needs strong leadership to steer clear of such obvious dangers, its leaders stand disgraced. ■

This article appeared in the Asia section of the print edition under the headline "Fighting hatred with hatred"

More than half the sky

Vietnam has one of the highest shares of women in work in the world

War, communism and Confucianism all play a part

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DONG THI VINH strides proudly across a patchwork of green fields at her farm just south of Hanoi, Vietnam's capital. Every now and then she pauses to yank up a weed or prune a pomelo tree. Along with a friend, she started an organic fruit-and-vegetable company seven years ago. Since then, the annual tonnage of produce sold has increased tenfold, partly thanks to contracts the firm has won to supply nearby schools. Women are the financial "pillar of the family", says Ms Dong. She employs 19 full-time workers, all women. Her daughter has quit a job in the civil service to join the family firm.

Vietnam has one of the highest female labour-force participation rates (ie, the proportion of women who are in paid work or looking for it) in the world. Some 79% of women aged 15 to 64 are in the labour force, compared with 86% of men. That figure is higher than in all the members of the OECD except Iceland, Sweden and Switzerland, and ten percentage points above China, Vietnam's northern neighbour (see chart).

Many scholars believe that Vietnam was a largely matriarchal society before a period of Chinese conquest that began in 111 BC. A long history of wars with China, and later France and America, sucked women into the workforce, as more men than women were maimed or killed. In 1960 there were 97 Vietnamese men aged 25 to 54 for every 100 Vietnamese women. By 1975 the war between north and south had reduced that number to 93. Many survivors find it hard to hold down a job. Ms Dong says the war has left her husband with a weak immune system. Even short periods of manual labour trouble him. There are hundreds of others like him in their village.

Vietnamese-style Confucianism also plays a part. Combined with nationalism fostered by war, it helps to create a feeling that women have a moral duty to make money. Communist ideology reinforces this norm. Government posters exhorting women to work show them wearing hard hats or military uniforms. Supportive government policies help, too. Maternity leave was increased to six months in 2013, high by regional standards.

The different sexes gravitate towards different types of work. Men tend to take jobs in corporations or organisations that confer status, whereas women tend to be more enterprising. The Global Entrepreneurship Monitor looks at, among other measures, the sex of new business owners across 54 countries. Vietnam had the highest ratio of women to men: 1.14 to 1. This is partly because mothers still do most child care, so they have to work flexible hours.

Businesses owned by women tend to be informal. Women make up 55% of the self-employed. They typically start a business just to make ends meet. Nguyen Thi Hong chops up and sells chickens for ten hours a day in a sweltering market in Hanoi. Along with her husband, she supports three children, her parents-in-law and her husband's brother. As she puts it, if she did not work, "How else could we live?"

Even in the formal sector, work is not always smooth. Misogyny is rife. Many women complain about the glass ceiling, even though young Vietnamese women are now better educated than men. Wives still do the bulk of the housekeeping, too.

But as the economy shifts from farming to manufacturing, working women are becoming more independent. A recent report from the Mekong Development Research Institute, a think-tank, finds that new roads in the Mekong Delta over the past decade have made it easier for women to work in nearby textile and packaging factories, while their husbands stay at home and tend the family farm. Women in the region now earn more than men, and the balance of power between them and their husbands has shifted. Divorces have become more common and reported rates of domestic violence have fallen. Vietnamese women's labour may at last be beginning to work for them. ■

This article appeared in the Asia section of the print edition under the headline "Labour gains"

Who needs foreigners?

Domestic travellers have revived Bangladesh's tourism industry

Terrorism has scared off visitors from abroad

Print edition | Asia Jun 6th 2019

WHEN HE SET up Shanti Bari, an ecoresort in the forest near Srimangal, a town in a hilly, tea-growing region of Bangladesh, Tanvir Arefin Lincoln's guests were mainly foreign tourists. Locals laughed at the idea of staying somewhere with so few modern conveniences. They asked, "Where is the TV? Where is the AC? What are we paying for?" Mr Lincoln replied: "You're paying for fireflies, for the Moon and the stars. You're paying for a luxurious environment, not a luxurious room."

That was five years ago. Now, most of his guests are Bangladeshi. In 2000 just 300,000 Bangladeshis went on holiday within their country; in 2017, 7m did. The figures for last year and this are likely to be higher still, says Bhubon Biswas, head of the Bangladesh Tourism Board: "Business is booming."

Foreign tourism has oscillated wildly in recent years because of political violence and terrorism, including an especially grisly attack in 2016 that targeted expatriates in Dhaka, the capital. But even as foreigners have been scared off, locals have been taking their place. Incomes have increased three- or fourfold during the past ten years, says Syed Rashidul Hasan of Dhaka University. At first, families tend to spend the extra money on appliances and other consumer goods, he explains, but as their incomes continue to grow, they begin to splash out on services, such as holidays.

Most domestic tourists have a hankering for pampering. Down the road from Shanti Bari are the Grand Sultan and the Palace Luxury Resort, marble-clad complexes with swimming pools and games rooms stocked with Playstations. High-end hotels have sprung up elsewhere, too, especially along the 125km-long beach by the city of Cox's Bazar, Bangladesh's most popular tourist destination. But as Shanti Bari shows, there is also growing interest in environmental and adventure tourism. Resorts with assault courses and outdoor sports are springing up outside Dhaka.

First come the locals, then come the foreigners, or so the government hopes. It is setting up a special zone for foreign tourists in Cox's Bazar. The intention, Mr Biswas says, is to provide a place where foreigners can safely behave in ways that might cause consternation in other, more conservative parts of the country. "Bangladesh has a lot to offer foreign tourists," he insists, but Bangladeshis "are perhaps not ready for bikinis".

This article appeared in the Asia section of the print edition under the headline "Who needs foreigners?"

Economic geography
Flyover country v coastal elite

Flyover country v coastal elite

Once again, China's richest region is pulling ahead of the others

The interior had been catching up with the southern coast. No longer

Print edition | China Jun 8th 2019

MOTIVATIONAL SLOGANS do not get much blunter than the one hanging over the sewing machines in Li Zhiguo's factory: "Work hard here to make money, don't be disliked by your family". He proudly holds up one of his products, a red chiffon dress with ruffled sleeves. Dozens more are wrapped up, awaiting shipment.

It is a scene that, on the surface, should please Chinese leaders. Mr Li's factory is in Baiguan, a poor town in the central province of Hunan. The government has long wanted to spur growth deep inside the country, in part by getting low-end industries to leave the prosperous coast and move to places like Baiguan. The money, managers and machines in Mr Li's factory are almost all transplants from the coast. "There's advantages to being here. It's easier to find workers," he says.

But scratch a little deeper, and problems appear. Mr Li aims to have enough orders to keep a hundred workers busy. But business is so slack that he has only hired half that many. When Baiguan launched its industrial park three years ago, the government billed it as a new home for China's textile industry. Today, the zone is pockmarked with vacant buildings. Workers may be paid less than on the coast, but they are more expensive than their counterparts in Cambodia and Bangladesh. The roof over the park's sales office has partly collapsed. Managers complain of power cuts.

The difficulties of building a textile industry in Hunan are part of a much bigger challenge: closing the gap between inland China and its coast. When China opened its economy in the 1980s, its seaboard reaped the biggest gains. Other regions grew more slowly. Eventually the government began focusing on the poorer areas. Two decades ago this month, it launched a "develop the west" plan, followed in 2004 by a similar scheme for its central provinces. These projects involved large investments in roads, railways, schools and hospitals, plus incentives for businesses and workers to move to the interior.

In the official telling, these efforts have been a triumph. That is partly true. Since the early 2000s growth in the interior has soared. But a shift is now under way. Growth is still strong in the interior. Yet the coastal region, particularly its southern half, is now outpacing much of the rest of China. It is a phenomenon familiar in other countries: the richest areas are pulling further ahead of the poorer ones. It is one that makes the Communist Party, having prided itself so much on its efforts to reduce inequality, deeply anxious.

China's south coastal region comprises Shanghai and five provinces from Jiangsu to Hainan (see map). It is home to the mainland's four busiest ports, including Shanghai and the tech hub of Shenzhen. The region is China's wealthiest, with a GDP per person of nearly 100,000 yuan ($15,000). When the government began pouring money into the interior, the south coast initially lost ground. From 2003 to 2013 its share of national GDP fell from 36% to 33%. But since then its relative fortunes have revived. Its share rebounded to nearly 35% in 2018, the highest in more than a decade.

The region that has fared the worst is the north-east, burdened by a legacy of state ownership. The north coast, centred around Beijing, has also stumbled, in part because of policies to limit pollution. The western and central regions have done better. Several cities there, such as Chengdu and Wuhan, are thriving. But on the whole the west and centre have stopped gaining on the south coast. In nominal terms, China's economic slowdown of the past decade has been twice as sharp inland as it has been along the coastal strip.

The underlying picture is even more worrying. Fiscal deficits (the gap between government revenues and expenditures) have remained low on the south coast, rising from 2% in 2000 to 3.9% today. In western and central China, deficits have expanded rapidly, from an average of 5.5% to 15.5% (see chart). Land sales and transfers from the central government have kept local governments afloat, but will diminish as growth slows.

The change in regional fortunes is partly the result of investment flows. In 2000 the construction of things such as roads, railways and factories accounted for roughly a third of GDP in all regions. By 2015, as a result of the government's drive to boost the interior, the ratio had risen to 43% in the south coast, but to 68% in the west and to 60% in the centre (see chart). With investment now tailing off inland, their growth is also beginning to falter.

The slowdown in investment will be easier to stomach for places that have spent money well. The central city of Wuhan should benefit. It has been a focal point of China's efforts to cultivate its semiconductor industry. But cities that have got it wrong will suffer. Chongqing, in the west, worked to attract car and computer manufacturers. As sales of both have weakened, so has Chongqing's economy. It went from being one of China's zippiest cities, growing by 17% in 2010, to one of its slowest, growing by 6% last year. "Everyone says we got hit by a financial crisis," says Liao Li, a saleswoman in a small home-decoration shop there. It is not that bad, but Chongqing's decline has been sudden.

Plenty of industries on the south coast have also run into trouble, from shipbuilding in Jiangsu to garment-making in Guangdong. But the region's economy is more diversified, and so more resilient. It is strong in modern services, from software design to wealth management. And it is still an industrial powerhouse. Many of its manufacturers have spent heavily on automation. Its smaller firms have also adapted. Scholars estimate that 77% of China's "Taobao villages"—ones deriving much of their sales from e-commerce platforms such as the eponymous one—are based on the south coast.

As China's economy matures, the south coast's advantages are likely to grow. The region is well-suited to knowledge-based industries. It generates half of all patent applications nationwide. Since 2015 worker productivity has increased by 7.4% annually on the south coast, more than any other part of China, according to Moody's Analytics, a consultancy. It is also a magnet for foreign firms: 87.5% of foreign direct investment flowed to coastal China in 2017, official figures show. Many foreign managers say the business climate in the south is better. "Guangdong is like a spa," says a European executive who recently launched a big project there, having previously endured frustrations in the interior.

One incentive that is often touted for producing goods in China's interior is lower wages. But the region's workers usually earn more than those in South-East Asian countries: twice as much as in poorer ones such as Vietnam and a tenth more than in wealthier ones such as Thailand. The trade war with America strengthens the headwinds. Firms that might have moved inland from the coast are instead looking abroad. Industrial activity has been declining more rapidly as a share of the interior's economy than of the south coast's. In western China, for example, it has fallen from 51% of GDP in 2011 to 41% last year.

China's leaders will not give up. In recent speeches President Xi Jinping has declared that reducing the economic gap between regions remains a crucial goal. Local officials are still trying to pursue it. Nearly an hour's drive from Baiguan's would-be textile centre, the city of Zhuzhou has created "Power Valley", which local officials hope will become a manufacturing base for the railway, car and plane industries. It is a well-manicured zone with crisp factory buildings, a slogan ("beautiful intelligence town") and a big government office dedicated to making it work.

But nearly four years on from its opening, Power Valley is clearly low on fuel. A clerk at the reception says it has 80% occupancy. Yet just outside her door, there is half a block of abandoned offices. Down the road, one of the bigger occupied buildings belongs to a car-design company. Its manager sheepishly admits that he obtained a five-year lease rent-free. Ten employees are spread across four floors. "We are racing to catch up with the coast," he says. The race already seems lost.

This article appeared in the China section of the print edition under the headline "Flyover country v coastal elite"

Chaguan

A belt-and-road court dreams of rivalling the West's tribunals

Why is it being so cautious?

Print edition | China Jun 6th 2019

THREE WORDS—Fairness, Professionalism, Convenience—form a mission statement for the China International Commercial Court, which held its first public hearing in Xi'an on May 29th. When Chaguan attended the session, alongside foreign diplomats and representatives of China's Supreme People's Court, that three-word promise in English and Chinese shone from a digital screen dominating the bronze and marble entrance hall of this, China's newest judicial institution.

It is built to impress, for it has large ambitions. It was founded to buttress the railways, roads and fibre-optic cables of the Belt and Road Initiative—a globe-spanning scheme launched in 2013 by President Xi Jinping—with something less visible: a distinctively Chinese vision of how laws should govern globalised commerce. The court has two tribunals. The one in Xi'an is in a symbolic spot. The city was the historic terminus for jingling, snorting camel trains on trade routes later dubbed the Silk Road. Its sister tribunal in the southern boomtown of Shenzhen will hear disputes relating to maritime routes of Mr Xi's project. Yet for all the pomp, the new court has an uncertain future, clouded by doubts about how many firms will agree to use it—though its remit now extends to large disputes involving foreign businesses, not just belt-and-road deals. The doubts are related to a fourth word dear to Communist leaders but missing from courthouse digital screens: control.

A desire for this has made officials exceedingly cautious when crafting the court's rules. Other judicial bodies dealing with international commercial cases have opened in recent years from Dubai to Singapore and the Netherlands. To signal their independence, they typically employ judges from several countries. Leading lawyers urged China's supreme court to consider similar bold steps when setting up the new tribunals, playing on its desire to make the judiciary more worldly and better-trained. But officials at China's legislature balked at changing the law to allow foreign judges to sit in the new court. Instead the tribunals will borrow supreme-court judges. Hearings will be conducted in Chinese by Chinese lawyers, though evidence written in English is allowed.

The belt-and-road court is part of the supreme court. It has appointed an "expert committee" with 32, mostly foreign, members. But their role is only to advise the tribunals and to mediate should parties prefer to avoid litigation. A French member, Tao Jingzhou, who heads the China practice of Dechert, a law firm, laments in a new paper that the court is "constrained in many ways".

Shan Wenhua, another of the court's advisers, fielded reporters' questions on opening day in Xi'an. Professor Shan, who is dean of the law school at Xi'an Jiaotong University, assured Chaguan that the court's Chinese judges would "administer justice independently from any interference". He compared the new institution favourably to commercial courts and arbitration tribunals in London or Singapore, noting that it will offer the choice of formal litigation, arbitration or mediation, all under one roof. Answering questions from Chinese state media, the professor went further. Chinese businesses face "great risks" in belt-and-road countries where legal systems are not of "very high" quality, he explained. In addition, having to rely on foreign legal systems is "out of keeping with our status as a major power," he said. "We have a shot at creating a better system."

It is easier to grasp the scale of China's ambitions than to understand what international commercial law with Chinese characteristics might look like. In March the supreme court's president, Zhou Qiang, delivered his annual report to the legislature. Item one was a pledge to uphold the Communist Party's "absolute leadership" over the work of Chinese courts—for China rejects judicial independence, calling it a false Western ideal. Mr Zhou also called for strict implementation of rules requiring judges to seek Communist leaders' instructions when "major matters" arise. Mr Zhou's comments raise questions about the new belt-and-road tribunals, Susan Finder, one of the court's expert advisers, has written on her influential blog, Supreme People's Court Monitor.

Some motives to have more foreign cases heard in mainland China may be relatively benign. For instance, autocratic Chinese business bosses, notably from state-owned enterprises, loathe being cross-examined in foreign commercial courts or arbitration tribunals, and often do badly there. Other possible motives are more worrying. Too many belt-and-road contracts are secretive, unequal and reward local power-brokers in opaque ways, reflecting deep cynicism about global norms. Some experts wonder if China secretly envies the ability of American judges in civil suits to demand the seizure of assets on the other side of the world. Though Chinese officials denounce America as a bully with a long reach, some scholars wonder whether China might one day begin issuing more extraterritorial judgments of its own.

The long arm of the law

International lawyers expect rich-world parties to be wary of the tribunals, for now. They predict that foreign firms will prefer to take disputes involving Chinese partners to such compromise locations as Hong Kong, a Chinese city with its own legal system, complete with foreign judges. The opening case in Xi'an concerned a shareholding dispute involving Red Bull, an energy drink from Thailand. The case was passed to the tribunal by the supreme court. "Where you go to resolve a dispute is more or less a question of your bargaining power," says a lawyer with years of China experience. Smaller firms from poorer nations have fewer choices.

In the law courts of Communist China, power and political control count for more than fairness. The tribunals could one day matter a lot, should they be used to export a vision of international law that reflects that same, bleak worldview. At the moment, an obsession with power and order is hobbling the new tribunals. But that could change: China's autocrats may not be as clumsy for ever.

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

People power meets bullets
Sudan's Tiananmen?

Sudan's Tiananmen?

Pro-democracy protesters are slaughtered in Khartoum

The military junta do not want to share power

Print edition | Middle East and Africa Jun 8th 2019

WHERE JUST weeks ago the scent of freedom was in the air, there came the smell of smoke and cordite. The sounds of jubilant song gave way to those of automatic gunfire and the screams of the dying. In the early hours of June 3rd Sudan's armed forces moved against pro-democracy protesters who had been holding a sit-in since April outside the army's headquarters in Khartoum, the capital of Sudan. They shot and killed more than 100 people, including some children. All that remains of the carnival of democracy that had sprouted there are burnt tents and rubbish.

It was the worst violence since demonstrations toppled Sudan's brutal dictator, Omar al-Bashir, in April. It was also the most gruesome. People were whipped, raped and robbed. Bodies were slung into the Nile. Doctors treating the wounded were beaten and shot. In Omdurman, across the river, rescuers fished out the bodies of people who had been hurled, screaming, off a bridge.

Residents of the capital likened the carnage to atrocities committed by government forces and its militias during Sudan's long civil wars. Not coincidentally, the bulk of the bloodshed this week was the work of the Rapid Support Forces (RSF), a paramilitary force linked to the Janjaweed, a militia responsible for genocide in Darfur. Thousands of its troops now patrol Khartoum.

On June 3rd the Transitional Military Council, which took over after Mr Bashir's fall, turned off the internet and phone networks. Its leader, Abdel-Fattah Burhan, said the junta would form an interim government and hold elections in nine months. The Sudanese Professionals Association, which has spearheaded the uprising since it began last December, rejected the plan.

Trouble had been brewing for weeks. Protesters and the junta were tussling over who would control the country's transition to democracy. Negotiators had agreed on some issues, such as the establishment of a civilian-led parliament and cabinet, and a three-year transition before elections. But talks stalled over the contentious issue of who would be in charge of the highest decision-making body, the sovereign council.

To break the deadlock, the protesters declared a national strike, while the junta turned to its powerful deputy head, Muhammad Hamdan Dagalo (who is widely known as Hemedti) and his RSF. A former camel-rustler who had dropped out of primary school, Mr Dagalo rose to prominence after turning his clan of Arab nomads in Darfur into a gang of the Janjaweed. Horse-riders from that militia suppressed a rebellion 15 years ago by burning villages, slaughtering civilians and raping the women who couldn't escape.

Today, money and diplomatic support from anti-democratic Arab regimes have emboldened the junta. Mr Dagalo had previously sent at least 3,000 mercenaries to fight for Saudi Arabia and the United Arab Emirates (UAE) in Yemen. His forces are well-equipped and battle-hardened, and he has rich friends. The junta's call for financial help was quickly answered. Saudi Arabia and the UAE sent $500m and promised another $2.5bn. Egypt's security forces, no stranger to coups, are thought to have offered advice.

Yet the junta's swift resort to violence may have increased the risk of civil war. It could, perhaps, have let the protests gradually run out of steam. Instead, it unleashed death just before the start of Eid, the festival to celebrate the end of the holy month of Ramadan. "The country will never forgive them for gunning down innocents the day before Eid," says a doctor from Khartoum. Soldiers and policemen not affiliated with the RSF are said to be furious about the bloodshed. Troops in several garrisons have mutinied and tried to break into armouries to grab weapons to fight the RSF.

The killings also raise questions over where exactly power resides. Mr Dagalo, who denies orchestrating the violence in Khartoum (the government also claims the RSF was not involved), is thought to have presidential ambitions. If so, he may seek to undermine any transition that weakens him. He "needs state power to protect his interests", says Magdi el-Gizouli of the Rift Valley Institute, a think-tank. "He is effectively terrorising the population of Khartoum into submission."

He is not the only one with an incentive to thwart democracy. Mr Bashir kept himself in power for 30 years by playing factions off against one another. Many in the junta fear a new order, especially if it establishes the rule of law. Some fear justice for atrocities in Darfur or elsewhere.

The latest killings give the top brass even more reason to worry. The junta is "basically in the same exact boat as Bashir", who faces charges of genocide at the International Criminal Court (ICC), says Ahmed Kodouda, a political analyst.

Demonstrators, meanwhile, are enraged by the betrayal of their democratic revolution. From Al-Haj Yousif, an outlying neighbourhood of Khartoum, come reports of fresh protests suppressed by gunfire. In hospital corridors, doctors and patients alike sing protest songs, vowing not to abandon their struggle.

Averting a civil war in Sudan may require trade-offs between justice and peace. Outsiders, including Western governments and the African Union, have condemned the violence and called for a civilian-led transition. But many, including Britain, also insist that those responsible for war crimes be held accountable and handed over to the International Criminal Court. The fear is that Sudan may get only one of these things, or neither.

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Guns and tonic

Eastern Congo has the world's largest quinine plantations

A region known for misery also saves lives

Print edition | Middle East and Africa Jun 8th 2019

THE KIVU provinces in the east of the Democratic Republic of Congo have a tragic reputation. Armed militias rape and plunder. Ebola, a virus, has infected more than 2,000 people.

But the region has also saved millions of lives. North and South Kivu are home to the largest cinchona forests in the world. The bark of these trees, which were introduced by the Belgians, contains quinine, a drug that cures malaria. (It also tastes pleasantly bitter when dissolved in fizzy water and served with gin and a slice of lime.)

Near the edge of a plantation is one of just five quinine-extracting factories in the world. The operation, which has been running since 1961, produces about 100 tonnes of processed quinine a year, or about 30% of global demand. "First we address the country's needs, then we export the rest," says Etienne Erny, the managing director of Pharmakina, the firm that owns the factory.

Just under half the quinine is sent abroad. A third of this is turned into tonic water and the rest into medicine. It is a tragic twist of fate, therefore, that despite the abundance of quinine in Congo, it still has the second-highest rate of malaria deaths in the world. In 2017 some 435,000 people died from the disease. Many cannot afford to pay the $2 for a course of 21 pills or do not diagnose the malady in time.

While conditions in the Kivus (most notably altitude and humidity) are ideal for cultivating trees, the region's never-ending skirmishes are not. Some of Pharmakina's forests stretch into an area which is overrun with dozens of rebel groups that call themselves "Mai-Mai" and claim to have magical powers in battle. They regularly kidnap and kill. Now and then they send letters to Pharmakina demanding cash and threatening to abduct its workers. "You don't pay, but you have to talk to them," says Michael Gebbers, another director. Discussions take time and frightened employees do not dare turn up at the plantations. Moreover, during Congo's two bloody wars, which ran for a total of six years between 1996 and 2003, great swathes of the forest were unreachable and the company's output dwindled.

The problems of running a business in Congo extend beyond insecurity. Because there is no reliable supply of electricity, the factory is often powered by expensive generators. The chemicals used to process quinine are costly and come by lorry from Tanzania.

As if this weren't enough, the firm also has to deal with growing competition. Indian traders have begun buying cinchona bark and shipping it to Delhi, where the cost of processing is lower. Demand has also fallen since the discovery of synthetic quinine and artemisinin, another plant-based anti-malaria drug. Still, people hoping to give Congo's economy a tonic can do their bit to drive up demand each time they raise a glass.

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

John Magufuli's follies

Tanzania's president loves mega-projects. Careful planning, less so

Nothing can stop the man they call "the bulldozer"

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LIKE ISAIAH BERLIN'S hedgehogs, who knew one big thing, John Magufuli, Tanzania's president, sees economic growth through a single prism: the state, and the state alone, delivers prosperity. Cash has been poured into Air Tanzania, the loss-making state-owned airline, which has recently bought half-a-dozen new planes, including a Boeing 787 Dreamliner. Passengers arriving on it will be able to whizz across the country in high-speed trains, if things go to plan. Some 30 infrastructure projects are in the works. Dodoma, Tanzania's capital-in-name-only, is being overhauled. It will have Africa's largest stadium. A hydroelectric dam in the south is more modestly conceived: it will merely be the continent's joint second-biggest.

Such mega-projects go down well domestically. They foster pride and are taken as evidence that the president is serious about giving Tanzania a modern economy by 2025. For a president who won election in 2015 by the smallest margin in Tanzania's history, they are also potential vote-winners. Donors and investors are less enthusiastic. They have nothing against infrastructure-driven development, but it needs to be well planned, carefully implemented and make financial sense. They worry that Mr Magufuli's schemes often fail on all three counts. Already, several have made faltering starts.

Take Air Tanzania. Its reputation is dismal. In 2011 it stopped flying altogether after its last aircraft was grounded for repairs. Its new Dreamliner has yet to revive its fortunes. Flights to Mumbai and Guangzhou should have started last September but did not because the airline had been suspended by the International Air Transport Association over unpaid debt, and did not have experienced pilots. Flights will finally begin in July, the company says.

Mr Magufuli's vision sometimes trumps forethought. When he abolished state school fees, too few teachers had been trained to meet the surge in demand. "I have teachers teaching classes of 130 under a tree," complains one headmaster.

Similarly, government ministries have been told to move from Dar es Salaam, Tanzania's biggest city, to Dodoma. Yet the buildings meant to house them are under scaffolding and the city's expansion will not be complete for another decade. Mere details, scoffs the president (who has not moved): "Stay under a mango tree."

Grander projects are planned. A new railway is being built that will eventually connect Dar es Salaam to Kigali, Rwanda's capital, along 1,090 miles of track. The first, 186-mile phase, costing $1.9bn (about 4% of GDP) is due to be completed in December. Mr Magufuli insists on the trains being electric, which pleases environmentalists. However, Tanzania has an erratic electricity supply. Potential passengers worry that their trains may be stranded.

Mr Magufuli's answer to this is his most controversial project of all: the Rufiji Hydroelectric Project. The 2,115-MW dam is equalled in generating capacity in Africa only by Egypt's Aswan Dam (Ethiopia's troubled Grand Renaissance Dam will eventually eclipse both). If completed, it would more than double the amount of electricity Tanzania generates. But the dam is to be built in the Selous, Africa's biggest game reserve and a UNESCO World Heritage site. Conservationists are livid and think it may lead to more elephant poaching.

Others question the dam's viability. Mr Magufuli reckons it will be built within three years at a cost of $2.9bn. Both estimates need to be trebled, reckons Joerg Hartmann, an independent dam specialist. Donors also doubt the wisdom of making Tanzania's power supply dependent on a single source vulnerable to droughts.

The president, an engineer by training, is fond of the grandiose. Yet less ambitious projects could deliver more. Tanzania has plenty of water and natural gas. Smaller dams and power plants would be cheaper and quicker to build.

But the president is not for turning. Donors have little clout: it is hard to use aid as pressure when his government deliberately delays its disbursement and tries to tax it. Domestic critics have even less sway. Opposition MPs are frequently arrested. Those who criticise the dam have been told they will be jailed. Even the president's own officials are too scared to offer candid advice. Some Western diplomats say they are asked to break bad news to the president by aides too timid to do so.

Mr Magufuli faces few checks. "He is allowed to make all the decisions, from the smallest to the biggest," says Daniel El-Noshokaty, the resident director for the Konrad Adenauer Foundation, a think-tank associated with Germany's centre-right CDU party. If feasibility studies are carried out, they are rarely published. Donors suspect the president based his decision to build his huge dam on a viability study carried out by the Norwegian government in 1980. Yet not only did Norway abandon the project, because it did not make financial sense, but water levels have since fallen by 25% due to climate change and upstream irrigation, says Zitto Kabwe, an economist and opposition MP.

Only a booming economy would allow Mr Magufuli to pay for his projects without taking on unsustainable debt. The president points to official figures showing an expanding tax base and annual economic growth of 7%. Sceptics note that government data are unreliable and that questioning them could soon be a criminal offence. The International Monetary Fund (IMF) reckons the economy will grow by just 4% in 2019, one percentage point above population growth. Tax revenues ticked up by 3.1% last year, not nearly enough to fund the president's dreams. The IMF warned in a recent report (whose release was blocked by Tanzania) that a big increase in spending on mega-projects could leave the country struggling to repay its debts.

Far from boosting the economy, Mr Magufuli is shackling it. Private investment has been scared off by limits on foreign ownership, a ban on international arbitration to settle contract disputes and a delay in paying VAT refunds. Executives working for multinational firms have been arrested, and ludicrously high fines imposed on spurious grounds (Acacia Mining, a British firm, was told to pay $190bn—more than three years of Tanzania's GDP—for allegedly undervaluing gold exports). Tanzanian businessmen have been strong-armed into surrendering assets to the state. Tour operators and farmers complain of lower profits due to new taxes and rule changes. Unless Mr Magufuli changes course, one day the only elephant left in the Selous may be a white one.

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Yet more misery

Bashar al-Assad's ruinous campaign to retake Idlib from Syrian rebels

Will Russia and Turkey put an end to it?

Print edition | Middle East and Africa Jun 8th 2019

EVEN THE Eid al-Fitr holiday did not bring a respite for the almost 3m Syrians bottled up in Idlib. Warplanes buzzed overhead, as they have for more than a month, dropping ordnance on this scrubby province in north-western Syria, the last significant pocket of rebel-held territory. The offensive has already killed more than 300 people. Russian and Syrian jets have repeatedly bombed hospitals despite promises that they would be protected. Some 250,000 people have been displaced.

The ferocious bombing now under way in Idlib was not supposed to happen. Last September Bashar al-Assad, Syria's dictator, began massing troops for an offensive to retake the province. But a deal to prevent it was hashed out by Vladimir Putin and Recep Tayyip Erdogan, the presidents of Russia and Turkey, the strongest foreign powers in the neighbourhood. The Sochi agreement, as it is known, called for a buffer zone up to 25km deep between rebels and the regime. Soldiers from both countries would patrol it and apply pressure to their allies. Russia would restrain the Syrian army, while Turkey would force militants to retreat deeper into the province.

Signing the deal was easy. Implementing it was another matter. Turkey overestimated its influence over Hayat Tahrir al-Sham (HTS), al-Qaeda's former Syrian affiliate. In January HTS launched an offensive against other rebels in Idlib, including a Turkish-backed faction. It now controls most of the province. Both HTS and the Syrian army violated the truce by shelling each other. The buffer zone exists only on paper. The regime is now advancing into Idlib from the south-west. At each town along the way Syrian and Russian jets unleash air strikes to soften up the rebels. Ground troops attack soon after.

Most of the people in Idlib are internally displaced: they fled from one region to another as parts of Syria fell to the regime. The province has swelled to more than double its pre-war population. Mr Assad likes to portray it as a festering nest of jihadists. This is partly a problem of his own making. Rather than fight to retake every rebel-held pocket, he allowed some foes to surrender and granted them safe passage to Idlib. Some of the extremists now battling the regime were brought to Idlib on its buses.

Messrs Putin and Erdogan would both like to halt the fighting. If it worsens, trapped civilians will have nowhere to go except north. Mr Erdogan does not want another exodus across his border, especially not with the Turkish economy on the brink of what may be a painful double-dip recession. Russia, for its part, fears an offensive would strain relations with Turkey. The situation in Syria has brought them closer over the past three years, while Turkey's ties with America have deteriorated. Mr Erdogan has agreed to buy S-400 air-defence systems from Russia, despite American warnings that the purchase would make Turkey ineligible to buy F-35 jets.

Russia also doubts the capabilities of the Syrian army, which has demonstrated tactical incompetence time and again throughout the eight-year war. In late May, after the regime won a string of victories, rebels launched a surprise counter-attack on the village of Kafr Naboudeh. The Syrian troops garrisoned there were well-equipped and dug in. But they beat a disorganised retreat and left behind a cache of heavy weapons that were quickly turned on other regime troops.

None of this changes the strategic picture in Syria. Opposition supporters talk about a rebel counter-offensive emerging from Idlib. This is wishful thinking. Though they can harass the regime, their numbers are too small to retake much ground—and they are too radical to win much foreign support.

The question is simply how much suffering will be inflicted on Idlib. Mr Assad seems emboldened to retake the last bit of his country (never mind that what he controls is largely in ruins). Mr Putin is losing patience with rebels who have also shelled Russian bases in Syria. On June 3rd he blocked a statement in the UN Security Council that urged combatants to protect civilians in Idlib. But he may not want to damage his ties with Mr Erdogan over what will be a ruinous offensive. The two plan to meet later this month on the sidelines of the G-20 summit. As ever, the future of Syria will not be in the hands of Syrians.

This article appeared in the Middle East and Africa section of the print edition under the headline "Yet more misery"

The fault in our stars

When is Eid al-Fitr?

The answer may depend on pollution and politics

Print edition | Middle East and Africa Jun 6th 2019

AS THE SUN slipped into the Mediterranean on June 3rd, imams in Gaza took to their minarets to announce the end of Ramadan. Observers in Saudi Arabia had spotted the *hilal*, the waxing crescent moon that marks a new Islamic month. Muslims could celebrate the Eid al-Fitr holiday—at least for a few minutes. Word soon came from Jerusalem: Palestine's grand mufti could not find the moon. Eid was postponed.

"Do not fast until you see the crescent, and do not break your fast until you see it," said the Prophet Muhammad. Early Muslims were keen astronomers, in part because faith demanded it. Scholars like Ibn Yunus of Egypt corrected Ptolemy's mistakes. The first modern observatory was built in Baghdad. Their work shaped our understanding of the cosmos. The moon's phases are now a matter of predictable calculation.

But Islam still relies on human eyes to spot the *hilal*. This is hardly a science. Even if it hangs overhead, that sliver of luminous lunar rock can be obscured by clouds or smog. Eid is thus rarely observed at the same time across the Middle East. Arch-rivals Saudi Arabia and Iran often choose different dates, which are adopted by allies and co-religionists.

This year was unusually absurd. War-torn Syria and Yemen had two Eids, one for government-controlled lands, the other for rebel-held pockets. Watchers in Libya could not find the moon on June 3rd but adopted the Saudi date anyway. Wags wondered if some countries were making political statements. For the first time in recent memory, Jordan and Palestine broke with Saudi Arabia. Both are unhappy with the kingdom over its support for Donald Trump and his Middle East peace plan.

Along with Eid greetings, Arabs swapped Eid jokes. One widely shared video from a Kuwaiti YouTube channel showed Sunni and Shia clerics playing tug-of-war with the lunar crescent. But the confusion is a real annoyance. Muslims in the West groan about having to ask their bosses for a day off—without knowing in advance which day it will be.

Other calendars that fix their months by the moon use mathematical formulas: Rosh Hashanah or the Chinese new year are predicted scientifically. Some Muslim jurists say their faith permits the same. Enthusiasts have designed websites and apps that show when and where the crescent will be visible. Their work suggests that the *hilal* should not have appeared in the eastern hemisphere until June 4th. No one tell the Saudis—or Mali, which somehow spotted it on the 2nd.

This article appeared in the Middle East and Africa section of the print edition under the headline "The fault in our stars"

Fewer friends, more problems

King Abdullah of Jordan fears that old allies are ditching him

And it is not just America

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"WE ARE ALL King Abdullah." So said the official campaign to celebrate the 20th anniversary of the king's accession to the throne in Jordan. But the turnout on February 7th suggested that few agreed with the sentiment. Even trays heaped with *mansaf*, lamb stewed in yogurt, could not rouse large crowds. Two months later the World Economic Forum on the Middle East and North Africa, held on the Dead Sea in Jordan, also failed to attract the desired audience of global bigwigs. At home and abroad, says a former official, "the king is losing his prestige."

Other Middle Eastern countries have oil. Jordan has location. It sits at a strategic crossroads, so the West and regional powers have long valued its stability. During the cold war Jordan served as a reliable and moderate Western ally when other Arab states turned to the Soviet Union. It acted as a conduit to next-door Israel, with which it has a peace treaty, when others shunned the Jewish state. America used Jordanian territory to launch special forces into Iraq and as a base from which to co-ordinate rebels in Syria's civil war.

The dispensable kingdom

Today, though, Jordan doesn't seem so essential. Many Arab states now deal directly with Israel. Some of them are upset with King Adbullah (pictured) for not toeing the line on regional matters. He has maintained relations with Qatar, which has been ostracised by other Gulf states, and backed away from the war in Yemen led by Saudi Arabia and the United Arab Emirates (UAE). He is seen as soft on the Muslim Brotherhood, an Islamist group that operates in Jordan but is banned elsewhere. The king has even shaken hands with Hassan Rouhani, the president of Iran, which is hated by big Arab powers.

As it pulls troops out of the region, America is also losing interest in Jordan. King Abdullah moans that the administration of Donald Trump is ignoring him as it draws up a peace plan for Israel and the Palestinians. The king fears that he will be pushed to provide a permanent home for millions of Palestinians, who are the majority in Jordan, making it the de facto Palestinian state. The king also worries that the plan will ignore his historical claim to custodianship of Jerusalem's holy places or give countries that support Mr Trump, such as Saudi Arabia, a role in the city.

America, Saudi Arabia and the UAE can put pressure on Jordan by withholding aid. America gives it over $1bn each year, around 2.5% of GDP. The Gulf states injected billions more into Jordan during and after the Arab spring. But Saudi Arabia did not renew its aid package in 2017, a move that Jordanian officials viewed as punishment for their nonconformist policies. Months later King Abdullah said he faced economic pressure to tone down his opposition to Mr Trump's recognition of Jerusalem as Israel's capital. As Jordan faced an economic crisis last year, the Gulf states (including Saudi Arabia) promised $2.5bn, mainly in the form of loans. Only a fraction of the cash has been transferred so far.

King Abdullah needs the help. Millions of Palestinian, Iraqi and Syrian refugees have sought shelter in Jordan, a burden it cannot afford, says the king. Public debt equals 95% of annual GDP. The government has cut subsidies and raised taxes, pushing prices higher. Over a million of Jordan's 10m people are poor. Youth unemployment stands at 41%. Such is the demand for jobs that when the American embassy in Jordan advertised for a secretary, radio stations ran the news on their bulletins. "The malls, markets and restaurants are empty," says Samer Tawil, a former economy minister.

The people used to blame greedy ministers and corrupt officials for their misery—and looked to the king for remedies. Now when they protest, as they often do, they call out King Abdullah by name. "Prices are rocketing and Abdullah is playing poker," runs one of their chants. "Jordan can't handle the cost of its royal family," says a sheikh from the Beni Hassan, the kingdom's largest tribe. A widely-shared letter from a former minister, Amjad al-Majali, demanded the king "hunt the corrupt circle that is close to you".

Anger is fiercest among the indigenous Bedouin, who dominate the security and intelligence services. Retired officers sign open letters stating that they no longer consider Abdullah and his Palestinian wife, Rania, their monarchs. Some threaten to take up arms. Amid reports of coup plots, the king removed his interior minister and intelligence chief. Their replacements immediately arrested tribal leaders—further inflaming tempers.

Some Bedouin sheikhs look to Prince Hamzah, the king's half-brother, who was removed as heir apparent in 2004 to make way for the king's son. Prince Hamzah's rich Arabic lilt (acquired during a youth living with tribesmen) appeals to the Bedouin and contrasts with the king, who grew up speaking English. After years out of public view the prince is back in the media. "Only the intelligence services would authorise that," says a politician. Calls for choosing a government by elections, not by royal decree, are growing too. Better to share power, perhaps, than risk losing it all.

This article appeared in the Middle East and Africa section of the print edition under the headline "Fewer friends, more problems"

Crimea
Subsidies, stagnation and repression

After the annexation

Crimea is still in limbo five years after Russia seized it

Moscow's rule brings mega-projects, stagnation and arrests

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THE METALLIC likeness of Catherine the Great towers over a park in Simferopol, the capital of Crimea. First erected in 1890 to commemorate the centenary of Catherine's capture of the peninsula, it was torn down after the Russian revolution. After the Soviet Union collapsed, leaving Crimea part of newly-independent Ukraine, attempts to rebuild the statue stalled. Only after Russia annexed Crimea in 2014 did the empress's countenance rise again. "She's the Putin of the 18th century," says Andrei Malgin, the director of a local history museum. A defiant message adorns the pedestal: "This monument has been rebuilt in honour of the reunification of Crimea with Russia in 2014 and FOR ALL TIME."

Russia's seizure of Crimea ruptured its relations with Ukraine and the West. Other crises followed: wars in eastern Ukraine and Syria, election interference in America. Ukraine still wants its territory back. Volodymyr Zelensky, the country's new president, called it "Ukrainian land" in his inauguration speech. But Russia has the peninsula firmly under its control. Western officials pay lip service to territorial integrity, while resigning themselves to the new status quo.

Russian officials crow that they have spruced up the peninsula after Kiev let it deteriorate. Indeed, the federal government has been generous: two-thirds of the regional budgets for Crimea and Sevastopol come from federal transfers. Sergey Aleksashenko, a former deputy head of the Russian central bank, reckons Moscow has spent 1.5trn rubles ($23bn) on Crimea over the past five years—equal to three years of national health-care spending. Mega-projects have transformed the landscape. A 19km bridge stretches across the Kerch strait, linking Crimea to the Russian mainland (see map). A smooth highway runs from the bridge to Sevastopol, and the city has a sleek new airport. North of the bridge, Moscow now claims the Sea of Azov as its own. Last autumn, Russia seized three Ukrainian ships trying to enter it; their 24 sailors are still in Russian custody.

Yet the patriotic fervour of the annexation has faded. "The euphoria has completely gone," says Oleg Nikolaev, a prominent businessman. The region suffers the same problems as the rest of Russia: corruption and mismanagement, inflation and falling salaries, repression and restrictions. "We build a road, then tear it up to lay pipes. Then we build the road again but forget the streetlights, so we tear it all down and start again," Mr Nikolaev gripes. In Sevastopol an outsider governor appointed by Mr Putin has riled locals.

Support for the annexation remains high. Yet a recent study by Vladimir Mukomel of the Russian Academy of Sciences turned up dissatisfaction with "the Russian bureaucratic machine, staff turmoil [and] corruption". Demands for stability have given way to a desire for change.

Crimea's disputed legal status compounds the challenges. Western sanctions crimp business. Significant private investments are few, and tend to the quixotic. A group of investors from St Petersburg hopes to turn a dusty Soviet-era design bureau on the outskirts of Sevastopol into a Russian Silicon Valley. "What does a techie need? Himself, a laptop and inspiration," says Oleg Korolev, the park's managing director. "Why not on the shores of the sea!" This glosses over the things a budding entrepreneur might not find in post-annexation Crimea: connections to the outside world, access to capital and the rule of law.

The new airport offers flights only to Russian destinations. Crimean residents have trouble getting visas to other countries, few of which recognise the annexation. Crossing the land border to Ukraine, as an estimated 200,000 do each month, means braving long lines and inquisitive border guards. Most banks, even Russia's state-run giants, see the region as toxic; only a few small ones service it directly. To order from online merchants, Crimeans use VPNs that conceal their location. Companies partner with firms on the mainland to avoid problems with suppliers. A cottage industry has cropped up offering deliveries from IKEA and other superstores in Krasnodar, just across the strait.

According to Mr Mukomel, the only material beneficiaries have been civil servants and pensioners. "There are new rules of the game, and perhaps not everyone has adjusted to these new realities," says Mr Malgin. As director of a public museum, he is among the winners.

The new rules

"We got up early for prayers, and then we heard the knocks," says Zera Suleimanova. On March 27th Russian security services detained her son and nearly two dozen other Crimean Tatars. It was the largest mass arrest yet in a growing campaign of repression. The Tatars, a Turkic Muslim group who controlled the peninsula before the Russian empire arrived (and who were deported for decades by Stalin), mainly opposed Russia's annexation. Their ruling council, the Mejlis, and its leaders have been banned from Crimea.

Arrests, harassment and disappearances have become common. A Tatar activist says police threaten them: “If you misbehave, you’ll become a *poteryashkoi*”—a “lost one”. Activists have formed a group called “Crimean Solidarity” to support political prisoners.

Ethnic Ukrainians, a shrinking minority, face similar pressure. “Everything left from Ukraine has been erased,” laments Archbishop Kliment, head of the Ukrainian Orthodox church in Crimea. Before the annexation, the church had 49 locations, including 25 active parishes, and nearly 20 priests across the peninsula. Today it is down to just nine locations and four priests. “The language is dying,” one Ukrainian activist whispers. “There are five- and six-year-old kids for whom Ukrainian is as alien as English.”

The new authorities’ official histories efface the peninsula’s non-Russian past. Asked what came before Catherine, a tour guide at one Sevastopol history museum responds with a wave of the hand: “Just some Turks.” As Mr Kliment points out, this is nothing new: the Russification of Crimea began long before Mr Putin gobbled it up. “But whether they can make it last,” he muses, “only God knows.”

This article appeared in the Europe section of the print edition under the headline ”Subsidies, stagnation and repression”

Picking up the rubble

Andrea Nahles's resignation leaves Germany's government teetering

The Social Democrats are searching for a leader, and for a message

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THE DOUGHTY heroines who cleared the debris from Germany's ravaged streets after the war were known as *Trümmerfrauen*, or "rubble women". At some point the nickname attached to Andrea Nahles, who resigned as leader of the Social Democrats (SPD) on June 2nd. In January 2018 she showed why she deserved it. The SPD's morale was in ruins after an election loss a few months earlier. Angela Merkel's conservative Christian Democratic Union (CDU) wanted it to rejoin the "grand coalition" that had run the country since 2013, but many SPD members thought the party needed to lick its wounds in opposition. Ms Nahles took them on. In a barnstorming speech at a party meeting in Bonn, she said voters would find shunning government "crazy", and vowed to make the CDU "squeal" in coalition talks. The party voted to stay in government, and in April it elected Ms Nahles its first woman leader.

Little over a year later it is Ms Nahles's strategy that lies in tatters. True to her word, she negotiated an SPD-friendly coalition treaty. The party secured the finance and foreign ministries. In government it has chalked up wins on migration, energy and defence. And yet voters have turned away in droves. The last straw came on May 26th, when the SPD slumped to 16% of the vote at the European elections, 11 percentage points below its previous score, and failed to win an election in the city-state of Bremen for the first time in seven decades. One recent poll put the party at a once-unthinkable 12%, less than half the surging Greens. Ms Nahles, a veteran of party intrigue, tried to soldier on in the face of internecine plots. But in the end, the support was not there.

Her decision reignites questions over the future of the coalition with the CDU (and its sister party, the Bavarian Christian Social Union). Mrs Merkel, the chancellor, and Annegret Kramp-Karrenbauer, the CDU leader, want the "GroKo" to serve out its term until 2021. But that looks difficult. Some 57% of voters say the parties should call time on their alliance.

Whether the SPD heeds their call will depend on how the contest to replace Ms Nahles plays out. A triumvirate of state politicians has been appointed to run the party temporarily and organise the race for the leadership. Novel ideas such as open primaries or a dual leadership (which has worked well for the Greens) are doing the rounds. A second task is to decide how to carry out a vague mid-term "review" called for in the coalition agreement. The party meeting to discuss it, originally planned for December, could be brought forward to autumn. Some insiders think party members will have to vote again on whether to stay in government. The SPD'S board will meet on June 24th to lay out the road map; a new leader is not expected for months.

Whoever takes over will face huge challenges: boosting morale in a party riven by distrust; responding to the rise of the Greens, who are gobbling up SPD votes in Germany's cities and in its south and west; and handling the fallout from state elections in the east this autumn, where the party expects to do badly. But the biggest question will inevitably be over the fate of the coalition. Any candidate for the leadership will have to answer the many GroKo doubters who consider their scepticism vindicated. Some may call for the party to quit the government immediately.

There are strong arguments against doing so. A walkout would probably trigger an election, and polls suggest the SPD could lose a third of its seats. "Giving up because we are weak would be to admit publicly that we are not capable of governing, and who should vote for a party like that?" says Ralf Stegner, a deputy SPD leader. Many would prefer to demand policy changes from the CDU/CSU on pensions, taxes on the rich and climate protection—issues on which the SPD believes voters share its views—and to leave only if the party is unable to obtain concessions.

Yet the CDU is in no good position for early elections either, notes Gero Neugebauer, a political scientist in Berlin. Ms Kramp-Karrenbauer is also struggling. If an election looms, party rivals might challenge her to become the CDU's chancellor-candidate (Mrs Merkel has promised to step down). The CDU too stands to lose seats. Optimists in the SPD hope such worries would force the CDU to back down on policy. That could strengthen the new SPD leader and let the coalition stagger on.

Perhaps. But optimism has rarely proven a winning bet for the SPD. "They have a leadership problem, a policy problem and a coalition problem—they have to solve all of them, and they don't know how," says Lothar Probst, a political scientist in Bremen. No wonder senior SPD figures have hurried to rule themselves out as candidates to replace Ms Nahles. Having dumped its *Trümmerfrau*, the SPD is desperately scrambling for someone else to clean up the mess she leaves behind.

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A hard AK to follow

Turkey's President Erdogan may face a mutiny in his own party

Former bigwigs in the ruling party are said to be planning a new one

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ONE OF THE more tedious pastimes in Turkish politics is debating whether murmurs of discontent in the ruling Justice and Development (AK) party will transform into open rebellion against President Recep Tayyip Erdogan. Speculation inevitably begins whenever a former AK luminary says something even mildly critical of Turkey's strongman, and dies down when nothing else follows.

This year seems different. The economy is in a funk, and AK has been weakened by losses in local elections. Now evidence is mounting that some of Mr Erdogan's former allies, including his predecessor as president and an ex-prime minister, are on the verge of creating a rival political party.

Last month, after the opposition narrowly won Istanbul's mayoral election, Turkey's election board ordered a re-run. The move was widely believed to have been orchestrated by Mr Erdogan and his inner circle. There was a chorus of protest at home and abroad.

Exceptionally, some members of AK's old guard joined in. Abdullah Gul, a former president, called the decision an injustice. A former prime minister, Ahmet Davutoglu, said it contradicted the rule of law. Weeks earlier, Mr Davutoglu had published a manifesto that criticised the new constitution (which gives Mr Erdogan nearly unchecked powers), AK's alliance with ultra-nationalists, widespread censorship and the influence of a "parallel structure" of cronies and palace officials.

Mr Gul and Ali Babacan, a former economy tsar, along with a handful of other ex-ministers, are preparing to break with AK and launch a new party, people close to them say. The group were ready to make their move at the start of the year but decided to wait until after the local elections, says Etyen Mahcupyan, a former government adviser. "They will act in the autumn," he says. Whether Mr Davutoglu will join is not certain. He and Mr Babacan do not get along, AK insiders say.

Much depends on the outcome of the mayoral rerun in Istanbul, set for June 23rd. For Mr Erdogan, losing in the country's biggest city was painful the first time around. Losing twice in three months could be embarrassing enough to cause a legitimacy crisis. Critics within AK may feel emboldened to speak out.

In an interview in 2001, on the eve of AK's formal launch, Mr Erdogan promised there would be no room in his new party for autocrats: "The leader will not overshadow the party." At first he seemed to live up to his word, and AK accommodated some degree of debate. But over the past decade, Mr Erdogan has transformed it into a personal vehicle. Members of the old guard have been pushed out. Haunted by an abortive coup in 2016 (after which the government arrested some 60,000 people), the president has surrounded himself with yes-men and family members. Loyalty trumps everything else. The old AK is no more, says Ibrahim Turhan, a former parliamentarian: "This is now Erdogan's party."

How much backing the schismatics might have among AK voters is unclear. Dissatisfaction with the country's direction is growing, but few analysts expect a new conservative party to shave off more than a fraction of AK's support. Secular critics scoff that Mr Erdogan's former enablers will need quite a makeover before marketing themselves as his opponents.

Mr Erdogan has fended off many threats to his rule, often ruthlessly enough to dissuade anyone from trying again. He may nip this one in the bud. But if it materialises, it would be the most serious challenge he has faced from within.

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Debt and discipline

The EU edges towards punishing Italy for letting its debt rise

But a fine is a long way off; the European Commission prefers compromise

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As one country comes out of the naughty corner, another risks being sent there. On June 5th the European Commission opined that Spain was no longer breaking European fiscal rules, and recommended bringing its decade-long "excessive-deficit" procedure to a close. But it began the process of opening a similar procedure against Italy. Eventually, if no compromise is reached, the Italians could face a multibillion-euro spanking.

The ultimate source of the problem is Italy's extravagant burden of public debt. In 2018 it came to 132% of GDP, second in Europe only to Greece. The European Union's rules require that this ratio fall at a prescribed pace. Instead, for the first time in four years, Italy's debt ratio rose last year.

That alone would not have warranted action if Italy had convinced the commission there was a good reason for the infraction, or that it would prove temporary. Giovanni Tria, the finance minister, argues that a recession in the second half of 2018 explains some of the overshoot. He also thinks the budget deficit this year will come in at 2.2% of GDP, below the 2.4% initially projected. The government has introduced new basic income and early-retirement schemes, but fewer citizens than expected are taking advantage of them. That should limit the rise in the debt ratio.

Such arguments would usually sway the commission. But it fears a much worse fiscal picture in 2020. It expects the deficit to break the 3% ceiling enshrined in the EU's Stability and Growth Pact, meaning Italy will violate both the debt and deficit rules. Mr Tria says this will be avoided either by raising the value-added tax or through "alternative measures" that bring in equivalent revenue. Brussels is sceptical. VAT rises have been deferred in the past and are ruled out by both of the parties in Italy's populist coalition, the Northern League and the Five Star Movement (M5S).

Politicians show little inclination to tighten their belts. Flushed with his success in the European elections, Matteo Salvini, the leader of the League, wants to rewrite the EU's rules rather than follow them. He has pledged to implement a flat income tax, which could cost the government large amounts of revenue. Meanwhile Luigi di Maio, who leads M5S, wants to protect welfare spending. On June 3rd Giuseppe Conte, the technocratic prime minister, threatened to quit if the parties could not compromise on spending. Mr Salvini has since set a two-week deadline for the coalition to strike a deal.

For now the government has time on its side. The commission's patience may be wearing thin, but it is not exhausted. A formal disciplinary procedure is launched only once the finance ministries and heads of member states give their blessing. That will not happen before EU leaders meet at a European Council summit on June 20th. The leaders may be satisfied with minor concessions, similar to those Italy's government made in 2018 when a row erupted over this year's budget.

Even if no concessions are made, a fine is a long way off. Once a procedure has been formally opened, the commission will ask Italy to take remedial steps. Only if Italy is deemed to have failed to do its homework will it be fined. In principle, the penalty could be as high as 0.2% of GDP, or about €3.5bn ($4bn). But Brussels has never actually fined a rule-breaker.

Financial markets, typically a more effective source of discipline, were largely unfazed by the commission's report on June 5th. But the coalition's first year in power has hurt investors' confidence. At the start of 2018, Italian economists note, the government could borrow at roughly the same interest rate as Spain. Now, the interest rate on a ten-year bond is nearly two percentage points higher.

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Slime of the times

Estonians are protesting populism by wearing “pink slime”

An insult aimed at liberals has become a badge of pride

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ALL OVER Tallinn, people are sporting the same strange accessory: a pink blob the consistency of used chewing gum. It dangles from lapels in libraries, at foreign-policy conferences and in bars in Telliskivi, Bohemian quarter of the Estonian capital.

Estonians call it “pink slime”. This is not to be confused with the meat slurry used in cheap sausages. In Estonia, “pink slime” started as an insult aimed at liberalism. The Estonian Conservative People’s Party (EKRE), a nationalist outfit, opposes multiculturalism, immigration and gay marriage. Its leader, Mart Helme, says he does not believe in liberal democracy and thinks globalists in Brussels want to erase the identities of Estonia and other countries, turning them all into a uniform post-national mush. The party’s epithet for the ideology it detests is *roosa ila*, or “pink slime”—a reference to feminism and gay rights, and by extension the rest of the liberal worldview.

EKRE cannot be ignored. It has been a junior partner in government since April, following an election in which it won 18% of the vote. “Rahva Oma Kaitse”, a satirical radio show, joked that *roosa ila* would soon be outlawed. On hearing this, Liina Lelov, a jewellery designer, decided to create something for those who identify with it. The pins, which she makes by hand and sells for €5 ($5.50) each, have sold out multiple times.

In April Kersti Kaljulaid, the president, made a sartorial statement of her own, attending the government’s swearing-in ceremony in a top bearing the words “speech is free”. Days earlier Martin Helme, the incoming finance minister (and son of Mart), had called for “biased” presenters to be removed from the state broadcaster. In the same week Vilja Kiisler, a journalist, quit the country’s largest newspaper, saying she had been asked to tone down her criticism of EKRE by the editor-in-chief—the nephew of the elder Mr Helme.

Before the swearing-in ceremony was over, there was a new reason to take offence. Mart and Martin Helme posed for photographers making an “OK” hand gesture, which has become associated with white supremacism. (The younger Mr Helme has stated that he wants to “keep Estonia white”.) EKRE seems to be furnishing liberals with fodder for outrage faster than their fashion designers can keep up.

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Labour's foreign policy
The Corbyn doctrine

From demonstrations to Downing Street

The Corbyn doctrine on foreign policy

Labour promises a new world order. More likely it would turn Britain into an NGO with nukes

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BENEATH A GAZEBO on Whitehall, Jeremy Corbyn gazed towards his past. Banners from different stages of the Labour leader's life floated above the crowd that had gathered on June 4th to protest against a state visit by Donald Trump. A flag for Stop the War, an organisation once chaired by Mr Corbyn, loomed large. So did a placard for the Palestine Solidarity Campaign, another group he has supported. A few logos of the Campaign for Nuclear Disarmament, which Mr Corbyn helped run, were visible. Behind his left shoulder, meanwhile, lay Mr Corbyn's possible future: the entrance to Downing Street. He has spent his life protesting against British foreign policy. Soon he may run it.

Just as Labour has plans to overhaul Britain's economy, so too does it promise to upend the country's relationship with the world. It says that under Mr Corbyn Britain would lead the fight on climate change, force big companies to behave themselves in developing countries and, through some diplomatic ju-jitsu, bring about an end to unilateral military action.

Yet beneath the lofty aims, Labour would preserve many of the fundamentals of Britain's foreign policy. It would stay in NATO and continue to spend 2% of GDP on defence. The party has committed to renewing Trident, Britain's nuclear deterrent, even though Mr Corbyn has in the past said he would not use it. When it comes to Israel and Palestine, Britain would continue to back a two-state solution. Aid spending would stay at 0.7% of national income. And Labour still wants to leave the EU, even though most of its supporters do not. A shift in rhetoric would not always be matched by a shift in reality.

Start with what would be different. Labour's foreign policy is enthusiastically provocative. During Mr Trump's visit Emily Thornberry, the shadow foreign secretary, said of the president: "He is a sexual predator, he is a racist, and it's right to say that." There is little desire to join the cross-party consensus that has historically dominated British foreign policy, which the Labour leadership sees as out-of-kilter with public opinion. Long, expensive wars in Iraq and Afghanistan, and more recent strikes in Libya and Syria, have made Britain less safe, Labour believes. Many Britons agree. In 2017 about half told pollsters that foreign wars were in part responsible for terrorist attacks. Less than a quarter disagreed. Labour would recognise Palestine and give Chagos islanders the right to return to the disputed British territory.

The biggest change would be a reluctance to use the forces Labour has pledged to fund so lavishly. Britain's "bomb first, talk later" approach, as Mr Corbyn has described it, would be replaced by a policy of using military action only as "a genuine last resort". Outside UN-sanctioned peacekeeping missions, it is difficult to see circumstances in which British troops would be deployed. And Britain's attitude towards NATO would change. Although Ms Thornberry supported the decision to send soldiers to Estonia as a "tripwire" force to deter its neighbour Russia, she has pointedly refused to say whether the Baltic states should have joined the transatlantic alliance. Mr Corbyn and his advisers have repeatedly labelled NATO a tool of Western imperialism and a threat to peace, arguing that its expansion into eastern Europe was a provocation of Russia.

The effects of such radical views will be tempered by two factors: the party's mandate and the country's means. Internal party politics will be a check on Mr Corbyn's hard-left advisers. Labour is not a one-man band, and its position on Britain's nuclear arsenal reflects this. Unite, a trade union which is also the Labour Party's biggest funder, is opposed "in principle" to nuclear weapons but says its priority is to preserve members' jobs, including those of defence workers. For the same reason it is cool on the idea of suspending the sale of arms to dodgy regimes in the Middle East.

More broadly, Mr Corbyn represents only one strand of foreign-policy thinking within the party, which is not filled exclusively by peaceniks. Labour has always had a militaristic streak. It was Clement Attlee, feted by the left on all other matters, who took Britain into NATO and demanded that it develop the nuclear bomb. While residual supporters of the Iraq war are few, previous interventions in, for example, Kosovo—opposed by Mr Corbyn—are regarded with pride within the party. The bulk of its MPs are attached to Britain's nuclear capability and its role in the Western alliance.

External factors could still alter this. If Labour ended up in coalition with the Scottish National Party, this might temper some of the government's domestic policies—but it could radicalise its foreign policy. The SNP opposes renewing Trident. And Labour's policy is set at its annual conference. Thus Britain's future as a nuclear power or NATO member would be settled by a closed-door meeting of union delegates and party members.

What will not change, whether Labour or the Conservatives are in Downing Street, is the government's overestimation of Britain's clout in the world. Both parties are fond of the tagline "Global Britain". Yet whoever enters Downing Street will find that life as a medium-sized country in a world of continent-sized rivals is hard. Britain cannot act like a Scandinavian country, using its large aid budget to play an outsized role in the world, points out one former foreign secretary. “Nordics are trusted by people in the international community in a way Brits are not,” he says.

Playing an active role in the Middle East requires winning over not just the Palestinians but Israel and America too, a task for which Mr Corbyn, who has spent his life railing against American imperialism and who failed to root out anti-Semitism within Labour, is uniquely ill-suited. The close intelligence relationship between Britain and America may be jeopardised, given Mr Corbyn’s views and allies. Even British agencies may feel uncomfortable sharing reports with a Downing Street that includes a senior adviser who was a member of the British Communist Party until 2016.

It may be that, rather than charting a radical new course, Britain finds itself bleating from the sidelines, the Foreign Office reduced to little more than an NGO, says Thomas Raines of Chatham House, a think-tank. Back on Whitehall, Mr Corbyn told the crowd: “Never forget: protest and activism eventually leads to change.” He may find that is not always the case, even in Downing Street.

This article appeared in the Britain section of the print edition under the headline ”The Corbyn doctrine”

The president in the palace

Donald Trump's visit to Britain goes well—at least for him

The president may not have registered the subtle digs from the queen

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DONALD TRUMP saw only people cheering, not protests, reports of which the president branded "fake news". They did not seem so fake on Whitehall. Placards said "Dump Trump", "Trump: Climate Disaster" and "Keep Trump away from our NHS". One optimistic poster proposed "Stop Brexit, stop Trump". Most bizarre was a banner saying "Man Utd fans against apartheid". The mood was cheerful, even carnival-like—at least until it rained.

As ever, Labour's Jeremy Corbyn came out to back the protests. But his disdain was diluted after Mr Trump revealed that he had rejected a meeting request from Mr Corbyn, whom he dubbed a "negative force". He said the same of Sadiq Khan, London's mayor, calling him a "stone-cold loser". This contrasted with his enthusiasm for Brexiteers, singling out Boris Johnson as a great potential successor to Theresa May as prime minister. He also met Nigel Farage, whose new Brexit Party is eating into Tory support, and suggested that he should be one of the Brexit negotiators.

The president clearly valued hobnobbing with royalty and feasting in Buckingham Palace with the queen (whom he called a "fantastic woman") more than bilateral discussions with Mrs May. But although he said he would have negotiated Brexit differently, by suing the European Union, he also praised Mrs May's deal. And he glossed over differences on Huawei, a Chinese telecoms giant mistrusted by America but cautiously accepted in Britain, by saying that the two countries would soon reach an agreement.

Trade was trickier. Mr Trump promised a "phenomenal" post-Brexit deal that would double or even triple bilateral trade. But he also echoed his ambassador by saying that everything should be on the table. That includes not just farm products but access to the NHS. When most Tory leadership candidates instantly said the health service was not for sale, Mr Trump backtracked. But his own trade negotiating documents make clear that America will look for more NHS contracts and higher drug prices. What's more, Congress has said it will not ratify any trade deal if Brexit is seen to threaten peace in Northern Ireland. A bilateral deal looks both hard and far off.

The British managed to get in a few subtle digs of their own, with the queen and Mrs May going out of their way to praise the role of international institutions, which Mr Trump has criticised or in some cases abandoned. The prime minister openly admitted to differences on climate change and Iran, and she used this week's D-Day commemoration to remind the president of the value of NATO in upholding the global order. Mr Trump's response was to repeat his demand that NATO allies spend more on defence.

Besides praising Mr Johnson, with whom he spoke by phone, Mr Trump sought meetings with Jeremy Hunt, the foreign secretary, who he said would make a good prime minister, and with Michael Gove, the environment secretary, whom he claimed not to know. The White House has clearly decided these are the three strongest candidates to succeed Mrs May. It is not obvious that Mr Trump's support will prove helpful, any more than did Barack Obama's backing for the Remain campaign in 2016. Yet it could weigh with some Tory party members. Certainly Mr Hunt and Mr Gove seemed pleased.

This article appeared in the Britain section of the print edition under the headline "When the Donald calls"

Woodford, felled

Neil Woodford, star fund-manager, comes a cropper

The troubles of one of Britain's best-known funds will force investors to think harder about how liquid their portfolios really are

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MAIDSTONE, KENT'S county town, was a bastion of resistance during the Peasants' Revolt of 1381. Six centuries later it is at the centre of another rebellion, which threatens to engulf one of Britain's best-known investment groups. The Kent County Council pension fund, which holds the savings of government employees, had for months been frustrated by the poor performance of the £3.7bn ($4.7bn) Woodford Equity Income Fund (WEIF). On June 3rd it tried to withdraw its £263m investment in the vehicle, prompting WEIF's custodians to suspend redemptions. Insiders expect a stampede once trading resumes.

Neil Woodford, WEIF's star manager (pictured), built his fame over 26 years at Invesco. In 2014 he left to start his own business. His approach, based on bespoke research, gut feeling and a taste for going against the grain, divided opinion. Among his first picks were four tobacco firms, a provocative bet amid a backlash against cigarette makers. But investors followed him: WEIF oversaw £10bn at its peak.

Like the vehicles Mr Woodford ran at Invesco, WEIF at its launch mostly held shares in large, listed companies. It was "open-ended": investors could come in and out whenever they wanted. And it vowed to distribute stable, recurrent income, in addition to growth in value. For the first two years returns were strong, reassuring shareholders. In 2016 Kent topped up its initial £200m stake with another £60m.

But the fund morphed into something barely recognisable. Convinced that his peers were too pessimistic about Brexit, Mr Woodford swapped blue-chips for smaller, younger companies focused on the domestic market. From 40% in 2016, these accounted for 95% of WEIF's listed stocks in March 2019. But some of his riskier investments, such as stakes in firms developing new drugs, soured. And protracted political uncertainty has thwarted his hoped-for recovery in the price of unloved stocks, such as retailers and housebuilders.

Even before the latest woes, losses since 2017 had wiped out nearly all of WEIF's early gains (see chart). Investors started running for the exit, causing the fund's value to shrink by £560m in May alone. But finding a buyer for large stakes in small businesses is hard, so WEIF struggled to raise the cash needed to meet redemptions. And the selldown kept pushing the fund against a regulatory limit of 10% in unlisted stocks, forcing it to take "extreme" steps like listing some on the Guernsey exchange, says Peter Brunt of Morningstar, a research firm. On June 5th the Financial Conduct Authority hinted that it might open an investigation.

Mr Woodford's firm says closing the gate will give it the breathing space it needs to "reposition" the fund towards more liquid stocks, so as to meet redemption requests once it reopens. Observers are not optimistic. "Investors who have stayed are now trapped and we don't know for how long," notes Patrick Connolly of Chase de Vere, a financial adviser.

Investors may fume at Mr Woodford for his racy choice of stocks. But they cannot blame him for hiding the truth: WEIF's holdings were disclosed on its website all along. Instead they might ask why firms like Hargreaves Lansdown, Britain's largest financial adviser, continued to recommend WEIF until very late. Pension trustees will also force investment committees to keep closer tabs on how liquid their portfolio is, expects Ryan Hughes of AJ Bell, an investment platform. The legacy of Maidstone's revolt of 2019 may be reform.

This article appeared in the Britain section of the print edition under the headline "Woodford, felled"

Pro-creation

New proposals to regulate Britain's surrogacy boom

Surrogacy is legal, but the rules are a mess. A new plan aims to straighten them out

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KATIE TAYLOR loathes being pregnant. "Morning sickness is horrible," groans the 34-year-old. "Heartburn is horrible. Sleeping is an absolute nightmare." Funny, then, that she keeps on having babies. After giving birth to three of her own, she became a surrogate to four more. She is now carrying a fifth. "We've only got 11 weeks to go," she says, "then my part will be over."

The baby will be one of a tiny but growing number born by surrogacy in Britain, where the practice is legal so long as nobody profits. Until the late 2000s only a few dozen such children were registered in England and Wales each year. By 2016, a recent peak, the number had risen to 400, following a rise in demand driven partly by gay men. Yet the law has failed to keep pace. On June 6th the Law Commission, which helps Parliament tidy up its legislation, published proposals to change it.

Its most radical suggestion is the introduction of pre-conception agreements. At the moment, a birth certificate lists the surrogate as the baby's mother. Legal parenthood cannot be transferred for at least six weeks, and then only by court order. In the meantime, there is a risk that the surrogate might try to keep the child, or that the proposed parents might drop out. Nurses are sometimes unsure who should take the baby home. In one case, says Ms Taylor, an infant had to be handed over in a hospital car park. Under the new agreements, the child's future parents would take over at birth, though the surrogate would retain the right to object for a few weeks.

Such agreements might stem the flow of British couples choosing surrogates from countries where the prospective parents' rights are clearer. Ukraine is popular, as are some American states. In a survey by Cambridge University, two-thirds of those who considered surrogacy at home before going abroad rejected Britain because of its lack of legal framework. "They go somewhere like California because they know where they stand," says Andrew Powell, a barrister who specialises in surrogacy.

But the report dodges the question of whether the law should allow commercial surrogacy. Many existing surrogates favour keeping it altruistic. Ms Taylor is motivated by a desire to help those who might otherwise struggle to conceive. She had her own children after four rounds of *in vitro* fertilisation and likes to help others in a similar predicament. "The specialness would go out of it" if she were paid, she says. "It'd be just another job." Others are squeamish about a process they liken to selling babies.

Yet some argue this already happens by default. Courts grant rights to parents who paid for commercial surrogacy abroad. In Britain, surrogates are entitled to "reasonable expenses", an ill-defined category that can stretch to recuperative holidays. Payments of £15,000 ($19,000) are typical. "If it's in the child's best interests to live with the intended parents, it's hard to imagine a sum of money that would make a judge think the child should be taken into care," says Emily Jackson of the London School of Economics. Relaxing the law would make payments more transparent and might encourage more surrogates to come forward.

As teenagers, Matthias Nijs and his partner Janno thought their sexuality meant they would never be able to raise a family. Now they are preparing for Ms Taylor to hand them their baby. "We are 29 weeks," says Mr Nijs, beaming. Nappies, clothes and toys are heaped in a pile in their living room. A sign in the kitchen proclaims the due date. But Ms Taylor is always happy to remind them of the hard work ahead. "I say, 'Your child kept me awake from 12 until three last night,'" she chuckles. "'I hope that when your child comes out, she gives you enough crap too.'"

This article appeared in the Britain section of the print edition under the headline "Pro-creation"

Mettle after metal

Four years after its steelworks shut, Redcar is recovering

A more diversified economy means industrial towns can overcome disasters more quickly than they once did

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AT A HOUSE in Redcar in 1876, Samuel Plimsoll was inspired to invent his famous line. Painted on a ship, it indicated the limit to which the vessel could be loaded to maintain buoyancy—thus making it hard for fraudsters to overload it with the intention of collecting an insurance payout. Lately the residents of Redcar, a town of 40,000 on Teesside, have worried more about a sinking economy than sinking ships. In 2015 the gigantic SSI steelworks closed for good, putting 2,000 people out of work and whacking the local economy. Today the site of Plimsoll's house is a vacant branch of Marks & Spencer.

The progress of Redcar since SSI's collapse is being watched nervously by other industrial towns that have found themselves in trouble. On May 22nd Scunthorpe, 100 miles south, received the news that British Steel, the country's second-largest producer of the metal, had entered liquidation, imperilling the jobs of 3,000 employees in the town. The government does not want to bail it out; the firm is desperately looking for a buyer. If the worst happens, what can Scunthorpe expect?

Redcar was hit hard by SSI's closure. The output of local manufacturing industries, including but not limited to metals, fell by 10% in a year. Between September 2014 and March 2016 the share of working-age men with jobs slumped by five percentage points, a greater decline than the fall across Britain during the crisis of 2008-09.

Scars are still visible. British Steel Redcar, a railway station three minutes' ride from the town centre, once served the site but no longer has a purpose. On a single day your correspondent boosted its annual passenger numbers by 2.5%—just 40 people used it in 2017-18, making it Britain's loneliest stop. Even today real wages in Redcar remain a tenth lower than they were in 2015, the worst performance of any of the 200-odd regional authorities in England and Wales.

It is harder to quantify the emotional impact of losing a plant where generations of the same families had worked for a century. From the beach, the idle works hulk over the skyline. Research by Sascha Becker, Thiemo Fetzer and Dennis Novy of Warwick University suggests that an area with Redcar's characteristics "should" have voted 62-38 for Brexit in the referendum, which took place just months after the steelworks closed. In fact Redcar voted Leave by 66-34.

Yet the town could surely have found itself in worse shape than it is now. Whereas in the early 1990s unemployment in some post-industrial areas topped 15%, in Redcar it has fallen from 9% to 6% since the closure of the SSI works. Working-age employment rates have risen to well above their long-run average, with full-time jobs taking up a greater share than before. These numbers have not been achieved by jobseekers deserting town: indeed, in recent years more 20- to 64-year-olds have moved to the area than have left. Higher employment means household incomes have held up better than average wages. The town is far from posh, with twice as many charity shops as the average across Britain, according to the Local Data Company, a research firm. But it remains lively, with banks, butchers and an oddly large number of tanning salons.

The town's valiant economic performance is partly a result of a strong jobs market across Britain. With the country's unemployment rate at a four-decade low of 3.8%, firms are looking for workers wherever they can find them. Meanwhile, unlike the former coal-mining areas, which were hopelessly reliant on a single industry, Redcar has long had a more diversified economy, making it easier for ex-steelers to find work than it was for jobless miners a generation ago. A report last year suggested that many ex-SSI workers had moved into construction and vehicle repairs.

The government's response may have played a role, too. Some £50m ($64m) of state support, equivalent to £25,000 per worker formerly employed directly at the plant, has been made available to a "task-force". About £4m was put towards offering advice and grants to help people form startups, and £14m was dedicated to training those directly affected by the closure.

Not everyone who needed help has got it. But other SSI alumni have had good experiences. James McDermott, who once conducted structural inspections at the plant, says he received help from the task-force to improve his skills with drones. After being awarded a £10,000 grant he now runs Overview Drone Services, providing aerial photography, inspection and land surveys to businesses. "I can't fault the help I've been given," he says.

Detailed research on the fortunes of Redcar's ex-steelers—long promised by the government, not yet delivered—is needed to work out which programmes worked. The research cannot come soon enough: with British Steel on the brink in Scunthorpe, the government may soon be called into action again.

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The Salah effect

Mo Salah's goals help to tackle Islamophobia in Liverpool

The arrival of a Muslim star player keeps prejudice at bay on Merseyside

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"IF HE SCORES another few then I'll be Muslim too," chant Liverpool fans whenever Mohamed Salah, an Egyptian striker, finds the net. Since arriving in June 2017, he has done so with record-breaking frequency. On June 1st he scored his 71st goal in 104 appearances, to inspire the Reds to victory in the Champions League, Europe's most prestigious competition. As usual, he celebrated by kneeling in prayer.

It is unlikely that Mr Salah—whom another chant describes as a "gift from Allah"—has converted many fans to Islam. But a working paper by political scientists at Stanford University has found signs that his popularity might have helped to tackle anti-Muslim sentiment on Merseyside.

The cleanest evidence came from a Facebook experiment on 8,000 British Liverpool fans. The academics gave each respondent a survey containing footballing facts and questions; a third of surveys also included a slide describing Mr Salah's commitment to praying. Then all users were asked about their attitudes to Muslims. Of those who saw the slide about Mr Salah's faith, 23% thought Islam was compatible with British values, compared with 18% of the other fans. Although most Liverpool supporters may know about Mr Salah's faith anyway, the experiment showed that a reminder could alter their opinions.

The academics also hunted for signs of broader changes in Islamophobic sentiment in Liverpool since Mr Salah was signed. First they looked at hate crimes, in which the perpetrator is motivated by race, religion or another type of identity. Of 23 English regions analysed, almost all saw a rise in the number of such crimes in the ten months after Mr Salah's arrival, part of a long-term trend that the Home Office puts down to better recording by the police. Merseyside, by contrast, reported a slight fall. The researchers built statistical models to predict monthly rates of various types of offences in Liverpool, and found that hate crimes had been 19% less common than expected, a gap that did not exist for any other illegal activity, suggesting that any "Salah effect" was limited to religious tolerance.

Then the researchers turned to Twitter. They identified British followers of Manchester United, Manchester City, Chelsea, Arsenal, Liverpool and Everton (a Merseyside rival), and analysed 44,000 tweets that mentioned Muslims, Arabs or mosques. In the 14 months after Mr Salah's transfer, 7.6% of Islam-related tweets by Liverpool fans had negative sentiments, about the same as the 7.3% during the previous three years. But the figure for Everton jumped from 18.6% to 21.3%; for the other teams it rose from 7.1% to 10.9%. Online Islamophobia in Liverpool seems to have been kept in check at a time when it was rising elsewhere. (The researchers found no sign that the broader increase was caused by jealous fans abusing Mr Salah.)

Most parts of the country, including Merseyside, saw a spike in anti-Muslim sentiment in the summer of 2017, after terrorist attacks in London and Manchester. If Mr Salah has played even a small part in reining in Liverpool fans' prejudice since then, that is an achievement as remarkable as leading the club to European glory.

This article appeared in the Britain section of the print edition under the headline "Salah tackles Islamophobia"

All kicking off

How football can reveal the lighter side of identity movements

Yorkshire take on Parishes of Jersey in an alternative "national" competition

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IT WAS SATURDAY, June 1st. The anticipation had been building for days. Spectators had arrived long before kick-off to make themselves comfortable, and were busying themselves with souvenir programmes, drinking Spanish beer and eating freshly grilled meat. Or chip butties. This was, after all, Yorkshire.

While the attention of most football fans was on Madrid, where Liverpool were about to play Tottenham in the Champions League final, fans streamed into the grounds of Ossett United to watch Yorkshire IFA play Parishes of Jersey FC. Yorkshire won, scoring the only goal of the game in the 93rd minute.

It was the first match of the Heritage Cup, featuring unrecognised nations of the United Kingdom. Kernow FA, the Cornish team, had to drop out because of a lack of funds to travel. Ellan Vannin, representing the Isle of Man, couldn't put a team together. The boys from the Chagos islands, many of whom live in Crawley, stepped in, only to receive a 9-2 thrashing at the hands of Jersey.

The creation of "national" football teams for such places is a relatively new phenomenon. The Yorkshire team was set up in July 2017 and has played just seven matches. Parishes of Jersey was created last summer. Nor is it restricted to areas with a historical, readily recognised identity; Surrey has a team, too.

"For me, a lot of this was about saying to people in devolution politics, 'Stop going to London cap in hand.' Let's promote Yorkshire as it is, not as part of England," says Phil Hegarty, the team's founder and chairman."Not that there's anything wrong with England." Yorkshire has long had a strong regional identity, and has its own political outfit, the Yorkshire Party, which in the last general election won more votes than the Liberal Democrats in Wakefield.

There are no politics on the pitch. The crowd is good-natured. "This is the only chance these lads have to play international football," says one supporter. Another pair of Yorkshire fans debate whether the Jersey team are "southern softies" or, worse, from "northern France". The Yorkshire mascot, a man in a Viking outfit, applied for the gig on the basis of once playing Spiderman at a children's party. He comes from Newcastle and lives in County Durham.

Many teams have sought to register with FIFA, world football's governing body, and been rejected. Instead they have joined the Confederation of Independent Football Associations (CONIFA), which organises a biennial World Cup. The last one, held in London, was won by Karpatalja, a Hungarian team.

"We want CONIFA to be a viable alternative to FIFA," says Mr Hegarty, who hopes that in ten years 10,000 people might watch Yorkshire on television. It is an ambitious goal, but not an impossible one: 521 people turned up to the field in Ossett, even on the day of that other big match in Madrid.

This article appeared in the Britain section of the print edition under the headline "It's all kicking off"

Bagehot

Rory Stewart, odd man out

The most interesting candidate for the Tory leadership

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LET'S HOPE things get better smartish: so far the Conservative leadership race has been a cross between a farce and a pander-fest. Candidates have fixated on the unrealistic Brexit deadline of October 31st, claimed magical negotiating powers for themselves and flirted with a kamikaze policy of leaving the EU without a deal. For these modern-day Metternichs, the only thing easier than renegotiating Brexit is growing a magic money tree in their back yards. The air is thick with promises to cut taxes, increase public spending and otherwise let the good times roll.

The exception to this dismal picture is Rory Stewart, the secretary of state for international development and the MP for one of England's most northerly constituencies, Penrith and the Border. According to the normal rules of politics, Mr Stewart should be nothing but an afterthought in the race. He is a leading supporter of Theresa May's unpopular deal on Brexit, and he has been in the cabinet only since May 1st. He combines a suspiciously privileged background (Eton, Oxford and the Foreign Office, cloak-and-dagger branch) with an even more suspicious taste for ideas (he has taught at Harvard and published four books). Nerdish and soft-spoken, he loves to dwell on the case for prudence, caution and "facts on the ground"—hardly a rallying cry for populist times.

Yet Mr Stewart's campaign has caused a surprising stir with the public, thanks to a combination of Heath Robinson improvisation when it comes to campaign techniques and high seriousness when it comes to policy. Mr Stewart wanders around the country with a small film-crew, introducing himself to strangers, chatting to them about whatever is on their minds (he has been delighted to discover that people are much keener on talking about serious subjects such as Brexit and, above all, social care, than about the sort of trivia that obsesses Westminster), and then posting the resulting videos on the web. His video on the social-care system has been watched 700,000 times and another on the case against a no-deal Brexit more than 2m times.

Mr Stewart's campaign is well adapted to a selfie-obsessed age, in which the world is full of people making videos of themselves and posting them to their followers. It is equally well adapted to Mr Stewart's exotic biography. He made his name by walking 6,000 miles across Iran, Afghanistan, Pakistan, India and Nepal, depending for bed and board on his ability to chat to the locals, and writing a bestselling book about his adventures. He has decided to apply much the same technique to becoming prime minister, walking hither and thither and engaging people in conversation. Mr Stewart's knowledge of Muslim culture and Afghan languages has proved surprisingly useful on his current travels. During a recent visit to Woking he not only visited the usual campaigning venues, such as the British headquarters of the World Wildlife Fund, but also the Shah Jahan mosque, the oldest in the country, which attracts 3,000 worshippers every Friday.

What are the chances that Mr Stewart will be able to persuade his fellow MPs to put him on the shortlist of two candidates that goes to the party's 120,000 members in the country? The stark answer is that they are very small. The parliamentary party's large pro-Brexit wing is solidifying behind Boris Johnson, who already has about 40 backers to Mr Stewart's five, while the party's moderates look as if they are getting behind Michael Gove, a Brexiteer in good standing, but a responsible one. Mr Stewart may even fall foul of the party's new rule, designed to thin out a field that at one point reached 13, which demands that candidates must have at least eight MPs backing them by 5pm on June 10th. All in all his campaign brings to mind Adlai Stevenson's famous reply to a supporter who told the governor that "all the thinking people" were on his side: "That's not enough. I need a majority."

So why does an exotic candidate who is unlikely to get onto the shortlist matter? Because the Conservatives shouldn't just be using this election to decide who replaces Theresa May. They should be using it to decide what direction the party takes after the twin traumas of the financial crisis and the Brexit vote. Mr Stewart is providing the party with a map and a compass. He argues that the Tories need to rediscover their historical role as the party of realism. His first career, in foreign policy, was defined by discovering the gap between the neoconservative dream of bringing democracy and human rights to the Middle East and the messy reality on the ground. Recently his career as a politician has been defined by defending Mrs May's messy compromise against hardliners who think that all you need to do is intone the magic phrase "Leave means Leave" and practical problems will evaporate.

The places in between

He argues that the best way to deal with populism is to steal some of its clothes. Politicians should do more to tackle the "small injustices in daily life", such as the fact that disgraced businessmen can keep their knighthoods. He thinks the best way to resolve the tension between parliamentary and direct democracy, inherent in the attempts to implement the referendum result, is to create an intermediate body—a "citizens' assembly", equipped with the power to call expert witnesses but freed from the discipline of parties—to produce a blueprint which it then submits to Parliament. He recognises that the Conservatives need to learn more about the country they aspire to govern, which means getting out and talking to people who aren't their natural constituents. His campaign team is particularly proud that their polling shows he is the most popular Tory candidate among young voters.

Smart Conservatives have taken to joking that Mr Stewart is the sort of Tory who is embraced by people who don't vote Tory. But isn't that exactly the sort of person an imploding party needs, if not to lead it then at least to help re-engineer its policies? Banging on about "clean Brexits" to fellow fanatics might be emotionally satisfying. But it is also a sure way of ending up in the boneyard.

This article appeared in the Britain section of the print edition under the headline "Odd man out"

Psilocybin
Shroom for improvement

What the dormouse said

Magic mushrooms, illegal in most places, may have therapeutic uses

The active ingredient, psilocybin, offers hope in treating depression

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"MY CHILDHOOD was similar to those of many immigrants: my parents were under a lot of stress, and there was violence and alcoholism in the family," says Carlos Plazola. "When I was under stress, I reacted with fear and anxiety. I always regretted my responses, but I couldn't override them. After a mushroom journey, I found new ways to respond that included compassion and empathy." That is why Mr Plazola joined Decriminalise Nature Oakland, a group which this week persuaded the council of the Californian city in effect to tolerate the consumption of magic mushrooms and other psychoactive plants and fungi. Last month Denver voted to do the same, but just for magic mushrooms. A campaign in Oregon wants to legalise their use by registered therapists. A Republican state senator in Iowa, Jeff Shipley, has filed a bill to allow the use of psilocybin and other hallucinogens for medical purposes.

After half a century, psychedelic drugs are inching in from the cold. Magic mushrooms, whose active ingredient is psilocybin, are in the vanguard.

Attitudes towards the drug may be moving back towards those prevalent in the 1950s and early 1960s, when psychedelics elicited interest rather than horror among ordinary Americans. The name "magic mushrooms" was coined, improbably, by a headline writer in stodgy old *Life* magazine. The magazine's owner, Henry Luce, who had been taking LSD with his wife, had commissioned a banker friend to write about taking part in the secret mushroom ceremonies that had persisted in Latin America for centuries after the drug was suppressed by the Spanish invaders.

The therapeutic potential of psychedelics was discussed by scientists and enthusiasts. Bill W, co-founder of Alcoholics Anonymous, said he got sober with the help of a hallucinogen—the seeds of *Belladonna*, or deadly nightshade. Over 1,000 research papers, involving 40,000 volunteers, are reckoned to have been published in the period looking into their potential for treating a wide range of mental ills. But the research effort was scuppered by the moral panic sparked by Timothy Leary, founder of the Harvard Psilocybin Project, who, to the horror of parents and politicians, urged America's young to "turn on, tune in and drop out".

Magic mushrooms were banned in America in 1970, and are listed as Schedule 1 drugs by the UN, an assessment meaning that the potential for abuse outweighs their medicinal potential. Though barred in most of the world, psilocybin is legally available in a few places, such as Jamaica and the Netherlands, which has led to a small but flourishing psychedelic-tourism business (see article).

But things are changing, for a few reasons. That the widespread decriminalisation of marijuana in America did not bring the social and moral collapse some detractors predicted has opened minds to the possibility of doing the same for other drugs. Psychedelics have enjoyed a vogue in Silicon Valley. Steve Jobs said taking LSD was "a profound experience, one of the most important things in my life". And consuming tiny doses of psychedelics to enhance productivity is fashionable these days. Influential pundits such as Sam Harris discuss their potential.

All this has helped rehabilitate psychedelics. But the main reason for the revival of interest is probably the determination of a group of scientists. A few of the older ones first worked on the drugs in America in the earlier wave of research; they have been joined by a younger, transatlantic band. Earlier this year, Imperial College in London opened the world's first Centre for Psychedelic Research.

The scientists' findings are reaching a wider public through, for instance, the journalism of Michael Pollan, who last year published "How to Change Your Mind", a book about the history and use of psychedelic drugs. In the words of Del Jolly of the victorious decriminalisation campaign in Denver: "There's so much information out there. Healthy normals are beginning to understand the potential of these things."

There are plenty of psychedelics researchers could work on, but the focus is on psilocybin. That is partly because nobody has heard of it, so, unlike LSD, it does not raise hackles. It is also relatively easy to synthesise. Since 2006, when the results of the first of the new wave of studies was published, there have been a dozen papers showing that it may be a useful treatment for obsessive-compulsive disorder, tobacco addiction, alcoholism, depression and the anxiety that so often afflicts people when they are approaching death.

Legal lows

Research has gone slowly because of the drug's illegality. Getting funding can be difficult. David Nichols, a former professor of medicinal chemistry and pharmacology at Purdue University, Indiana, who first worked on psilocybin in 1969, founded the Heffter Institute because he knew that governments would be loth to fork out for research into illegal drugs. Backed by philanthropists, it has paid for a lot of research.

The paperwork is horrendous. It took Peter Hendricks at the University of Alabama at Birmingham, who is conducting trials on the impact of psilocybin on cocaine addiction, six or seven years to overcome the bureaucratic hurdles. Because so little psilocybin is produced, getting hold of it is tricky and expensive. According to David Nutt, professor of neuropsychopharmacology at Imperial, and a former adviser to the British government (famously sacked for saying that horse-riding accidents did more damage than ecstasy), each dose of psilocybin used in Imperial's trials has cost around £1,500 ($1,900).

The trials are mostly small—only a couple involve more than 50 patients—and some have no placebo comparison. But the results are encouraging. A study at Imperial followed 12 patients with treatment-resistant depression. Nine were classed as seriously and three as moderately depressed; three months after taking a dose of psilocybin, one was seriously and six were moderately depressed, while five were no longer depressed. A study at Johns Hopkins University (JHU) of 51 patients with late-stage cancer suffering from depression and anxiety found that four-fifths had statistically significant improvements in their mood after six months; another at the same university into tobacco addiction found that six months after a dose of psilocybin 80% of volunteers had not had a cigarette for a week. TheJHU study covered just 15 patients, who also benefited from a lot of psychological support. But the rates for the various drugs on the market is 25-35%. For cognitive behavioural therapy, it is 17%.

How the drug works is a bit of a mystery. It induces perceptions and sensations that range from heaven to hell (a terrifying bad trip), and commonly include a sense of oneness with the universe and of the revelation of a great, spiritual truth. A third of the 36 patients in a trial carried out at JHU rated its effects as the most profound spiritual experience of their lives; a further third said it was in the top five. That aspect seems to be essential to its efficacy: several studies have shown that the more profoundly mystical the experience, the greater the therapeutic effect.

Magnetic resonance imaging gives some clues to what is going on. Psychedelics seem to act in part through the default mode network (DMN), an interconnected group of bits of the brain that switch on when people remember the past, imagine the future or ruminate on themselves, and which is overactive in depressed people. When people take psychedelics, the DMN switches off; at the same time, other bits of the brain communicate with each other more than they normally do, perhaps forging new neural pathways that override old, destructive patterns of thinking. So it may be that these drugs tackle mental problems on a higher level than existing medicines and can thus act across a wide range of disorders. Matthew Johnson, of JHU, likens their effects to "a reboot of the system—it's like pressing control-alt-delete".

A study at JHU highlights another interesting parallel: that what is happening in the brain resembles what happens to those who meditate intensely. "It may be that what you get from psychedelics is a crash course in the effects that you could get from a long-held meditation practice," says Dr Johnson. "My expectation would be that the self-control and cognitive benefits from meditation couldn't come from a crash course. But in terms of the enhanced sense of self, this may be a helicopter ride to the top of the mountain, while those on the meditation path are hiking up."

Researchers are excited. Depression and addiction are huge problems: 300m people worldwide suffer from depression, according to the WHO; 8m people die from tobacco addiction every year; and America is suffering from an opioid epidemic. Existing medicine for addiction, such as methadone for heroin, or nicotine substitutes for tobacco, is not very effective. And as Dr Nutt points out, no serious advances have been made in drugs for depression for 30 years. A variant of ketamine, a widely abused controlled drug, has recently been licensed for use in America in the most serious cases of depression, but its effect lasts only about a week. Psilocybin's seems to persist for at least six months.

America's Food and Drug Administration has given "breakthrough" status to psilocybin trials being conducted by a British company, Compass, whose seed investors include Peter Thiel, a tech billionaire. Compass is undertaking the first large-scale trial of the safety, efficacy and appropriate dosage of psilocybin for treatment-resistant depression. "Breakthrough" status means that "the drug may demonstrate substantial improvement over existing therapies", and the FDA is keen to "expedite" its licensing. Compass is seeking a patent for a particular molecular form of psilocybin and the process to manufacture it. The drug's current illegality will not be a problem if the FDA approves it. "If the science holds," says Ekaterina Malievskaia, one of Compass's co-founders, "there are no political and ideological hurdles."

Compass's patent application is raising a few eyebrows in the field. Some researchers feel that psilocybin is a spiritual gift which people have enjoyed for millennia and nobody should try to own. Usona, a non-profit founded by Bill Linton, CEO and founder of Promega, a biotech company, and Malynn Utzinger, a doctor, is also starting a trial—for "major" depression, a broader category than "treatment-resistant" depression. It is funded by philanthropy and is not seeking a patent: "We feel the work we're doing is so transformational that we're best serving the world by not attempting to monopolise treatment through patents," says Mr Linton.

But there are also questions about whether Compass will be able to make money. Synthesised psilocybin will certainly be needed, for although magic-mushroom cultivation is widespread, whether decriminalised or not, sick people will need to be given controlled quantities in a safe, cheerful environment, not a handful of *Psilocybe* mushrooms.

Even so, as Mr Linton points out, "This molecule has been synthesised many times since 1958 [when Albert Hoffmann, the chemist who discovered LSD, first did so]. There are many synthetic routes to reach the final product, and it is highly unlikely that anyone could obtain a blocking patent." Compass, however, might gain a commercial edge if its particular molecular form gets FDA approval and a patent.

There is a long way to go yet. Few drugs make it through the FDA process, and even if everything goes swimmingly, psilocybin will not be on the market for four or five years. Some of the drug's proponents worry that decriminalisation could jeopardise its progress by reigniting the moral panic of half a century ago. Mr Pollan, generally an enthusiast, cautions against "premature decisions about psychedelics before the researchers have finished their work".

Although psilocybin seems safe compared with other mood-altering drugs (see chart), messing with your mind is inherently risky. "People will get hurt," says Brad Burge of the Multidisciplinary Association for Psychedelic Studies. "That's inevitable. People will drive when on magic mushrooms. That can lead to a pushback." But nobody in the field wants to prolong a situation in which, in the words of Cindy Sovine, who worked on the decriminalisation campaign in Denver, "people are going to jail and losing their children" for personal use of a drug that can bring pleasure and enlightenment.

In the current climate, progress towards a more liberal regime, whether through the medical or the legal route, is likely to continue. After all, as Max Planck, a great physicist, put it: "A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die."

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Blissing out

Psychedelic tourism is a niche but growing market

A "mushroom journey" is for some the trip of a lifetime

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"IT WAS LIKE being transported into a parallel dimension of eternal unfolding completeness and divine bliss. Very powerful, direct and overwhelming. It was a big surprise, but also incredibly obvious. A 'Doh!' moment, rather like Homer Simpson," says Guy, a South African who runs an online-marketing company from Stockholm, and who attended a retreat last month organised by the Psychedelic Society, a British outfit, at a rural artist's haven in the north-east of the Netherlands.

Magic mushrooms were banned in the Netherlands in 2007, after a 17-year-old partaker jumped off a bridge. But "truffles", a form of the mushrooms that grow underground, are legal, and underpin a growing business in weekend trips. Prices for the Psychedelic Society's retreats range from £550 ($700), for those on low incomes, to £1,200. Applicants are screened to weed out people who should not take the drug, such as those who have had psychotic episodes. The society has organised retreats for three years and now runs one most weekends. The waiting list is in the hundreds.

At the one Guy joined in May, nationalities ranged from American through a range of Europeans to Chinese; motivations from mild curiosity, through a sense of being emotionally or professionally stuck, to grief. Guy hoped to "mend my broken heart": his partner had left him and their one-year-old son two years earlier.

The retreats are organised around a "ceremony", in which participants, lying on mattresses, drink a tea made from truffles. While they trip for five or six hours, four facilitators stay with them, to hold their hands if they get scared or listen to their babblings. The rest of the time is taken up with exercise, dance and "group work" (on, for instance, lowering emotional defences). Lode Lhamo, a French facilitator who adopted a Tibetan name after becoming a Buddhist in India, says the whole team is motivated by "the level of wounding and pain that people carry. We can't really transform society unless people heal themselves."

Competition is growing. Synthesis Retreats started last year and expects 600-700 clients in 2019 and twice as many next year. Martijn Schirp, a founder, thinks about 20 firms offer a similar service in the Netherlands. There are others in Mexico, where possession has been decriminalised, and Jamaica, where mushrooms are legal. "This whole space is buzzing. There are converging trends: the psychedelic renaissance, wellness, and people looking to buy experiences rather than things," says Mr Schirp.

A few weeks on, Guy does not think his life has been transformed, but he is grateful for the experience and things are going a little better with his ex. "I had a conversation with her, about things like money, schedules and holidays. The kind of conversation that would normally be difficult. But when things escalated, I was able to pull back a bit." He feels things have somehow shifted. "I don't want to make out this is a broken-heart medicine, but even if it's a trick of the mind, it kind of worked."

This article appeared in the International section of the print edition under the headline "The trip of a lifetime"

Global technology (1)
Pinch points

Pinch points

The technology industry is rife with bottlenecks

The US-China tech cold war is making companies more aware of them than ever

Print edition | Business Jun 8th 2019

JAPAN HAD long since lost its lead in electronics. Or so many thought. When an earthquake and tsunami hit the country in 2011, its continued centrality to the industry quickly became apparent. Copper foils for printed circuit boards, silicon wafers to make chips, resin to package them—for many components Japan was the home of the biggest, sometimes only, supplier. As production ground to a halt, customers scrambled to find alternatives. Many had to limit their output, like carmakers reliant on Renesas Electronics, a leading maker of engine-controlling chips whose wafer-fabrication plant sustained heavy damage.

Natural disasters—whether cataclysmic like the Japanese earthquake or merely destructive like floods or wildfires—regularly test the electronics supply chain. Now a geopolitical shock from President Donald Trump's efforts to isolate China has thrown the industry's structure into sharp relief—and exposed its choke points (see table).

This structure is best thought of as a transcontinental relay race with hidden hurdles, says Willy Shih of Harvard Business School. Modern electronic devices are the most complex things humans produce. Firms at every stage of the process are highly specialised and wield advanced technology. Components are passed from one firm to another, each of which adds a bit of value; some parts cross the ocean several times. Sometimes, where only one or two providers of a particular subsystem exist, the lanes converge. Downstream firms, which may only know their direct suppliers, often have no idea what happens upstream, explains Mr Shih. Until, that is, something goes awry.

The earthquake in Japan revealed that the country produces the bulk of chemicals and other materials to make microchips. The Trump tremor immediately highlighted China's dominant role in electronics assembly. It is home to half the world's capacity, estimates Henry Yeung of the National University of Singapore, which can be ramped up at short notice. When Apple launches a new iPhone, for example, tens of thousands of workers have to be hired within weeks.

In May America's Commerce Department blacklisted Huawei, a Chinese technology titan, and 70 of its affiliates, barring American firms from selling them certain technologies without government approval. This shed light on another bottleneck: chips. Like ZTE, a smaller Chinese firm which in 2017 briefly found itself in a similar situation, Huawei could not survive without chips designed in America.

Although Huawei has its own semiconductor subsidiary, HiSilicon, it still imports most of its chips and spent $11bn last year on components from America. Qualcomm, a company based in San Diego, makes around half the world's baseband processors, modem chips which manage wireless connections. Intel makes virtually all "server-class" chips used in the world's data centres. Chips based on designs licensed from Arm, a British firm, can be found in almost every advanced smartphone out there. All said they would limit sales to Huawei, lest they fall foul of the American ban.

For their part, Qualcomm, Arm and other chip designers depend on foundries to turn silicon into microprocessors. The largest of these is Taiwan Semiconductor Manufacturing Company (TSMC). It is one of only three firms capable of producing cutting-edge microprocessors. The other two are Intel, which focuses on making chips it designs itself, and Samsung of South Korea. According to insiders, processors which go into an iPhone are all made in a single TSMC facility. And Taiwan, like Japan, is prone to earthquakes. (TSMC says its chip factories are designed to resist major earthquakes.)

Intel, Samsung and TSMC, in turn, rely on a bevy of specialised equipment suppliers to kit out their factories. One is ASML, a Dutch firm. It is the world's only maker of lithography equipment that uses "extreme ultraviolet" light, which enables the production of transistors small enough for the next generation of advanced chips. ASML has spent decades, and billions of dollars, getting that finicky technology to work. Its 180-tonne machines sell for €120m ($135m) a pop. Intel, TSMC and Samsung have each bought a handful. SMIC, a Chinese chipmaker, has ordered one. If SMIC or other Chinese firms were barred from buying more, China's ambition to become self-sufficient in advanced chips would come a cropper, says Robert Castellano, an industry analyst.

Get with the program

Then there is software. Three-quarters of the world's smartphones, including many made by Huawei, use Google's Android mobile operating system. The American ban means that, although Huawei retains access to the open-source version of Android, Google has said that it will no longer provide the Chinese firm with proprietary bits, such as the app store and security updates. That will not hurt Huawei in China, where these services are already blocked. But it will in the West, where consumers rely on them every day.

Open-source does not guarantee invulnerability. Some think Mr Trump may want to ban exports of such software to China, as has long been the case for certain encryption programs. Without programs like the Linux operating system or Kubernetes, a tool to manage computing loads, Alibaba could not have become the world's fastest-growing cloud-computing giant.

All these bottlenecks, and America's direct or indirect sway over many of them, makes it tempting for hardliners in Washington to "weaponise interdependence", as Henry Farrell of George Washington University and Abraham Newman of Georgetown University put it in a recent influential paper. America has threatened to cut off foreign financial institutions from the SWIFT banking network and the dollar clearing system for doing business with countries or entities it does not like. The Huawei ban applies to foreign firms if at least one-quarter of their technology originates in America (hence Arm's decision to stop licensing the Chinese firm).

After the Japanese earthquake, many firms moved to identify risks in their supply chain and sought alternatives, says Bindiya Vakil, boss of Resilinc, which maintains a database of links between suppliers and monitors disruptions. But it is hard to will new high-tech companies into existence. And doing so would be costly. So the system remains largely unchanged.

Will the Huawei ban alter it? Many firms will speed up efforts to bypass China—for instance by building factories in places like India or Mexico. (Mr Trump's threat last week to slap tariffs on Mexican imports may give them pause.) Samsung has already moved most of its smartphone production to Vietnam. Retaliation by China may hasten the process. When in 2010 it cut export quotas for rare earths, a set of obscure minerals used in magnets and other electronic components, of which 70% is produced in China, this quickly led to a search for alternative sources and substitute materials. Days after the Huawei ban Xi Jinping, China's president, paid a much-publicised visit to a rare-earths facility.

Whether or not it responds in kind, China will redouble efforts to become technologically independent. Huawei has said it will soon release its own mobile operating system to supplant Android. The government is likely to pump even more money into the country's chip industry.

Optimists argue that interdependence will be disarmed once it has served its purpose in the latest Sino-American trade tussle. But the damage has been done. As Mr Shih says, many companies feel they can no longer rely on Chinese suppliers. And the Chinese realise that America can use the supply chain to wage economic war. Hawks in Washington and Beijing may dream of two "techno-spheres" of influence. To globalised technology firms, it feels like a nightmare.

This article appeared in the Business section of the print edition under the headline "Pinch points"

The silicon tightrope

Taiwan's computing titans are caught up in the US-China tech war

They would rather remain in the shadows

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IN THE SHADOW of Taipei 101, the Taiwanese capital's tallest skyscraper, 42,000 people attended Computex, one of the world's biggest electronics trade expos, which concluded on June 1st. They bought, sold and ogled every electronic component imaginable. Neon-pulsating fans. Computer casings in every imaginable shade of beige. Infinite varieties of fibre-optic cables. And, of course, chips. If silicon had a smell, Computex would be oozing it.

The massive exhibition space is in fact a sideshow. The real action takes place high above, in the hotel suites of central Taipei. The world's technology firms book them, then fly in for meetings with the Taiwanese companies that are the beating heart of the global electronics supply chain. Taiwan is, in effect, Computex writ large.

The largest Taiwanese tech companies are contract manufacturers, which make products for other firms rather than sell them directly to consumers. The combined sales of the 19 biggest last year totalled $394bn. They co-ordinate the fiendish logistics of getting hundreds of parts sourced from Asia and beyond to arrive in the right place at the right time, in order to keep their assembly plants, many located in China, humming. Largan, Pegatron, Quanta and TSMC are not household names. Their customers—Huawei, Apple, Amazon—are. But the global tech value chains atop which these illustrious firms sit would break without their Taiwanese links.

All iPhones and many Huawei devices run on cutting-edge microprocessors made by TSMC. Largan grinds the minuscule lenses and other optical equipment that goes into high-end smartphone cameras. Many lower-end phones sold by companies under various brands are basically generics produced by Pegatron or Quanta. Hon Hai, better known as Foxconn, is the only company with the capacity to marshal the armies of workers needed to ramp up iPhone production. The vast majority of its stadium-sized factories are in China, but Taiwan is the centre of operations. The label on most Apple devices, "Designed in California. Assembled in China", is missing a central component: "Made possible by Taiwan".

By the same token, Taiwan's silent giants find themselves in the middle of the technology cold war between China and America. TSMC is perhaps Huawei's most important supplier. For now it says that America's decision last month, on national security grounds, to prohibit its companies from exporting technology to the Chinese firm does not affect it; TSMC's meticulous supply-chain management systems show that its exports to Huawei do not contain enough American intellectual property to fall under the ban. Nonetheless it is under pressure, as are its Taiwanese peers. Rumours are swirling that Foxconn has stopped some of its manufacturing for Huawei. (Huawei denies this. Foxconn declined to comment.) Last week China said it was compiling its own list of "unreliable" foreign firms.

Even before these latest salvoes, Taiwanese companies were already looking beyond China to locate new assembly plants, prompted by rising Chinese labour costs and President Donald Trump's earlier tariffs on Chinese imports. But relocating links of the complex supply chain from clusters such as Shenzhen in southern China (800km from Taipei as the crow flies) will increase the costs of shipping and logistics, eating into the Taiwanese firms' comparatively thin margins. And a wholesale move out of China looks unfeasible, not least because few other places possess the expertise that agglomerations like Shenzhen have built up over the years.

Some Taiwanese firms are quietly seeking a toehold in other countries. Pegatron is planning to invest $1bn in a new manufacturing facility on the Indonesian island of Batam, just an hour by ferry from Singapore. Foxconn and Wistron, another Taiwanese firm, each now has an iPhone factory in India.

Keeping a low profile is getting harder for the Taiwanese companies. If you include Hong Kong, China consumes 40% of Taiwanese exports, most of it courtesy of the contract manufacturers. Around 1m Taiwanese, roughly one-tenth of its labour force, work in China. Taiwan's relations with China, which considers the island part of its territory, are ever uneasy—especially when, as now, the Democratic Progressive Party, which insists that Taiwan is an independent country, wields power. Last month John Bolton, Mr Trump's national security adviser, enraged China by breaking with decades of precedent to meet his Taiwanese opposite number. Terry Gou, Foxconn's founder and Taiwan's richest man, is meanwhile seeking the presidential nomination of the biggest opposition party on a China-friendly ticket.

Most of Mr Gou's fellow tech bosses prefer to keep their heads down. Small wonder, for shadows have served them well. From now on they may have to get used to the spotlight.

This article appeared in the Business section of the print edition under the headline "The silicon tightrope"

Bartleby

Charity begins at work

Toxic workplaces can be found in every sector

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THE REPORT was devastating. The working environment at the organisation was described as "toxic". There was widespread bullying of staff and a bunker mentality among senior management; 39% of employees developed mental or physical health issues as a result of their work. An investment bank or a technology firm in Silicon Valley? No. This was Amnesty International, a human-rights charity. Five managers have just left the organisation following the report's findings.

Workplaces create their own hierarchies, regardless of whether the aim of the operation is to help people or make money. Two female partners at KPMG, an accountancy group, recently left out of concern at the behaviour of a male colleague. Coming from a family of teachers, Bartleby can attest that school staff rooms are beset by bitter rivalries. Universities are famous for their internecine disputes, as captured in the adage that "academic politics are so vicious precisely because the stakes are so small."

At Amnesty, the problem was not with staff motivation. The report, by the KonTerra group, a consultancy, makes clear that many employees regarded their job as a "vocation or life cause" that provided them with "a compelling sense of purpose and meaning". But that commitment proved to be a double-edged sword.

First, in the eyes of workers, managers believed the importance of the NGO's work was so great that they did not need to listen to staff concerns. Employees, the higher-ups seemed to conclude, "should be grateful for being able to work at Amnesty". Second, workers found it difficult to set healthy boundaries on their hours (or on their tolerance of a toxic climate) owing to a deeply held belief in their mission.

One cause of stress was a process called the Global Transition Programme, which moved Amnesty's staff away from headquarters and closer to the abuses they covered. Workers felt that their views about these transfers were not seriously considered and that the implementation of the programme was rushed. As a result, employees found their work patterns disrupted, even as some moved to high-risk locations. Concerns came to a head when Gaëtan Mootoo, a long-time employee, committed suicide, leaving a note blaming work pressures. Another staff member committed suicide shortly afterwards, although inquiries found no evidence that the death was work-related. These tragic incidents led to the commissioning of the report.

So what went wrong? On the surface, Amnesty seemed to offer services to help employees cope with stress. Staff were eligible for five counselling sessions, and an external reporting service for whistle-blowing had been created. Programmes were developed to train leaders and to help staff support their colleagues. But these efforts were described as "ad hoc, reactive and inconsistent". In a survey 85% of employees said they had not been given enough guidance to support the well-being of their colleagues.

The problem clearly came from the top. If senior management is not committed to a caring atmosphere, no amount of discussion groups or special programmes will make things better.

A certain amount of stress at work is inevitable. Most organisations are hierarchical. Deadlines are a part of life, as is uncertainty over whether individual projects are going to succeed. But workers who are stressed and fearful are unlikely to stay in their jobs or be productive in the long run.

Many managers derive a lot of their status from their oversight role. That is, in part, why organisations create such roles: they can reward high-achieving employees with a title as well as with extra money. But power is seductive. Peter Cappelli, a scholar of human resources at the Wharton School in Philadelphia, says that toxicity arises when "the boss acts like a dictator and actively punishes people who articulate different views or express disagreement".

As Amy Edmondson of Harvard Business School explains in her book, "The Fearless Organisation", the ideal is to create an atmosphere of "psychological safety" where workers can speak their minds. Managers need to learn the art of "respectful inquiry", where they ask employees questions and listen intently to the answers. The bosses at Amnesty may have listened to the political dissidents whose causes they were championing. But they clearly weren't listening to their staff.

Not what it was

What slumping demand for cruises says about Chinese tourists

Chinese holidaymakers increasingly want the same things as Western ones

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WESTERNERS IMAGINE Chinese travellers to be different from them. The rise in the number of large tour groups in European cities has stoked fears of "overtourism" among locals. Chinese tourists' supposed preference for only visiting popular landmarks, their taste for Chinese food and their addiction to luxury shopping are widely mocked. But the tastes of Chinese travellers are, in fact, rapidly converging with international norms—nowhere more so than on cruise ships.

America dominates the cruise industry. Carnival, Royal Carribean and Norwegian Cruise Line, which control nearly 80% of the global market between them, are based there. Just over half of the 26m people who went on a cruise in 2018 were American, reckons Cruise Market Watch, a data-provider. But China is catching up. Between 2013 and 2016 number of Chinese cruise-goers grew at a compound annual rate of 70%. In 2016 they overtook Germans to become the second-biggest cruise-going nation. Last year 2.4m Chinese holidayed on the high seas, spending around $3bn out of a global total of $46bn.

Now the industry is entering choppy waters in China, even as cruise passenger numbers increase almost everywhere else. Chinese passenger numbers dipped by 1-2% in 2018 and are estimated to fall by a further 5-15% this year. What happened?

Cruise lines owed their early success to offering Chinese tourists what they wanted: "floating shopping malls with casinos" in the words of David Beckel of Bernstein, a research firm. At sea they could bypass the country's strict gambling laws (just as the original American "booze cruises" in the 1920s were a way of getting around Prohibition) and snap up duty-free Western brands. Shops on Royal Carribean and Carnival voyages were regularly stripped bare of everything from Bulgari necklaces to South Korean rice cookers.

No longer, it seems. Chinese tastes are fast becoming more sophisticated, observes Alex Dichter of McKinsey, a consultancy. Surveys suggest that visiting landmarks and shopping have been dethroned as top reasons for travelling. Nowadays taking a break from work to recharge and to experience local cultures tend to be the top of the list. The emphasis is on experiences, not things—like travellers in the West, in other words. Oliver Wyman, a consultancy, found that the share of Chinese holiday spending on shopping fell from 41% in 2016 to 32% by 2018.

As a result, cruise lines that have gone too native, or that rely too much on shopping for profits, have suffered. Norwegian launched its first ship built especially for China in 2017, armed with shops, gambling machines, Asian restaurants and a karaoke bar. Two years later, amid disappointing ticket sales, Norwegian spent $50m ripping out all the Chinese fripperies and moved the ship to Alaskan fjords. In 2018 Royal Caribbean scuttled SkySea Cruises, a joint venture with Ctrip, a Chinese online travel agency, when it discovered it could make more money running its own vessels with fewer nods to local taste. Carnival maintains its joint venture with CSSC, a state-owned Chinese firm. One reason might be to appease regulators keen to boost Chinese shipyards' order books.

Royal Caribbean has found it more lucrative to offer a Western experience at sea at a premium price than to compete against cheap Chinese resorts. It is among the few lines in China that makes money, claims Richard Fain, its executive chairman. It is still adding more ships. On June 6th, after *The Economist* went to press, *Spectrum of the Seas*, its newest vessel, was due to embark on its maiden voyage from Shanghai carrying nearly 5,000 passengers.

Mr Fain thinks that the Chinese market will eventually rebound. Analysts at Goldman Sachs, a bank, reckon that just 0.5% of potential passengers in China took a cruise in 2017, compared with over 4% in America. Pierfrancesco Vago, executive chairman of MSC Cruises, the world's fourth-largest line, blames regulation. Western lines cannot sail between two Chinese ports. China is thinking about relaxing some of these rules, but only for domestic firms, which are few in number and tiny in size. To grow, they—and their regulators—may need to turn international.

This article appeared in the Business section of the print edition under the headline "Not what it was"

Fine by US

American trustbusters are rattling Google, Amazon, Facebook and Apple

Reports of investigations have hit the tech titans' share prices

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SHARES IN THE biggest internet firms took a nasty tumble on June 3rd, after weekend reports suggested American authorities were limbering up to scrutinise their business models. Just four —Amazon, Facebook, Apple and Alphabet—lost $134bn in market capitalisation in a day, not far off the entire worth of Netflix (which also fell).

Dealing with competition quibbles is hardly new for Big Tech. European trustbusters have been on their case for two decades. Even whopping fines there have barely registered with investors (see chart). Alphabet, which owns Google, has coughed up $9.5bn across three cases over the past two years (it is appealing). Its valuation rose each time. News of a preliminary probe into Amazon in September dented its share price much less than poor earnings unveiled soon after.

This time is different. The 4.5% drop in the four giants' market value suggests investors are more worried. Possibly meatier American fines are not the reason: the billions Google has been forced to pay represent less than a tenth of the $134bn in profits it has generated since the first case was opened in November 2010. Even higher penalties can be written off as a cost of doing business.

More likely, shareholders fret that American authorities could force the firms to change their money-spinning business models. In his confirmation hearing William Barr, America's attorney-general, said he wanted to "find out more" about how Apple and others had grown so big. Elizabeth Warren, a senator and Democratic presidential hopeful, has said that Facebook should be broken up. If America is picking up where Europe left off, investors are right to be concerned.

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Braking bad

A merger of Fiat Chrysler Automobiles and Renault is no more

Objections from Nissan and the French government did for it

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SUDDEN, SURPRISING and "transformative". The description could apply both to the proposed merger between Fiat Chrysler Automobiles (FCA) and Renault announced on May 27th and its demise only ten days later. Late in the evening of June 5th the Italian-American firm, which had approached its French counterpart with the offer, announced that it was withdrawing the proposal. The share prices of both companies fell on the news. The rapid implosion of a deal that was intended to secure the futures of both carmakers as the industry undergoes fundamental change is a huge blow for its architects. It shows that the much-needed consolidation of the car industry will be fiendishly hard to pull off.

The deal looked like a winner for both parties. Their complementary strengths in regions and products, plus a chance to share investment in electrification and self-driving cars, had convinced John Elkann, the chairman of FCA (who sits on the board of *The Economist*'s parent company), and Jean-Dominique Senard, his counterpart at Renault, of the wisdom of combining the two firms. This would create the world's third-biggest carmaker. If Renault's Japanese partners, Nissan and Mitsubishi, got on board, the firm would become a colossus making 15m cars a year—almost half as much again as their closest competitors.

So what went so wrong, so quickly, to compel FCA to pull out? The deal, born out of reportedly convivial talks between Mr Elkann and Mr Senard, was greeted with approval by investors. The French government, which has a 15% stake in Renault, seemed amenable. Nissan, Renault's main alliance partner in which the French firm has a 43% stake, made reassuring noises.

But, it then emerged, Nissan had been kept in the dark about the deal until the last minute. It worried that the deal's structure as a 50-50 partnership between shareholders of Renault and FCA did not properly acknowledge Renault's stake in Nissan, worth some $13bn. And the Japanese firm felt rushed into making a huge strategic decision, not long after it had rejected Renault's plan for a full merger under Carlos Ghosn, the firm's former boss who is now fighting charges of financial wrongdoing at Nissan (which he denies). Under the terms of the agreement governing the alliance, a change of control would have allowed Nissan to renegotiate the partnership. It had apparently called for a strategic review. The cost savings of €5bn ($6bn) that FCA claimed for the deal were partly predicated on the continuation of Renault's alliance with Nissan and Mitsubishi.

Despite its misgivings, Nissan could have been brought on board, FCA believed. For FCA the main stumbling-block was the French government, which has a habit of being a tricky counterparty in deals involving national champions. Without French support, and acceptance of a 7.5% stake in the merged firm, the deal would not have got this far. But the French wanted control. Sources close to FCA say that the government was constantly second-guessing and renegotiating every aspect of the deal. For FCA this portended future interference. When France pointed the finger at Nissan as a roadblock, FCA lost patience.

The question is what happens now? Yet another car-industry mega-merger has collapsed—this time before it even got off the ground. It seems unlikely that the deal can be revived. FCA's disillusionment with the French government seems too great. The rocky relationship between Renault and Nissan is unlikely to be improved by the French government's finger-wagging. FCA will lick its wounds and may seek another deal. One often mooted partner is PSA Group, the maker of Peugeots and Citroëns. But it was the damning verdict on the now-dead merger issued last week by PSA's boss, Carlos Tavares, who called it a "virtual takeover" of Renault, that may have thrown a spanner in the works. Engineering the consolidation of the car industry is looking harder than ever.

This article appeared in the Business section of the print edition under the headline "Braking bad"

Kafkaesque

Disgruntled investors are losing patience with central Europe

States are being sued over broken promises and contracts

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SEBASTIAN PAWLOWSKI used to gush about the economic potential of the Czech Republic and the wealth of Czech culture. The Swiss investor with Polish roots arrived in Prague in the early 1990s and became one of the top property developers in the Czech capital, then full of promise and excitement. He founded a popular private museum dedicated to Alphonse Mucha, a local art-nouveau master, and one to Franz Kafka, a Prague-born writer.

These days Mr Pawlowski is still a supporter of Czech arts, but would not invest another koruna in the country. He blames a kerfuffle over an investment in Benice, a Prague district where he bought land for residential development in 2007. This, Mr Pawlowski claims, was scuppered by local authorities, which in 2012 reversed zoning rules by court order.

Even now Mr Pawlowski still lacks permission to build the planned 800 flats. In 2017 he sued the Czech state at the World Bank's International Centre for Settlement of Investment Disputes (ICSID) for $218m over a violation of the bilateral investment treaty (BIT) between Switzerland and the Czech and Slovak Federative Republic concluded in 1990, and still in force despite the country's subsequent break-up.

Mr Pawlowski is not the only investor who says he was stiffed by local or national governments in central and eastern Europe. Some of these legal tussles are part of the transition to a modern market economy. A lack of co-ordination between local and national authorities that make different promises is partly to blame. Increasingly, however, the region's governments seem wilfully to ignore international rules.

Investors' biggest concern is the subjugation of local courts by populist rulers. Andrej Babis, the Czech prime minister who is facing criminal charges over the misuse of EU funds, recently replaced his justice minister with a loyalist. Last week his Hungarian counterpart, Victor Orban, shelved a plan to create a parallel court system that would handle cases involving the state. But his earlier overhaul of the justice system has fuelled concerns about judicial independence. So have similar moves by Poland's ruling Law and Justice party.

Investors rely on BITs to get a fair shake—those in central Europe more so than most. Of 942 investor-state disputes worldwide since 1987, a disproportionally high number involved post-communist countries that joined the EU 15 years ago (see chart). The Czech Republic (38 cases) and Poland (30) are the worst offenders. By comparison, Germany and France, much bigger economies with more inward investments, have four cases between them.

Tales similar to Mr Pawlowski's abound in the region. Invenergy, an American firm which invested 2.2bn zloty ($583m) in 11 wind farms in Poland in 2005, last year sued the Polish government for $700m in a UN court over cancelled power-purchase agreements. Poland's courts sided with Invenergy but were ignored by state-controlled bodies. Another American investor, George Nussbaum, set up a billboard business in the 1990s that boomed until the Czech government banned billboards on highways because of traffic-safety concerns in 2012. This put an end to licensed roadside billboards but not those without legal permits, which are put up by some Czech firms. Mr Nussbaum is about to file a suit at the ICSID alleging a breach of the Czech-AmericanBIT. The British liquidator of New World Resources (NRW), an energy group, is threatening to lodge a complaint about the Czech government at the ICSID under the Energy Charter Treaty, an international compact governing cross-border investments, over the insolvency and expropriation in 2017 of OKD, a Czech miner which NRW used to own.

In a case last year involving Achmea, a Dutch health-care company, and Slovakia the European Court of Justice (ECJ) ruled that EU law takes precedence over the Dutch-Slovak BIT. This led the EU's executive arm to step up efforts to end intra-EU investment treaties by the end of the year. This assumes that national courts can be trusted to issue impartial verdicts—and governments, to respect them. Opponents of the proposal argue that, in central Europe at least, they do not.

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

Growing up

Electric-scooter startups are becoming more cautious

They are paying more attention to regulations and norms of road use

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ON MAY 29TH electric scooters began legally to glide down cycle lanes in the Swedish city of Helsingborg. The next day a rider collided with a car and died. The Swedish Transport Authority immediately called for a ban on the devices. The incident highlights the riskiness of the vehicles—and of the fast-growing micromobility business around the world.

Motorised versions of children's kick scooters are notoriously unsafe. Their silent motors catch pedestrians and other road users unawares. A study by the Portland Bureau of Transportation concluded that e-scooters get into accidents 22 times as often as cars do, and 44 times as often as motorbikes. Another, by the city of Austin, found that one in three users is hurt on their first go. They are also increasingly unwelcome. Abandoned dockless devices obstruct pavements and doorways. In 2018 San Francisco temporarily banned them. The mayor of Nashville recently tweeted that the city's experiment with them "is not working out".

In keeping with the startup credo of asking forgiveness rather than permission, firms often launched large e-scooter fleets without consulting local authorities, sometimes literally overnight. The backlash is making them rethink their approach. Bird, a two-year-old industry pioneer, has introduced a "GovTech platform" to let local authorities designate no-ride and no-park zones, set speed limits and display safety messages on scooter dashboards. VOI of Sweden, whose scooter was involved in last week's accident, accompanies launches with educational pop-ups. It is planning a "virtual traffic school" for novices.

A big remaining obstacle is insurance. In Sweden scooters limited to 20 kilometres per hour (12 miles per hour) are classified as bicycles and do not need motor-liability coverage. In some places, like Germany, authorities demand that micromobility startups take out such policies. Elsewhere, insurance is the responsibility of the renter. Like their customers, then, companies face a balancing act. Thom Rickert of Argo Group, an insurer, talks of a "complicated liability economy". It could get more complicated soon. The latest craze is for even more dangerous-looking electric-powered skateboards.

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Schumpeter

Blue-collar capitalists

Employee ownership has a lot going for it. But not if it becomes over-politicised

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IDA TARBELL, the great muckraker of the early 20th century, not only wielded her pen against Standard Oil. She also used it to advocate for better versions of capitalism. In "New Ideals in Business", a book from 1916, she explained how William Cooper Procter, a pioneering Episcopalian, introduced profit sharing in 1887 and eventually share ownership for workers of Procter & Gamble (P&G), a consumer-goods firm. Lauding the impact on the company's performance, she recounted the words of one employee: "Do you suppose I'm going to let a new man come in and loaf on his job...? It's my profits that I'm looking out for now."

Over a century on, P&G still grants about a tenth of its shares to its employees and retirees. Other well-known firms, such as Southwest Airlines, Starbucks and even Huawei of China, are part or wholly worker-owned. But today left-wing politicians are pushing capitalism for the masses perilously close to socialism. On June 5th Bernie Sanders, a senator and candidate for the Democratic presidential nomination in 2020, gatecrashed Walmart's annual general meeting in Arkansas, demanding that the retail giant put a worker on its board. He has also unveiled a policy that would force big firms to give a portion of their stocks to a fund controlled by employees, which would pay them a regular dividend. This shares features of a proposal by Jeremy Corbyn's Labour Party in Britain.

Other presidential hopefuls, most notably Elizabeth Warren, another firebrand senator, also decry the lowly position of workers in America, and tie it to wealth inequality, the pre-eminent economic gripe this campaign season. They are right. If employees held more company stock—as top executives do thanks to share allocations—America's wealth gap, in which the top 10% of households own 80% of America's financial assets, may become a bit less gaping. But compelling rather than coaxing firms to give away shares to workers jeopardises a delicate compromise between progressives and conservatives that has historically helped advance the cause of employee ownership in the West.

Employee ownership has many virtues. Its radicalism appeals to the left: it boosts workers' wealth. Its conservatism pleases the right; workers gain a stake in capitalism's future, which may improve their performance, and so that of the business. Not all schemes work, but studies show that on average employee-owned firms benefit from higher output per worker, a more stable workforce and higher returns on assets. According to a study in 2017 by Nancy Wiefek of the National Centre for Employee Ownership, an industry body, employee-owners enjoy significantly higher median income and job tenure than workers without ownership (though there may be other explanations for this).

America leads the way in the number of blue-collar capitalists. But even it still has a long way to go. Almost 40% of adult American workers are engaged in some sort of profit-sharing. The number of Americans enrolled in employee stock-ownership plans (ESOPs), in which firms grant shares to workers, has risen steadily to 14.3m in 2016, from 13.5m in 2010. ESOP assets total $1.4trn. Britain's comparatively modest employee share ownership is viewed almost reverentially. When Julian Richer, 60-year-old owner of a British hi-fi chain, announced last month that he would put 60% of his shares into a trust for employees (he has no children), he was showered with praise. At last, the country found a capitalist it could like.

Not everyone applauds the idea. As Joseph Blasi of Rutgers University observes, for decades critics warned that employee ownership is a risky substitute for pay, because it encourages workers to put too many eggs into one basket. If their firm goes bust they can lose everything—as happened with United Airlines in 2002. Policymakers have promoted diversified 401(k) pension plans instead. Other opponents say it encourages free-riding; if you expect others to do the heavy lifting to ensure their asset maintains value, you may be tempted to slack off.

Mr Blasi says such claims are mostly disproved. Employee ownership typically comes on top of pay, rather than substituting some of it (not at United, which explains that fiasco). Workers seldom hold more than 15% of their financial wealth in their own company, which is manageable. As for free-riding, Tarbell's account illustrates that other workers will not tolerate loafers.

Expansion of employee ownership could use a tailwind. At last count 158,000 private firms in America were in the hands of baby-boomer founders on the verge of retirement, according to Ms Wiefek. These companies could be sold partially or wholly to their employees via an ESOP scheme. But take-up is much lower than the potential suggests. To accelerate it, the government could provide more information, modest tax inducements or procurement policies that favour employee-owned firms. Richard Freeman of Harvard University sees scope for using employee ownership to offset possible job losses to artificial intelligence (AI). His answer to the question 'Whatcha gonna do, workers, when AI Robomania runs over you?' as he wrote in a recent paper, is to spread ownership of capital more widely.

An esop to the rich

The best bet may be to rekindle a spirit of self-interest among businessmen. They enjoy a disproportionate share of capitalism's rewards—and worry about its fate. Based on public-company filings, Mr Blasi estimates that big firms have shelled out at least 0.5% of their shares a year to their five most senior executives. Boards could do more to broaden ownership to the rank and file. The reckless remedies proposed by Mr Sanders, Mrs Warren and Mr Corbyn should not put firms off. Bringing capitalism to the masses has a rich history, dating back to Procter and bolstered in the Thatcher and Reagan years of the 1980s. It deserves a rich future. As Tarbell said, all it takes is "brains, freedom from isms, humanity and a large firm sense of responsibility".

America First trade policy
Bully for you

Bully for you

President Donald Trump is trashing deals in favour of tariffs

That may backfire on America

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NEW FRONTS in President Donald Trump's assault on the global trading system are opening up by the day. On May 30th he dropped a bombshell on Mexico, threatening a 5% tariff on all its exports to America, rising to 25% by October if immigration flows do not fall (see article). On May 31st he turned to India, announcing the end of longstanding trade preferences on around $6bn-worth of its exports to America. A proposal is being considered to enable the administration to increase tariffs on imports from countries deemed to be manipulating their currencies. The appointment of judges to the court of appeals of the World Trade Organisation (WTO) is being blocked. Japan and the European Union are on notice that America may impose tariffs on their cars. Meanwhile the biggest trade fight of all, with China, is getting bloodier.

The trade element of Trumponomics is a striking departure from previous administrations' policies, and a stiff challenge to the multilateral trading system. But critics must face some uncomfortable truths. The first is that some of America's frustrations with its trading partners are justified. China's system of subsidies and state-directed capitalism harms competing firms elsewhere, and raises questions about surveillance and security. India's protectionism has long been an obstacle to trade liberalisation. And the WTO's dispute-settlement system has serious weaknesses.

Moreover, America has the strength to force others to comply with many of its demands. Although its share of the world economy (measured at market prices) has fallen from 38% in 1969 to 24% this year, it is still the world's most important commercial market. When previous tariffs on Mexican and Canadian steel and aluminium were removed, trade between the three North American countries was still more restricted than before. But Mexicans and Canadians celebrated their loss as a win, since it could have been much worse.

Mr Trump may even succeed in creating some manufacturing jobs in America, as companies respond to the risk of new tariffs by deciding to serve a greater share of the domestic market from within. Tariffs certainly seem to be spooking some into avoiding China. Analysts at Bank of America Merrill Lynch report that companies are increasingly sourcing from elsewhere, and "localising"—that is, increasing production capacity in markets where they sell.

Finally, low tariffs are unlikely on their own to derail the affected economies. Currencies and commodity prices fluctuate all the time, says Paul Bracher of Frost Bank, a Texas-based supplier of trade finance, and though a 5% tariff would crimp his customers' profits, as margin compressions go it would be "not that big".

But a 25% tariff would be a "game-changer", he says, as few companies could adjust fast enough to avoid them. The Mexican government would retaliate, and business confidence in America would suffer. (On June 4th Jerome Powell, the Federal Reserve's chairman, hinted that it would cut interest rates if necessary.) Economists at Citibank calculate that 25% tariffs could cause Mexico's GDP to contract by 4.6% if prices and exchange rates do not adjust, or crush the value of the peso by 59% if they do. These figures were not intended as predictions, but to make the point that "the consequences of this policy could be so extreme we see it as unlikely to happen".

Chinese officials are drawing up a list of "unreliable entities", which could mean sanctions for American companies complying with their government's ban on sales to Huawei, a Chinese telecommunications company. Erin Ennis of the US-China Business Council, a lobby group, worries that America is pushing past the point at which China will be persuaded to change its policies. Mr Trump's tariffs may well result in the Chinese government increasing subsidies, she says, in order to speed up the development of domestic goods and services that can replace foreign ones.

Indeed, Mr Trump may even have pushed his own party too far. America's constitution says that trade policy falls to Congress, though over time Congress has delegated certain powers to the president. He has tested the limits of that delegation, for example by claiming national security as justification for tariffs on imported steel and aluminium. But the latest threat of tariffs on Mexican imports requires him to declare a state of national emergency, which Congress has the power to override. Even if it declines to, a court might. John Murphy of the US Chamber of Commerce, a business group, says that "the Chamber is examining all legal options".

In its admirers' telling, Trumponomics is muscular pragmatism. Regarding China, they say that earlier efforts failed and multilateral approaches are timid or naive. If you believe that trade weakens economies and steals jobs, it all makes sense.

But it also sits ill with Mr Trump's glee when he actually agrees to a trade deal. Last November he signed one with Mexico and Canada, the USMCA, and boasted of making progress in talks with China. The president can be a dealmaker, or, in his own phrase, a "tariff man". He cannot be both.

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Time for a makeover

In its second term, will India's ruling coalition be bolder about reform?

A new finance minister may augur a new approach

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INDIA'S NEW finance minister, Nirmala Sitharaman (pictured below), is an unusual figure in the country's politics. She is the first woman to head the finance ministry since Indira Gandhi seized the post (while also serving as prime minister) 50 years ago, after nationalising many of India's banks. She is an economist. But unlike most in her Bharatiya Janata Party (BJP) she hails from the country's south, having grown up in Tamil Nadu, one of the few big states to resist the BJP's advances in the recent election. She claims a humbler background than her predecessor, Arun Jaitley. Her father worked for India's railways and she spent a month selling home furnishings at Habitat, a shop in London.

Ms Sitharaman thus embodies the BJP's broadening appeal to aspirational Indians outside its traditional heartlands. But will she help it fulfil those aspirations? On the day she was appointed, India's statistical authority reported that growth in the first quarter of the year had slipped to 5.8%, its slowest since Narendra Modi was elected prime minister in 2014 (see chart). The government also belatedly released a report it had withheld showing that unemployment had risen to 6.1% in the year ending June 2018. In India, the jobless are often not the poorest, who cannot afford not to work, but the newly educated, qualified for better jobs that have yet to arrive.

The prospects for a quick economic recovery depend partly on the banks Ms Gandhi nationalised. They are responsible for most of the bad loans that have long clogged lenders' balance-sheets. Optimists point out that the share of bad loans has begun to fall. And several troubled banks have been permitted to expand credit after a more lenient official was put in charge of their regulator, the Reserve Bank of India (RBI), the country's central bank.

The RBI cut interest rates for the third time this year on June 6th. It must also keep a close eye on India's lightly regulated "nonbank" lenders. They have kept credit flowing to households and industry in recent years, financing themselves by selling bonds and commercial paper to yield-hungry mutual funds, until one lender defaulted in September 2018.

The prospects for a cyclical recovery seem brighter than the chances of deeper reform. Ms Sitharaman is unlikely to enjoy the same autonomy given to Mr Jaitley, a cabinet heavyweight who helped pave Mr Modi's path into national politics. His departure due to ill health may mean his boss takes a closer interest in economic affairs. That is not necessarily a good thing.

As chief minister of Gujarat, Mr Modi excelled at drumming up investment from big corporations and breathing down civil servants' necks. But that approach has translated less well to the role of prime minister, which requires more indirect methods, such as creating the right incentives and delegating to the right people. A bureaucrat quoted in "The Lost Decade", a new book by Puja Mehra, talks of long, tedious meetings, in which Mr Modi would monitor his policies' implementation and the civil servant would scoff the peanuts and chickpeas.

After Mr Modi's first victory in 2014, liberals hoped the pro-business tub-thumper would become a pro-market prime minister, encouraging investment by liberalising labour and land laws, relying on statecraft, not stagecraft. Instead he became what Indians call "pro-poor", providing a multitude of redistributive welfare schemes, such as cash handouts for small farmers.

These schemes seemed inspired by the government's lingering fear of being outflanked on the left. It largely abandoned its efforts to ease the acquisition of land for industrial purposes after Rahul Gandhi, the leader of the opposition Congress party, accused it of being a "suit-boot ki sarkar"—a government for suited-and-booted corporations. It was slow to help public-sector banks write off their bad loans, in part because it did not want to appear soft on crony capitalists.

Since this timidity helped win it a second landslide, Mr Modi would seem to have little reason to abandon it. But perhaps his victory has finally killed his fear of the opposition. Ms Sitharaman was described as a "one-person demolition squad" after her impassioned response in parliament to Mr Gandhi's accusations of government cronyism. Having bulldozed the opposition, perhaps Mr Modi will now feel emboldened not to copy it.

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Buttonwood

The long-term decline in bond yields enters a new phase

What will happen when interest rates eventually start to rise again?

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AT THE END of 1989, an American in London received a call from a friend back home. The caller had watched the fall of the Berlin Wall and the toppling of Nicolae Ceausescu in Romania with growing dismay. He was at the end of a four-year course in Russian Studies at an elite university with hefty tuition fees. He had learned all the Kremlinology a would-be cold warrior could need—but not that the cold war might suddenly end. "I just took a $60,000 bath," he said.

This story comes to mind not so much because of fears of a new cold war, this time with China, but because of the bond market's recent response to such fears. Long-term interest rates have tumbled almost as swiftly as communism fell in Europe. The yield on a ten-year Treasury bond has plunged from 2.5% to 2.1% in the past month. Ten-year Bund yields have turned negative again and have reached a new all-time low.

What happens to long-term interest rates in large part reflects what is expected to happen to short-term rates. The bond market's Kremlinologists expect the Federal Reserve to cut them soon. Other central banks will seek to keep money easy. One consequence is that the secular decline in real interest rates is unlikely to reverse soon (see chart). The implications are far-reaching: the whole edifice of asset prices is founded on a low-rate regime. But what if that regime were to come to an abrupt eventual end?

It is hard to be truly confident about the future path of real interest rates. The reasons for their decades-long decline are not well understood or agreed upon. One school stresses an increased desire for saving. Demographic change is part of this story. As a large chunk of the rich world's population approaches the end of their working lives, they seek to set aside more of their income for retirement. The integration of high-saving China into the world economy is another factor. In this view, long-term interest rates had to fall simply to clear the saturated global market for savings.

Another school says that low bond yields are a distortion caused by the policies pursued by central banks in the rich world. They have kept short-term interest rates close to (or in some cases below) zero for much of the past decade. They have also spent trillions of dollars buying government bonds with the explicit goal of driving down long-term interest rates. In their defence, central bankers say they set interest rates to keep the economy purring. If they had pressed down too hard on the monetary pedal, the result ought to be a burst of rising prices.

In the absence of rising inflation it seems reasonable to expect that the era of low interest rates will last. If yields on the safest government bonds remain low, the expected returns on other assets—the earnings yield on equities, say, or the rental yield on property—should stay in line. The result would be that all assets will continue to look expensive relative to their long-run averages.

As logical as this seems, it is nevertheless disquieting. At some stage the influences that have pushed down yields will attenuate, even if this is not soon. Long-term interest rates will surely rise again. It is reasonable to believe that this will not be sudden. Demographic change happens slowly. So perhaps asset prices will adjust slowly to the new reality, whenever it dawns. But it is quite hard to imagine a world in which real interest rates grind upwards and asset-holders avoid taking a capital loss, says Shamik Dhar of BNY Mellon, a fund-management group. The uncertainty about the timing of even a gradual adjustment creates headaches, for instance for someone hoping to own a home. Buy at the wrong time, and you end up with a house that slowly loses value.

And what if real interest rates rise a lot more quickly than they fell? Well, they might. China is already a spent force in the global savings glut: its current-account surplus has dwindled to next to nothing. Baby-boomers moving into retirement might step up their spending. If rich countries turn once again to fiscal policy as a tool for ginning up their economies, there are plenty of asset-heavy projects (airports, roads, fibre-optic networks) to soak up savings.

Kremlinologists look for signs of shifting authority, for who's up and who's down. But when everyone is focused on who will be the next boss, they may all miss signs that the regime itself is cracking. For now, financial-market Kremlinologists are preoccupied with which assets to hold and which to avoid. But at some point capital will become scarcer. Somebody may find that they have taken an expensive bath.

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E-rupification

Indians are switching to digital payments in droves

Payment fintechs are better integrated with banks in India than elsewhere

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THE ALLEYS of the 150-year-old Chor (Thieves') Bazaar, a colourfully named flea market in Mumbai, are crammed with goats, used tyres, speakers, drills and other assorted ephemera. But even in this unlikely place, modern payment methods are gaining a foothold. In stalls abutting the market, bags of sand can be paid for by providing a phone number or scanning a QR (quick response) code. Many countries have seen digital payments take off in the past few years; in India, where little over a decade ago a cheque could take more than two weeks to clear, it feels like a revolution.

It is one that has been shaped, not always intentionally, by government policies. September 2010 saw the arrival of Aadhaar, a system of biometric IDs that could be used to open a bank account. After becoming prime minister in 2014, Narendra Modi chivvied bankers to open accounts for everyone. Around 360m basic "Jan Dhan" (people's wealth) accounts were opened, adding to the 243m accounts already in existence. But many sat empty, or held just a rupee or two put in by banks under government pressure to reduce the number of zero-balance accounts.

Two further developments gave those unused accounts a purpose. The first was the launch in 2016 of the Unified Payments Interface (UPI), an interbank money-transfer system. The second was "demonetisation" later that year, when 86% of banknotes in circulation were recalled. That caused economic carnage—but also gave digital payments a galvanic boost. Paytm, India's largest digital-wallet firm, took out ads thanking Mr Modi for the move.

Paytm now claims 371m users. PhonePe, a subsidiary of Walmart-owned Flipkart, claims more than 150m, and BHIM, run by a government-led bank co-operative, 46m. The value of digital transactions has risen more than 50-fold in the past two years, with many more smaller payments (see chart). Even the drivers of Mumbai's three-wheeled auto-rickshaws have begun accepting payments that go through UPI to their (presumably new) bank accounts.

China's giant payment apps, WeChat and Alipay, send transfers between their digital wallets, going through an official clearing house. Cryptocurrencies, which some tout as a possible future for digital money, touch the regulated financial system only when they are bought and sold. By contrast India's pioneers, which started with digital wallets, are fast becoming interoperable with UPI, which sends money directly between bank accounts. The result is both well integrated with the banking system and flexible enough to allow innovation in serving customers.

Regulators are happy with the system, says Saurabh Tripathi of BCG, a consultancy, since it protects deposits, increases financial inclusion and cuts tax evasion from unreported cash deals. It also suits banks, since they get fine-grained information on transactions that can be used for credit analysis and product customisation.

The global tech giants like the look of it, too. Google Pay is already available in India and Amazon Pay plans to launch soon. WhatsApp, which has 300m Indian users, has run a trial of a payments service with 1m of them, though the government's requests regarding privacy and data-localisation are delaying it going nationwide. The success of other dominant chat apps that have moved into payments, such as WeChat Pay in China and Kakao Pay in South Korea, suggests that whenever its launch happens, it will go with a bang.

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Evolutionary road

The Federal Reserve is reviewing its monetary-policy framework

It is trying to manage expectations

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"MOST OF AMERICA thinks the Federal Reserve is a national forest." That reminder that the general public has little idea what a central banker does was offered by an incumbent governor of the Federal Reserve to Alan Blinder when he joined in 1994. He passed it on 25 years later, on June 4th, to a star-studded group of economists and policymakers gathered at the Federal Reserve Bank of Chicago to discuss the Fed's first public review of its framework.

The review is a year-long exploration of how the Fed should adapt to trying economic times. It typically slashes interest rates by around five percentage points in a recession. But chronically low rates mean that it now has less than half of that room for manoeuvre. The Fed is seeking to answer three questions. Should it update its forward-looking inflation target to consider past inflation too? Should its toolkit be expanded? And could it communicate and implement its policies better?

What connects all three is the difficulty of managing expectations. At the effective lower bound, where interest rates are at or very near to zero, the Fed cannot simply slash short-term rates. It must either try other sorts of interventions in financial markets—or make promises and hope they are believed. In theoretical models, such expectation management can be extraordinarily powerful. If the Fed can convince consumers that it will maintain loose monetary policy, they may open their wallets, thereby helping to end the slump.

Lars Svensson of the Stockholm School of Economics argued for an average inflation target, on the grounds that it could move inflation expectations in the right direction when interest rates hit the lower bound and would be relatively easy to communicate. It could also allow the Fed to rely less on big financial interventions such as quantitative easing, which other speakers warned could mean risks to financial stability building up.

A move in that direction seems possible. But it seems unlikely that the Fed will eventually decide that a radical rethink is needed. In part, that is because of mounting evidence that its tools did not perform so badly last time round. Janice Eberly of Northwestern University, James Stock of Harvard University and Jonathan Wright of Johns Hopkins University argued that from 2012 the Fed's actions contributed meaningfully to the recovery, and indeed could be implemented even more aggressively to speed up future recoveries. And Eric Sims and Jing Cynthia Wu of the University of Notre Dame argued that there is more scope to replace conventional policy with quantitative easing than with either forward guidance or negative interest rates.

Jerome Powell, the Fed's chairman, emphasised that he was coming to the review with an open mind. But he also said that in the depths of the crisis policymakers had "major questions" about whether promising good times ahead "would really have moved the hearts, minds, and pocketbooks of the public".

That doubt is scary for central bankers, whose power comes from their credibility. Perhaps in the current calm the public could be readied for a recession-busting exercise in persuasion. But however earnestly a Fed governor pledges to boost inflation in slumps, a successor may tighten if inflation surges. It is therefore reasonable to doubt that the Fed can keep its promises. The danger for central bankers is that they try to manage expectations, fail—and leave their credibility in tatters.

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Fifty ways to leave your LIBOR

LIBOR is due to die in 2021. Hurry up and drop it, say regulators

Too late to get a new plan

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JUST DROP off the key. Yes, it means breaking a complicated yet rewarding long-term relationship: $240trn-worth of derivatives, loans and bonds are priced off LIBOR, the London Interbank Offered Rate; $200trn-odd are in dollars alone. But this key interest rate is due to die. Almost two years ago Andrew Bailey, the head of Britain's Financial Conduct Authority (FCA), LIBOR's regulator, in effect said it would expire at the end of 2021. In recent days American and British supervisors have again urged banks: hop on the bus.

A few years ago LIBOR was undermined by a rate-rigging scandal which highlighted ills that might anyway have proved fatal. Notionally, it is the rate at which banks can borrow from each other, for up to a year, in dollars, sterling, Swiss francs, yen and euros. It is calculated from daily submissions of panels of 11 to 16 banks. But banks now scarcely tap interbank markets. On June 5th Sir Dave Ramsden, a deputy governor of the Bank of England, said that in the first quarter of 2019 on average only nine deposits totalling just £81m ($105m) a day underpinned six-month sterling LIBOR.

Regulators want markets to move to new benchmarks based on overnight rates and a far richer seam of transactions. America's Alternative Reference Rates Committee (ARRC), a group of market participants convened by the Federal Reserve, plumped for the Secured Overnight Financing Rate (SOFR), derived from $1.1trn-worth of transactions daily, mainly Treasury repos. British supervisors are promoting the Sterling Overnight Index Average (SONIA), an unsecured rate dating back to 1997 but reformed last year. Its average daily base is £40bn.

The shift has begun. But as a new report by Oliver Wyman, a consulting firm, makes clear, there is still much to do, especially in the dollar markets, where SOFR had to start from scratch, and cash markets (for example corporate loans and mortgages). Thus SONIA's share of sterling swaps is up to 40%, but there is little liquidity at the longer end; SOFR accounts for less than 0.5% of dollar LIBOR swap volumes. In the dollar futures market almost $1trn-worth of SOFR contracts were cleared in March, but that is just 1% of the LIBOR tally. In the sterling cash market SONIA floating-rate notes made up over three-quarters of the total in the first quarter. Some 80 SOFR dollar bonds have been issued, but mainly by government agencies.

Virtually no loans linked to the new rates have been made at all. In cash markets, Oliver Wyman says, "LIBOR-based contracts are still being entered into at a rate little reduced from 2017." Little has been done to move existing contracts, of which many last beyond 2021, off LIBOR.

Several factors have held up progress. One is a lack of adequate "fallback" terms in contracts, stating what rate should apply when LIBOR vanishes. Existing contracts may say that if LIBOR is not published the previous day's rate must be used, but that is meant only as a temporary fix. Using LIBOR's last value could mean large gains and losses; but so could switching to a new benchmark. A second factor is that overnight rates lack the term structure—one-, three-, six- and 12-month rates—intrinsic to LIBOR. It is not hard to calculate backward-looking averages, but it is a big change from LIBOR. Borrowers are used to fixing interest payments in advance, rather than having to wait until the end of the period to know the precise rate they face.

Regulators say there's no need to be coy. Recently the ARRC proposed new fallback language; in any case, Randal Quarles, the Fed's vice-chair for supervision, told an ARRC conference in New York on June 3rd, the "easier path...is simply to stop using LIBOR". Familiar as the old rate is, it is going to disappear. Stick with it, and "history may not view that decision kindly". Although forward-looking term rates may not be ready by the end of 2021, David Bowman, a Fed official, urged banks not to wait. Ditto Mr Bailey in London two days later.

Banks point to a third problem: unlike LIBOR, SOFR, being based on Treasury repos, does not reflect their funding costs. In times of stress SOFR could fall while those costs rise. Simply adding a fixed spread will leave banks vulnerable if it is too thin and rile customers if too fat. (Such difficulties help explain why European regulators have extended the life of EURIBOR, the basis of many euro-zone mortgages.)

ICE Benchmark Administration, which calculates LIBOR, thinks that data on trades in international banks' bonds could be used to add a spread to a SOFR-based yield curve. The resulting index would do the same job as dollar LIBOR while using the Fed's preferred rate. Separately, the American Financial Exchange, a marketplace for interbank lending with 150 members (and indirectly serving 1,000 banks), has derived AMERIBOR, a benchmark rate for regional and community banks. So far a couple have used it to price loans. It plans to launch AMERIBOR futures this summer.

To hasten the handover, Oliver Wyman recommends that regulators remove disincentives, eg in margin requirements and taxes, to switch from LIBOR-based derivatives; and make up their minds about credit-sensitive benchmarks. Clearing houses should move faster to base their rules on SOFR, which would foster demand for derivatives. And banks should stop procrastinating. Set yourself free.

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Free exchange

Advertising may make people miserable, but it still has its uses

Workers keen to buy more luxury goods keep toiling away

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EVERY YEAR, as Americans polish off their Thanksgiving feasts, a particular genre of advertisement begins to air. The details vary, but the plot does not: one family member surprises another with the Christmas gift of a luxury car, often adorned with a cartoonishly large bow. The recipient never betrays a hint of the dismay one might expect of someone whose partner has spent tens of thousands of dollars without consultation. Such a car can easily cost more than the median annual income of an American household, and most people who see these ads will not be able to afford one. But the envy such spots induce serves an economic purpose, even as it leaves the majority feeling worse about themselves.

Ads and other forms of marketing ostensibly serve a straightforward economic role. Firms selling goods and services need to tell consumers about the availability and desirability of their wares, and spend on advertising to do so. By informing consumers about the relative merits of various products, ads improve the quality of purchasing decisions and, conceivably, leave both firms and shoppers better off than they would be in an ad-free world.

Yet advertising might fall short of this ideal in many ways. It need not be honest or representative of the full range of available products, for example. Some firms target impressionable children, in ways which could contribute to long-run health risks. London has recently banned junk-food advertising on its transport network, a prohibition campaigners want to extend. And honest or not, successful ads induce a desire to spend, perhaps on things the audience does not need or cannot afford. The information content of ads for fancy vacations, bespoke cars or diamond-studded watches does not much matter for people whose budgets cannot accommodate them. Their main takeaway is that others get to enjoy things that they themselves cannot afford. If the effect of advertising is mostly to encourage people to want things that they cannot have, rather than to direct them towards items that are a good match for their needs and tastes, then it is possible that spending on advertising leaves society worse off overall.

Some recent research suggests this might indeed be the case. A forthcoming paper by Chloé Michel, now at Swiss Re, Michelle Sovinsky of Mannheim University, Eugenio Proto of Bristol University and Andrew Oswald of Warwick University attempts to unpick the effect of advertising on welfare. The researchers used three decades' worth of survey results from a sample of nearly 1m Europeans, spread across 27 countries, to compare information on self-reported life satisfaction with variation in total advertising spending as a share of GDP. After taking account of other macroeconomic variables such as unemployment, and individuals' socioeconomic characteristics, they find a significant and inverse relationship between spending on advertisements and national welfare. They estimate that a doubling of ad spending is associated with a subsequent drop in reported satisfaction of 3%—an effect about a quarter as strong as a spell of unemployment.

It is possible that this result reflects the effect of some other factor which influences both advertising and well-being. And the authors are careful to note that they cannot be certain about the causal mechanism at work. But their findings may illustrate an aspect of the economy that has puzzled some economists for more than a century. In "The Theory of the Leisure Class", published in 1899, Thorstein Veblen, a Norwegian-American economist, explored the nature of what he termed "conspicuous consumption". Veblen argued that consumption is not merely about satisfying needs, but is also used to signal status and prestige.

The priciest cars may offer more nifty features and a smoother ride than a cheaper marque, but the vast difference in price is not primarily down to such advantages. Rather, the buyer is paying for such cars' value as a status symbol, which derives from the fact that very few people can afford one. (Following his insight, economists use the name "Veblen good" for items for which demand rises with price, though it is not the high price itself that generates the increased demand but rather the exclusivity that the high price confers.) These luxury items defy normal economic logic. In the mass market, productivity-boosting innovations that allow firms to sell better products at lower prices are a route to success. For producers of conspicuous-consumption items, such cost-cutting does not conquer the market but destroys it.

Less good than a feast

The notion that people might buy high-cost items in preference to serviceable alternatives simply to set themselves apart from the less well-off would seem absurd, were the economy not chock-a-block with examples, from designer handbags to silver cutlery to oxygenated energy drinks. Advertising enables the process. For goods to grant high status, there must be consumers who want but cannot have them. Ad campaigns featuring sleek cars bedecked with oversized bows add to the value of luxury brands by informing the masses of how desirable they are—and how inaccessible.

Veblen, though, saw the rich as a largely unproductive class of capital-owning moochers, who profited off the useful labour of working people (hence the "leisure class"). In recent decades, however, the share of Americans working long hours has grown, and has risen fastest among those earning the highest wages—an odd exception to the global norm that working time declines with income. The status envy induced by conspicuous consumption may play a role. In rich countries, most people's basic needs have long since been met. To keep workers striving—those on higher incomes especially—there must always be more desirable consumer goods and services just out of reach. Perpetual dissatisfaction may well boost economic growth by keeping highly productive workers who might otherwise enjoy more time with their families chained to their desks. But it is a funny sort of prosperity that depends on people never being satisfied with their lot.

This article appeared in the Finance and economics section of the print edition under the headline "Enough is never enough"

Alternative energy
Castles in the sky?

Alternative energy

An innovative approach to making electricity from the wind

Fly a kite that powers a generator

Print edition | Science and technology Jun 8th 2019

THE WIND BLOWS more strongly at higher altitudes. That is why wind turbines have grown ever taller. The blade tips of today's biggest now reach up a dizzying 260 metres, the height of the Transamerica building in San Francisco. Many dream of capturing stronger winds even higher up than that, but building taller turbine masts and constructing blades able to withstand the terrifying stresses involved in high-altitude wind gathering are costly. A number of firms are therefore developing a different and, they hope, ultimately cheaper approach to generating electricity at great heights. Their idea is to skip the mast altogether. Instead they propose to fly kites.

The kite developed by SkySails, a German firm, is a rectangular parachute-like structure attached to an 800-metre-long tether. This tether starts off coiled around a horizontal drum that is mounted on an axle which is anchored at each end in the shipping container in which the system's generator is housed.

SkySails' kite is launched, like a recreational kite, into the wind at ground level. Then, as the kite is pulled up by the wind while being manipulated to travel in a series of figures-of-eight in order to achieve a constant, optimal speed, the tether uncoils, spinning the drum. That powers a generator. Once the tether is fully extended, the kite is angled to catch less wind, reeled partway back in, and allowed to reel out again. In-reeling, according to SkySails' boss, Stephan Wrage, consumes only 4% of the energy the kite generates on its way out, so the process is pretty efficient.

Let's go fly a kite

The SkySails Power system, as it is called, goes on sale next year. A single unit will produce 200 kilowatts—enough to run about 100 homes. It will, Mr Wrage says, cost about €300,000 ($340,000). At $1,700 a kilowatt, that is half the cost of a conventional turbine of equivalent capacity, and is comparable with the cost per kilowatt of industrial-scale turbines that have outputs measured in megawatts. Nor is SkySails alone in designing a system that works with a simple, wind-launched kite of this type. Kitepower, a competitor in the Netherlands, has come up with a similar arrangement, albeit somewhat smaller, which it, too, expects to be on sale next year. Other firms, however, are working on kites that are launched actively from the ground, rather than relying on winds near the surface for their initial lift.

One such is TwingTec, a Swiss firm. Its prototype rises dronelike into the air, lifted by electrically driven propellers at the end of its wings (which have a combined span of three metres). The kite then stays aloft until its sensors indicate that the wind has died down, after which it lands itself automatically on a truck-top pad. TwingTec is now building a bigger version, with a wingspan of 5.5 metres, that will begin producing power for BKW Energie, a Swiss utility, in October.

Another system with active launch is that designed by Ampyx Power, a Dutch company. Its prototypes, which also have a wingspan of 5.5 metres, are propelled into the air by catapult—though, like TwingTec's, they also have propellers to allow a controlled descent and landing once a tour of duty is over.

These current versions, though, are just the beginning. The firm hopes, later this year, to fly an arrangement with two fuselages and a wingspan of 12 metres. And even that is but a stepping stone. The target is a wingspan of 36 metres. This version, scheduled for 2024, will have an output (2.36 megawatts) and a price (€2.4m) about the same as those of a standard turbine in a wind farm.

Nor is it absolutely necessary that the electricity generation is done on the ground. Makani, a firm recently absorbed by Alphabet, Google's parent company, has a different approach. It is lifting the generators into the sky, on board a pilotless aircraft with a wingspan of 26 metres. This craft has eight rotors, which act as propellers for take-off and landing. Once at operating altitude, however, they become miniature turbines. The electricity they generate (600 kilowatts at full capacity) is sent to the ground through a power line encased in a tether nearly half a kilometre long. Makani's prototype has been tested in Hawaii and, later this year, a further series of tests from an oil platform off the coast of Norway are planned.

Up to the highest height

Whether power-generation from high-altitude winds actually can compete with existing turbines remains to be seen. The potential is certainly there. Airborne Wind Europe, an industry group based in Brussels, calculates that the wind blows fast enough at heights of around 500 metres for this form of energy production to work almost anywhere in Europe. Lower down, however, the strongest winds are often found in coastal areas. These are places where population densities are frequently high and land for onshore wind farms is thus expensive, while building those farms offshore increases the awkwardness of construction and maintenance.

The mechanics of kite-flying, however, are more stressful than those of a wind turbine revolving smoothly and regularly. Flying tight figures-of-eight in gusty winds while pulling on a tether requires a robustness of structure and a precision of control that go beyond those involved in conventional aeronautics. And if, despite all precautions, a tether were to snap, measures would need to be in place to bring both it and the kite once attached to it safely back to earth. Moreover, air-traffic-control authorities will doubtless have something to say if their airspace seems likely to be invaded by fleets of giant kites.

Regardless of all this, high-altitude wind generation is an intriguing idea. In a world searching hard for alternatives to fossil fuels, it seems a promising option. The next few years should show whether or not that promise can be realised.

This article appeared in the Science and technology section of the print edition under the headline "Castles in the sky?"

The tiniest of clues

Researchers find a way to use minute samples to detect forged paintings

Radiocarbon dating can be done on microgram quantities

Print edition | Science and technology Jun 8th 2019

THE AMOUNT of creativity that forgers put into their work can sometimes rival that of the artists they copy. A sharp eye and an uncertain provenance might suggest to someone that a particular work is counterfeit, but often science is the only way to prove it. This can be done by analysing the materials the artist used, to see if they are contemporary with the claimed date of the painting. Forgers, though, are wise to this. Some remove the paint from old canvasses and reuse them for their creations. They also apply pigments prepared in period ways. Such trickery could become easier to expose with a new technique to spot modern forgeries from the tiniest of samples.

One of the difficulties with the laboratory analysis of a painting is obtaining samples of a sufficient size. Often the tests involved are destructive, so the same sample cannot be tested twice to confirm the results. A piece of wood from the back of a frame or a fragment trimmed from the edge of a canvas might be an acceptable loss. But taking a portion of paint from the picture itself could be a problem, especially if it damages what could turn out to be an extremely valuable work.

One technique is to use radiocarbon dating to establish the age of any organic materials in the sample. This process relies on measuring the presence of carbon-14 (14C), a mildly radioactive isotope created naturally in the atmosphere by cosmic rays. Since it is radioactive, it decays away, so old things have less of it than modern ones—and exactly how much less is predictable. Again, though, sample size can be a problem. Radiocarbon dating used to require samples in the region of tens of grams, but advances in scientific methods mean the amount of test material required is being dramatically reduced.

The latest reduction was reported this week in the *Proceedings of the National Academy of Sciences*, by Laura Hendriks of ETH Zurich and her colleagues. By converting a sample into carbon dioxide and then into ions, before using an accelerator mass spectrometer, a sensitive instrument capable of measuring the quantity of 14C present, Dr Hendriks has brought the amount needed down to millionths of a gram.

The team tested their technique on a known forgery, a painting entitled “Village Scene with Horse and Honn & Company Factory”, which imitates an American primitive folk-art style. The painting is dated May 5th 1866 and signed “Sarah Honn”.

The researchers took two samples. One, weighing 330 micrograms (as millionths of a gram are known), consisted of a few fibres from the canvas. Testing these produced a date range showing they were consistent with the claimed date of the painting.

Determining the age of the paint was trickier. A fleck weighing just 160 micrograms was taken from part of a white-painted building on the canvas. This contained inorganic pigments in an organic binding medium overlaid by a shellac varnish. What the group were interested in was the oil used in the binding medium, as this would have come from biological sources, such as seed oil, and would thus contain 14C that would have started decaying at the time the oil was produced.

First, the researchers needed to remove the varnish to avoid mixed ages from two different sources. Varnishes are often added later to paintings, so are not reliable for dating. Suitably cleaned up, the sample weighed only 58 micrograms. Nevertheless, this was enough to show that it contained an excess of 14C that was characteristic of when nuclear testing during the cold war added to the effects of cosmic rays, causing spikes in the usual background amount of the isotope in the atmosphere.

Detailed analysis revealed two possible periods for the binding medium’s manufacture: 1958-61 or 1983-89. That compares well with the real history of the painting. When he was convicted in 1990, after a decade of producing and selling fakes, Robert Trotter, an American artist, confessed that he had painted “Village Scene” in 1985.

Dr Hendriks’s experiment shows that it is now possible to date a sample of paint weighing no more than 200 micrograms. This could mean more paintings of disputed origin are offered for analysis—or maybe not if their owners are unwilling to contemplate bad news.

This article appeared in the Science and technology section of the print edition under the headline ”The tiniest of clues”

Diet and evolution

Modern humans may be evolving to deal with carbohydrate-rich diets

A new version of an old gene is spreading through the gene pool

Print edition | Science and technology Jun 8th 2019

IT IS EASY to assume that the long march of evolution has halted in modern man—that the safe, disease-free lives people now lead mean natural selection no longer operates on much of *Homo sapiens*. It is an attractive idea. Frances Brodsky of University College, London and her colleagues, however, beg to differ. A paper they have just published in *eLife* suggests that diet, at least, is still a selective pressure.

Dr Brodsky and her team study proteins called clathrins. These are involved in a range of matters physiological, but one of the molecules the team is investigating, encoded by a gene called *CLTCL1*, is concerned with the regulation of blood-sugar levels. *CLTCL1* comes in two forms, one more efficient than the other at encouraging the removal of glucose from the blood. The team decided to look into the evolutionary history behind this.

To do so they analysed the relevant DNA in 2,504 human genomes taken from a database called the 1000 Genomes Project. This project has collected samples from 26 human populations around the world. They also looked at chimpanzee DNA, and at fossil DNA from two extinct species of human, Neanderthals and Denisovans.

Putting all this information together they deduced two things. First, just under half of people alive today carry the more efficient version of the gene. Second, this version is also a more recent version of the gene. It seems to have started spreading during the Neolithic—the moment when humans started farming cereals.

Dr Brodsky suspects this is no coincidence. A cereal-based diet is far richer in carbohydrates than the diet of a hunter-gatherer. Once digested, those carbs will end up as glucose in the bloodstream. An inability to control high blood sugar is known as diabetes. And diabetes can be fatal. So a better way of removing glucose from the blood and into storage cells will be favoured by natural selection. A gene variant encouraging this would probably spread quite rapidly through a population of farmers.

There is, in fact, already one known example of something similar having happened—the persistence into adulthood of the ability to digest lactose, a sugar found in milk. Human children produce an enzyme, lactase, that lets them do this. Usually, this capacity is lost in adults. But populations descended from those that domesticated milk-producing animals such as goats and cattle often retain lactose-digestion into adulthood.

Whether the efficient form of *CLTCL1* really is still becoming more abundant—and people are thus evolving—is impossible to say at the moment. One thing which remains to be confirmed is that those with the less effective version actually do have problems regulating their blood-sugar levels. If that turns out to be true, though, and given that even today diabetes kills many people, the chances are good that this piece of evolution is still a work in progress.

This article appeared in the Science and technology section of the print edition under the headline "High-carb footprint"

Symbiosis

Fungi, it turns out, are canny traders of nutrients to plants

When phosphates are scarce, their price goes up

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IN THE SOIL, where plants' roots meet fungal hyphae, there are trading posts of a type that came into being more than 200m years ago—long before people got around to engaging in similar activities. These meeting places are the exchanges where plants provide fungi with nutrient molecules, such as sugars and fats, that they make by photosynthesis, in exchange for raw materials like nitrates and phosphates, which fungi are adept at collecting from the surrounding area.

That much is well established. Botanists have long wondered, however, how the details change when resources become patchy, and thus scarce in some places and abundant in others. A study just published in *Current Biology* by Toby Kiers of the Free University of Amsterdam suggests that, like cunning merchants who know how to make a profit, fungi exploit resource scarcity by marking up their prices. They demand more nutrients from plants in return for their valuable mineral commodities.

Such canniness has long been suspected. But proving it means tracking the raw materials as they are collected and distributed. That has proved tricky. Dr Kiers, though, thought she could do it using structures called quantum dots.

A quantum dot is a mote of matter a few nanometres across. It is made of a semiconducting material capable of fluorescing when struck by ultraviolet rays, and different sorts of dot fluoresce in different colours. Dr Kiers theorised that if she and her team attached quantum dots to particles of phosphate then they might be able to track those particles around as they were collected by fungi and passed along to plants. Matthew Whiteside, a member of her team, developed the technique, tested it and found that she was right. After sowing a Petri dish that played host to fungal hyphae and carrot roots with tagged phosphates Dr Whiteside found that he could, after sufficient time had passed, spot the tagged phosphates inside both hyphae and roots by shining ultraviolet light on them.

Dr Kiers then arranged for some patches of the Petri dish "garden" in which the fungi and carrots were growing to be rich in phosphates, and some to be poor. She also arranged for the phosphates in the rich zones to be tagged with dots that would fluoresce blue when bombarded with ultraviolet light and for those in the poor zones to fluoresce red. As she monitored the collection and trading of the phosphates from fungi to carrots she found that the fungi enthusiastically transported them across the hyphal network from areas of abundance to zones of scarcity.

Moreover, though she was unable to measure directly what price the carrots paid for their phosphates, she managed to do so indirectly. She found that hyphae growing in resource-poor patches put on more weight per unit of phosphate transferred to nearby roots than did those in patches of abundance. This, she argues, makes it clear that fungi in zones of scarcity are marking up the price of their products.

This article appeared in the Science and technology section of the print edition under the headline "An underground marketplace"

Russian literature
Smoke and dust

Smoke and dust

Vasily Grossman, the greatest bard of the second world war

Like "Life and Fate", the newly translated "Stalingrad" is a masterpiece

Print edition | Books and arts Jun 8th 2019

Stalingrad: A Novel. By Vasily Grossman. Translated by Robert and Elizabeth Chandler. *NYRB Classics; 1,088 pages; $27.95. Harvill Secker; £25.*

Vasily Grossman and the Soviet Century. By Alexandra Popoff. *Yale University Press; 424 pages; $32.50 and £25.*

DURING HIS final years, Vasily Grossman kept a few cherished mementoes in his shabby Moscow flat. One was a safety lamp presented by colleagues at the coal mine in the Donbas where, as a young chemist, he had worked to prevent explosions. Another was a child's alphabet block he found after the liberation of the Treblinka extermination camp.

Born in 1905 to a Jewish family in Berdichev, now in Ukraine, Grossman (pictured) had entered the camp after gruelling front-line service as a Soviet war correspondent for the Red Army's newspaper. In November 1944, in the journal *Znamya*, he published his essay "The Hell of Treblinka". It ranks not only as one of the first eyewitness reports of the Holocaust, but, as Alexandra Popoff says in her scrupulous but impassioned biography, as a work with "the everlasting quality of genuine art".

In an article he wrote in 1946 Grossman affirmed: "There is nothing more precious than human life; its loss is final and irreplaceable." The miner's lamp, the child's alphabet, testify to his core beliefs. Yet as a fine journalist, then a peerless novelist of the horrors of war and tyranny, his destiny was to inhabit times and places that ground up human beings by the million. In his novel "Stalingrad", which is only now being published in English, the sight of a dying old woman on a bombed boulevard prompts the anguished question: "Human suffering. Will it be remembered in centuries to come?" Or will the tears and despair disappear like "the smoke and dust blown across the steppe by the wind"? Grossman's oeuvre, which includes what may be the greatest fiction of the second world war in any language, has helped salvage that suffering from oblivion.

Western readers mostly know Grossman for "Life and Fate", his epic of the battle of Stalingrad and its aftermath. After its completion in 1960, the KGB confiscated the manuscript. Soviet censors decreed that the novel's unflinching comparisons between the barbarism of Nazi and Stalinist regimes would make it unpublishable for 250 years. Its Jewish author's vigilant attention to the anti-Semitism perpetrated by both systems embarrassed Soviet apparatchiks for decades.

Grossman died, poor and still under suspicion, in 1964. But by 1980 "Life and Fate" had reached the West via microfilm. In 1985 Robert Chandler's magnificent translation primed the book for fame in the English-speaking world. Radio and stage adaptations have enhanced its reputation as the "War and Peace" of the 20th century.

The parallel with Tolstoy, which both blessed and plagued Grossman, dates to the early 1940s. Stalin himself, Ms Popoff reports, had "anticipated a Soviet 'War and Peace'." Grossman, once a protégé of the Soviet literary guru Maxim Gorky, seemed a prime candidate to write it. Indeed, together with "Life and Fate", "Stalingrad" forms a consciously Tolstoyan fictional diptych inspired by the epoch-making Russian victory in 1942-43.

"Stalingrad" came first. Published in censored form as "For a Just Cause" in 1952, it contained sections reluctantly inserted to obey the party line. In 1956, after Stalin died, a new edition allowed Grossman to restore much of his own voice. But no fewer than 11 versions of the manuscript survive. For this translation, as forceful, sensitive and richly coloured as that of "Life and Fate", Robert and Elizabeth Chandler have woven the strongest unpublished material into the 1956 version.

Homer on the Volga

The result is another huge, seething fresco of front-line combat, domestic routine under siege, and restless debate. Again, Grossman transforms into art "all the savage grief and homeless happiness of those terrible years". Again, he resolves the impersonal waves of 20th-century history into brilliant particles of human life. The peril of each hour on the brink of destruction makes "the value of every individual" shine brighter than ever before.

"Stalingrad" (Grossman's original title) introduces many characters who return in "Life and Fate", in particular the extended family of the scientist Alexandra Shaposhnikova. The Jewish physicist Viktor Shtrum, her son-in-law and the ambiguous hero of the later novel, here plays a smaller but still pivotal role. Three generations of the clan labour, love and fight as the Red Army's chaotic, 1,000km retreat from the German invaders halts at the Volga. Finally, in the late summer of 1942, the Soviet "river of iron and steel" starts "flowing back, from east to west".

In the front-line posts, factories and power-plants of Stalingrad itself, with interludes in Moscow, Kazan and even in the German high command, Grossman knits a dozen plot strands into a single narrative. He shows how "a lacerating sense of historical change" cuts deep into the exhausted bodies and brooding minds of his characters. The battle scenes set in Stalingrad's "vast, rumbling smithy" have all the mesmeric thrill and dread that admirers will recall from "Life and Fate". The lyricism, tenderness and pathos of the moments of respite touch the same heights. An orphaned boy in a children's home who "could not tell anyone his pain", but finds comfort from a kindly cleaner, matters as much to Grossman—or rather, infinitely more—than the generals and leaders who sacrifice millions of pawns on their strategic chessboards.

There are, though, differences between the two masterworks. Unlike "Life and Fate", written after Stalin's death in the hope of greater freedom, Grossman drafted parts of the earlier book under duress. Some chapters of heroic labour in the fields or mines echo Socialist Realist doctrine. A very few pages parrot the sloganeering uplift of party orthodoxy.

Grossman still finds ways to spotlight the Holocaust—even though, as Ms Popoff notes, he completed the book as "Stalin's campaign against 'rootless cosmopolitans' was picking up steam". German officers mutter about "a real factory for processing Jews". Above all, his characters witness, suffer and reflect with a hyper-real intensity. It illuminates nearly every page like the hellish glow that lights up the night sky over Stalingrad. With the German axe "raised high in the air", the city becomes a second Troy, and Grossman its bard.

"What on earth's the 'Iliad' got to do with it?" asks one of Alexandra's daughters after a doomed friend refers to a captive Trojan princess. Simple: few works of literature since Homer can match the piercing, unshakably humane gaze that Grossman turns on the haggard face of war.

This article appeared in the Books and arts section of the print edition under the headline "Smoke and dust"

Brothers in arms

How Einstein and Eddington stood against jingoism

During the first world war, many scientists failed to

Print edition | Books and arts Jun 8th 2019

Einstein's War. By Matthew Stanley. *Dutton; 400 pages; $28. Viking; £16.99.*

THE EDIFICE of modern physics rests on two pillars, both built during the early 20th century. One is quantum mechanics, which deals with the behaviour of very small things like molecules, atoms and subatomic particles. The other is relativity, which is a theory of gravity and therefore of the universe at the largest scales—planets, stars and galaxies. Quantum mechanics was the work of many minds, but relativity is widely associated with just one person: Albert Einstein, the most famous scientist of the last hundred years.

Both theories are strikingly counter-intuitive, which makes them good fodder for popular-science books. Matthew Stanley takes an unusual tack. He tells the story of relativity through two entwined lives—Einstein's and that of Arthur Eddington, a British astronomer whose experiments in 1919 provided the first compelling evidence that Einstein's strange theories were correct. His tale unfolds against a backdrop of tragic politics, for the development of relativity coincided with the slaughter of the first world war.

A century before Einstein, Humphry Davy, a pioneering English chemist, accepted an award from Napoleon while Britain and France were fighting. Davy insisted that "if the two countries or governments are at war, the men of science are not." In Einstein's day many scientists similarly saw themselves as engaged in an international, humanist enterprise that transcended borders and rose above the ugly banalities of politics. Yet Mr Stanley shows that, with only a few exceptions, such sentiments did not survive the industrialised violence of the Western Front, in which science played an important role.

Take Fritz Haber, a Prussian chemist who habitually wore his military uniform in the lab (it complemented his duelling scar). He is best known today for devising a way to produce artificial fertiliser that is vital to feeding the world. But a tweak to that same process enabled Germany to carry on making explosives in the face of a British naval blockade. Haber also pioneered the battlefield use of mustard gas. On the Allied side, physicists and mathematicians drew up ballistics tables for artillery. William and Lawrence Bragg, a father and son, switched from X-ray research to using sound waves to locate enemy positions from the boom of their cannons.

Herbert Turner, a British astronomer, began the war as a cheerleader for scientific internationalism. By 1916 he was arguing in a British journal that Germans were little more than a "pre-Asiatic horde" and should be excluded from scientific endeavours. Even their language, he thought, should be banished from the academy. W.W. Campbell, an American astronomer, opined that Germany, "the most scientific of all nations, has prostituted science to…base ambition". The scathing sentiments wererecip-rocated. Wilhelm Wien, a German Nobel prizewinner, urged that German science should be cleansed of "unjustified English influence" and English terms.

All this is explored through the eyes of Mr Stanley's two subjects, both of whom resisted the tide of militarism and xenophobia. Einstein despaired at the war fever that overtook his colleagues in Berlin. Eddington was a Quaker and a conscientious objector. An early convert to relativity, he did more than anyone to spread its gospel in the West, as well as trying to keep open what lines of communication he could between the belligerent powers. His efforts culminated in an expedition in 1919 to observe a solar eclipse, with the goal of seeing whether light from distant stars could be deflected by a massive object like the sun, a key prediction of Einstein's theory.

Eddington's finding that light did indeed bend was a dramatic confirmation of Einstein's ideas. More than that, it was a pointed restatement of ideals that the war had squashed. Einstein's elevation to global celebrity was boosted by the fact (emphasised by Eddington) that an Englishman had confirmed a German's hypothesis which rewrote the rules of the cosmos.

The breadth of Mr Stanley's narrative inevitably comes at the cost of depth. His book is simultaneously a brisk biography of two great scientists, a brief introduction to relativity, and a potted history of the first world war. But it is punchy and well-written, and full of signposts for readers who might want to delve more deeply into the fascinating subjects it explores.

This article appeared in the Books and arts section of the print edition under the headline "Brothers in arms"

Dismal professionals

The trouble with economics

Jonathan Aldred thinks economists are too reductive. Is he right?

Print edition | Books and arts Jun 8th 2019

Licence to be Bad: How Economics Corrupted Us. By Jonathan Aldred.*Allen Lane; 320 pages; £25.*

IN THOMAS GRADGRIND, Charles Dickens created an educator who saw his pupils as "reasoning animals", with heads that should be filled with facts and little more. In "Licence to be Bad", Jonathan Aldred, an academic at Cambridge University, casts economists as the modern Gradgrinds. They exercise a baleful influence on political discourse, he maintains, by taking a narrow view of humans as essentially selfish creatures, forever trying to maximise their own well-being.

As Mr Aldred points out, economists have not always thought this way. Adam Smith is a hero of free-market enthusiasts but, as well as "The Wealth of Nations", he wrote "The Theory of Moral Sentiments", in which he opined: "How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortunes of others, and render their happiness necessary to him." In the 20th century John Maynard Keynes wrote that "economics is essentially a moral science and not a natural science. That is to say, it employs introspection and judgments of value."

But modern economics, the author argues, dismisses ethics in favour of a narrow focus on self-interest. "The argument that both parties to a voluntary transaction must be better off, otherwise it wouldn't take place," he writes, "is used to wash away all considerations of justice, fairness, responsibility, exploitation and so on."

Mr Aldred says that economists have constructed an idealised version of the world in which people deal with each other on equal terms, so government intervention is unnecessary, indeed positively harmful. They have applied the same reasoning in the law courts, leading to the doctrine that bargaining by parties achieves the optimal outcome.

A particular target of Mr Aldred's ire is the late Gary Becker, who won the Nobel prize in 1992 for his economic analysis of social issues. Becker argued that discrimination against women or ethnic minorities costs the discriminator money; in fully competitive markets, it would be competed away. This argument has been used by some to claim that anti-discrimination laws can be repealed, as they are unnecessary. It is certainly true that Becker can come across as laughably po-faced. Mr Aldred quotes his definition of love: "It can be said that M{-1} loves F{-1} if her welfare enters his utility function."

The idea that all human actions can be reduced to a calculation of self-interest is a bleak one. And it is not true. In Britain, for example, people give blood out of a sense of civic duty. Studies show that blood donation declines when rewarded by money; worse still, money induces donors to withhold details of medical conditions. In a Swiss village, support for siting a nuclear-waste dump nearby fell when the residents were offered compensation; they did not like the idea of being bribed.

The author neatly subverts the cynicism of some economists, such as the public-choice school which believes that politicians and officials are more interested in advancing their own interests than in the public good. By the same logic, he says, public-choice economists may be advancing their theories simply to boost their academic careers and their chances of a lucrative book contract.

But it is unfair to tar all economists with the same brush; Becker's views came in for lots of criticism from within the profession, for instance. On the left, Thomas Piketty, Joseph Stiglitz and Tony Atkinson have all worried about inequality; Mariana Mazzucato has pointed to the crucial role played by governments in long-term investment. And Mr Aldred is strangely dismissive of behavioural economists, who accept that humans are not desiccated calculating machines, and—in the hope of encouraging people to pay their taxes, or to save for their old age—tweak their recommendations accordingly. "Licence to be Bad" is a powerful tirade, but it is too sweeping in its condemnations.

This article appeared in the Books and arts section of the print edition under the headline "Dismal professionals"

The first folio of finance

A revolutionary treatise goes on the block

The 15th-century guide to book-keeping enabled the rise of modern corporations

Print edition | Books and arts Jun 6th 2019

MODERN CAPITALISM began among the European merchant families of the early Renaissance—the Fuggers of Augsburg, Medicis of Florence and, in Venice, one Antonio de Rompiasi, who in 1464 hired a tutor in mathematics for his three sons. Like any sensible teacher, young Luca Pacioli aimed to make his lessons memorable and clear. Good humanist that he was, 30 years later he gathered all the world's knowledge of the subject into a single massive volume.

His "Summa de Arithmetica, Geometria, Proportioni et Proportionalita" was the 615-page work of a mature professor who had spent decades working across northern Italy. The book was revolutionary on more than one count. It integrated computation using Hindu-Arabic numerals with the logic of classic Greek geometry; it was written in the vernacular of the marketplace rather than Latin (see Johnson); it circulated in large numbers thanks to the new technology of printing. Yet its greatest significance lay in a slim "how to" chapter that described the double-entry accounting system used by Venetian merchants.

With examples from dealers in butter to lemons to silk, Pacioli set out the method for tracking income and expenditure and the calculation of net profit or loss, which for the first time allowed an immediate snapshot of a firm's financial position. This brief section would facilitate the birth of the modern corporation.

"Without order there is chaos," Pacioli observed in a breezy style that is still in vogue in business books today. His manual is stuffed with quotes from scripture and Dante and pithy advice such as "Don't learn from ignoramuses who have more leaves than grapes." He wrote the accounting chapter to help would-be traders in Venice, then the capital of the financial world, "sleep easily at night". Without double-entry book-keeping, "their minds would keep them awake with worry". He could not suspect that what might be called "Book-keeping for Dummies" would become the backbone of business for centuries.

Like many monumental works of 15th-century printing, Pacioli's treatise has survived in its original form. Some 120 copies still exist, from an initial run of about 1,000. Now today's moguls have a chance to own this first folio of finance. Christie's, the auction house, is offering a first edition in the original vellum binding for sale in New York on June 12th. The starting price is $1m for what it unabashedly calls "the most influential work in the history of capitalism".

Pacioli's later life augments the glamour of the first printed use of "plus" and "minus" signs. Impressed by the book, Leonardo da Vinci convinced his patron Lodovico Sforza to hire Pacioli to teach at the court of Milan. Pacioli and Leonardo collaborated on the treatise "Divina Proportione", which married maths with art through the study of perspective. Not one, but two Renaissance masters were thus responsible for the exquisite harmony of "The Last Supper".

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Johnson

Latin is dead—yet it also lives on

The evolution of Italian is a parable of how languages develop

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CICERO, THE Roman statesman whose prose is thought to represent the peak of style in Latin, was also a bit of a snob about it. Few others, he complained in a tome written in 46BC, used the language properly any more. His gripes would be worse today. At a recent mass at the Vatican attended by your columnist, some of the Latin used by Pope Francis was impeccable. But much of it was downright dismal; it would have been incomprehensible to Cicero. Strangely, the pope's remarks were translated into several other species of terrible Latin.

That is because the pope's dismal Latin is also known as "Italian". Francis's native language, Spanish, is another kind of deformed Latin. The French in which his interpreter greeted some of the faithful is yet another variety.

Family trees of languages typically show Spanish, French and Italian descending from Latin in the same way that you are descended from your mother. But this is misleading. There was no birth of Italian, nor any definitive death of Latin. Instead, there were centuries of infinitesimal changes. Those who noticed them would, like Cicero, have considered them mistakes. But most people didn't care, which is how such tweaks took hold, and spread. As they accumulated, Latin did not create Italian and its sister languages. It became them.

Throughout the Dark Ages, the few literate Europeans continued to write in classical Latin. Or they tried to: as their speech evolved, their writing sometimes mutated to match it. A list of commonly misspelled words, written in the third or fourth century, offers a glimpse of what was happening. For example, the list insists on *calida* (hot) not *calda*: the unstressed "i" was evidently disappearing. (Now it is *calda* in Italian.) Other sounds were changing, too. Use *frigida* not *fricda*, the list advises. The word for "cold" was on its way to today's *fredda.*

Nor was pronunciation the only moving part. Modern students of Latin often wrestle despondently with the language's case system, in which the role a noun plays in a sentence is signalled by alternative endings. These collapsed into fewer forms in the Dark Ages; in modern Italian they leave no trace. Meanwhile, Latin's three genders (masculine, neuter and feminine) merged into two. Words were substituted. People stopped using Latin's *loqui*, "to speak", and started using *parabolare*, which originally had a narrower meaning. It became Italian's *parlare*.

A millennium or so after Cicero's moans, in other words, Europeans spoke a range of tongues that were nevertheless related to each other and to Latin. What happened next in Italy had as much to do with politics as with the dynamics of languages. The contrast with its northern neighbour is instructive. France was unified by the conquest of territory spreading out from Paris; the conquerors brought Parisian speech with them, and that became "French". A mighty state then did its best to teach that language everywhere, and to eradicate local variants.

Italy was unified far later, in the 19th century. "Italian" was thus created by the pen, not the sword. The 13th- and 14th-century works of Dante, Petrarch and Boccaccio were the peninsula's most revered literature. So when, in the 16th century, Pietro Bembo sat down to write a grammar for the prestige language of their texts, he used their (by now rather old) Tuscan dialect as his model. In this way "Italian" was born—though Bembo titled his book simply "Writings on the Vulgar Tongue". It soon spread to elites in other regions.

Even then, ordinary folk continued speaking their own dialects, which, across great enough distances—say from Milan to Naples—were and remain mutually incomprehensible. These are not bad copies of Italian but its siblings, descendants of Latin in their own right. Over half of Italians proudly speak one of them still (though nearly all speak Italian, too). A Sicilian who doesn't speak Sicilian is hardly worthy of the name; Neapolitan plays a crucial role in the celebrated novels of Elena Ferrante.

These days, amid migration and globalisation, Italian continues to develop. Naturally some worry that it is happening too fast; that young people are derelict in their grammar, or use too many foreign words. In reality, the same forces that made Latin from its predecessor (called Proto Indo-European), and turned Latin into Italian—the drift of time and exposure to different influences—are still operating. The only unchanging language is an unspoken one. Classical Latin may be dead—but as Italian, it lives on. Long live dismal Latin!

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Economic data, commodities and markets

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Google's algorithm
Seek and you shall find

Seek and you shall find

Google rewards reputable reporting, not left-wing politics

Our statistical study revealed no evidence of ideological bias in the search engine's news tab

Print edition | Graphic detail Jun 8th 2019

"GOOGLE & OTHERS are suppressing voices of Conservatives", tweeted Donald Trump in 2018. "They are controlling what we can & cannot see." The president's charges of bias are often dubious. But many people worry about algorithms absorbing human prejudices. Robert Epstein, an academic, has compiled data that show Google suggesting more positive terms when users type "Hillary Clinton" than when they look up Mr Trump. PJ Media, a conservative blog, claims that liberal sites get 96% of results for "Trump" on Google's news page, a compilation of links to recent articles.

Google says that the 10,000 human evaluators who rate sources for its search engine assess "expertise" and "trustworthiness" but not ideology. Web-traffic figures support this defence. Sites with high scores from fact-checking groups, whose judgments probably resemble Google's, draw larger shares of their visitors from search engines than sites with low scores do. Factually inaccurate sources also tend to have strong left- or right-wing slants.

Nonetheless, a subtle bias might not show up in such broad statistics. To test for favouritism, *The Economist* ran an experiment, comparing a news site's share of search results with a statistical prediction based on its output, reach and accuracy.

We first wrote a program to obtain Google results for any keyword. Using a browser with no history, in a politically centrist part of Kansas, we searched for 31 terms for each day in 2018, yielding 175,000 links.

Next, we built a model to predict each site's share of the links Google produces for each keyword, based on the premise that search results should reflect accuracy and audience size, as Google claims. We started with each outlet's popularity on social media and, using data from Meltwater, a media-tracking firm, how often they covered each topic. We also used accuracy ratings from fact-checking websites, tallies of Pulitzer prizes and results from a poll by YouGov about Americans' trust in 37 sources.

If Google favoured liberals, left-wing sites would appear more often than our model predicted, and right-wing ones less. We saw no such trend. Overall, centre-left sites like the *New York Times* got the most links—but only about as many as our model suggested. Fox News beat its modest expectations. Because most far-right outlets had bad trust scores, they got few search results. But so did Daily Kos, a far-left site.

Our study does not prove Google is impartial. In theory, Google could serve un-biased links only to users without a browsing history. If fact-checkers and Pulitzer voters are partisan, our model will be too.

Moreover, some keywords did suggest bias—in both directions. Just as PJ Media charged, the *New York Times* was over-represented on searches for "Trump". However, searches for "crime" leaned right: Fox News got far more links than expected.

This implies that Google's main form of favouritism is to boost viral articles. The most incendiary stories about Mr Trump come from leftist sources. Gory crime coverage is more prevalent on right-leaning sites. Readers will keep clicking on both. ■

Sources: Google; Adfontesmedia.com ; Mediabiasfactcheck.com ; YouGov; Meltwater; SimilarWeb; Pulitzer.org ; Facebook

This article appeared in the Graphic detail section of the print edition under the headline "Seek and you shall find"

Judith Kerr
Cats large and small

Cats large and small

Obituary: Judith Kerr died on May 23rd

The creator of the Mog books and "The Tiger Who Came to Tea" was 95

Print edition | Obituary Jun 8th 2019

WHENEVER she tried to draw a tiger, Judith Kerr disliked the result. For "The Tiger Who Came to Tea" she went to the zoo, usually with her small daughter Tacy, and drew them for hours. However much she thought she knew what they looked like, they were always better—sleeker, more striped, even more orange. Her tiger was rather plump. No wonder, when he had swallowed all the sandwiches on the plate (Owp!), and all the buns on the dish, and all the biscuits and all the cake, and drunk all the milk in the milk jug and all the tea in the teapot and then eaten all the food in the cupboards in Sophie and her mummy's house.

So she had no great hopes for the book when she finished it, in 1968. But to her enormous surprise it sold tremendously, and started her on a career of doing picture books, and three more-serious ones, that sold more than 10m copies round the world. All of them were produced at the same table, laden with jars of crayons in carefully assorted colours, in the light-filled attic at the top of her house in Barnes, in south-west London. There she worked away with a very soft pencil and her crayons. She was quite slow, rubbing out a lot and redrawing to get it right. And she was sparing with her indelible inks, since once you put ink on you couldn't shift it. She took similar care over the words, though those were harder, and they might need a good brisk walk along the river.

Often, as she worked at her desk, a cat sat on her lap. She was entranced by their weirdness and strange ways. The first of her drawing companions was Mog, a scruffy black-striped tabby who became, with input from her eight successors, the heroine of 17 books. (As if she knew her lofty status, Mog would urge on the paintbrush with her nose.) Mog-on-paper, like the original, was nice, but not very clever; she was a very forgetful cat. Most of all she forgot her cat flap, and then didn't know how to come in from the garden, jumping up on the geraniums to meow loudly at the kitchen window until her family cried "Bother that cat!" Mishaps came thick and fast, whether with escapes, or bad dreams, or "accidents" on favourite chairs, and frequently Mog took to flying, forgetting that cats can't fly. But at the end of most books the beaming creature was hugged and loved by the family again.

That family was drawn in lightest disguise, with Judith's writer husband Tom and her children Tacy and Matthew taken from life, as well as the tables and crockery and chairs. (The garden, though, was rather sketchy. She felt she never looked enough at trees.) For her, cats and stability and family closeness were all one thing. She could not have a cat as a child, because she spent those years wandering. Her Jewish family escaped from Berlin in 1933 when Hitler won the election and her father, a prominent man of letters, found himself marked for death. He left, and she, her brother and her mother followed, fleeing to Switzerland, then to Paris, and eventually to England, where she stayed.

As a child she was almost unaware of why they had left. In Berlin she heard strange remarks, such as whether her nose looked "ordinary" or not, and thought Hitler was hiding behind the lavatory curtain. In Switzerland she dreamed she saw her father, who now had 1,000 marks on his head, buried under coins pouring down from a broken ceiling. But her sharpest regret was that she chose the wrong toy to take when they fled, packing a stupid new woolly dog instead of her old, soft, familiar pink rabbit with embroidered black eyes and an endearing habit of collapsing on its paws. She imagined tearfully that Hitler must be snuggling it now.

That story was told in "When Hitler Stole Pink Rabbit" (1971), the first of three lightly fictionalised books about her wandering and emigré years. She meant to write only one book at first, to prove to her children that her childhood was much better than it sounded. They were poor and lived a lot on charity, but she found it fun to be a refugee: to belong a little in lots of places, as her father said. She thrived at strange schools and was good at languages, unlike her parents, who were gradually destroyed by exile. Her next two emigré books dwelled more on them and their struggles.

She could draw and paint wherever she was, and did so whenever she could. Her Indian ink got spilt on various floors, and her best presents (as for Anna, her persona in "Pink Rabbit"), were paintboxes and crayons, especially bright-blue-purply ones. Once in England, doing odd small jobs, she went to art evening classes and got a scholarship to the Central School of Arts and Crafts. Meanwhile she sketched everything she saw, especially people in motion or asleep. She sold her first painting for 3/6 to a man in a Lyons tea shop, and then sold more. By the 1950s she thought she could make a modest living at it, and after a break to have the children she turned to the drawing of picture books again.

Goodbye Mog

Over years of cosy bedtime stories with Tacy and Matthew, she had watched their faces closely to see how they reacted. Her iron rule was never to describe what they could tell from the picture, and to use as few words as possible. But she liked to challenge children, too. She knew, from “Pink Rabbit”, how to touch deftly on terrifying things, and that book had become a set text in German schools. So in “Mog in the Dark”, Mog “sat in the dark and thought dark thoughts” of what else might be lurking there. And in “Goodbye Mog” in 2002 Mog died, though “a little bit of her stayed awake to see what would happen next.” Many small readers were upset, and her chronicler was sorry. But she was a little tired of drawing all those stripes, and she also thought it an important book to write.

Even more important was to live life as she did, with joy and energy and the odd tot of whisky, and not to waste one day of it. Though she thought she was such an ordinary person, who often wore the wrong clothes and was a useless cook, her luck in life had been extraordinary. She had made a wonderful marriage; and she had escaped horrors. Her autobiography was dedicated to “the one and a half million Jewish children who didn’t have my luck, and all the pictures they might have painted.” Of tigers, too.

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