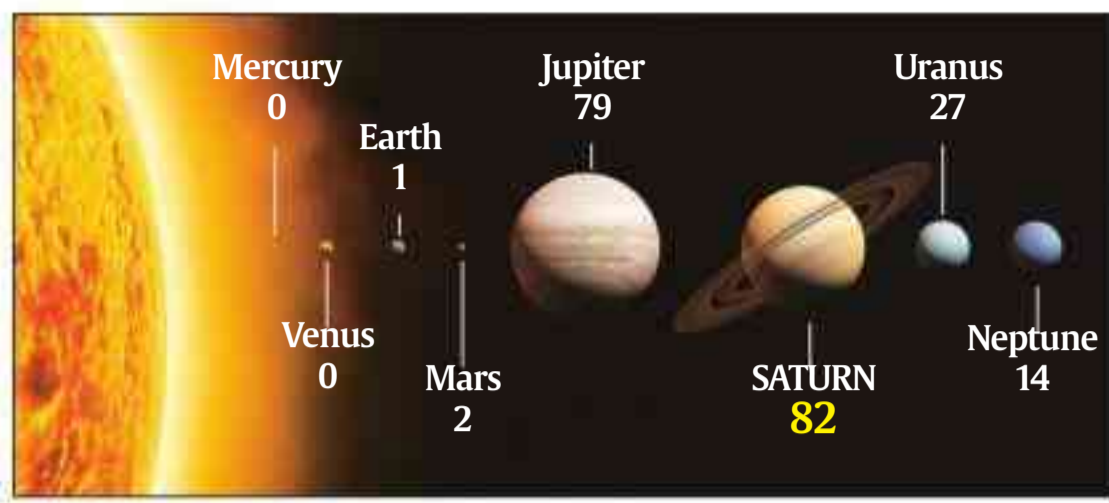


TELLING NUMBERS

Which planet has how many moons? Saturn has 82 now



ON MONDAY, the International Astronomical Union's Minor Planet Center confirmed 20 new moons orbiting Saturn, making it the planet with the most moons in our Solar System, at 82. The 20 had been discovered by Scott S Sheppard of the Carnegie Institution for Science. Until their confirmation, the planet with the most moons was Jupiter, at 79.

A count of the moons listed on the NASA website shows that our Solar System's planets together have 205 confirmed moons now. Saturn and Jupiter, with 161 between them, account for nearly 80% of these. Another 20% are orbiting Uranus (27) and Neptune (14). Of the remaining three moons, one is Earth's own while the

other two are with Mars. Mercury is so close to the Sun and its gravity that it wouldn't be able to hold on to its own moon, NASA explains. Any moon would most likely crash into Mercury or maybe go into orbit around the Sun and eventually get pulled into it. It is not yet clear, however, why Venus does not have a moon.

The newly discovered moons of Saturn are about 5 km each in diameter. Seventeen orbit Saturn opposite to the planet's rotation, and three in the same direction as Saturn's rotation.

The Carnegie Institution for Science has invited, until December 6, suggestions for names of the 20 new moons of Saturn. The rules are at: <https://carnegie-science.edu/NameSaturnsMoons>

THIS WORD MEANS

HKMAP.LIVE

App that tracks Hong Kong protest hotspots has riled China

PEOPLE'S DAILY, the mouthpiece of the Chinese Communist Party, has lashed out at Apple for hosting on its App Store an app that tracks and displays the movement of police in Hong Kong. The app, *HKmap.live*, "facilitates illegal behaviour", *People's Daily* said in a commentary.

HKmap.live (screenshot right) publishes crowdsourced information on the location of armed police forces, vehicles, use of tear gas, and clashes and injuries on a map of Hong Kong that is regularly updated. A website version is available too, as also a version for Android, but the *People's Daily* article did not mention this, and instead concentrated on its attack on Apple.



"Is Apple guiding Hong Kong thugs?" the article asked. "Apple's approval for the app obviously helps rioters," it said, and asked: "Does this mean Apple intended to be an accomplice to the rioters?" according to reports by the AP, AFP, *The South China Morning Post*, and *The Guardian*. "People have reason to assume that Apple is mixing business with politics, and even illegal acts," the opinion piece said. It warned "this recklessness will cause much trouble for Apple".

China, which is sensitive to international criticism of its policies, pulled NBA games off state TV after a team official tweeted in support of Hong Kongers protesting for democracy and freedom. It had earlier criticised the US jewellery brand Tiffany, and the airline Cathay Pacific.

The SCMP, which contacted the developer of the app on Twitter, quoted the developer as saying Apple previously rejected the app, but reversed its decision on Friday and made the app available for download from the iOS App Store on Saturday. Apple did not respond to media requests for a comment.

SIMPLY PUT QUESTION & ANSWER

Can govt intercept WhatsApp?

As TRAI examines the possibility of lawful interception of messages on WhatsApp and similar platforms, a look at the debate around such interception, the technical difficulties, and practices around the world

PRANAV MUKUL
NEW DELHI, OCTOBER 8

ON TUESDAY, *The Indian Express* reported that the Telecom Regulatory Authority of India (TRAI) is studying the possibility of bringing platforms such as WhatsApp under the ambit of "lawful interception".

Lawful interception of online communications platforms such as WhatsApp, Skype, Signal or Telegram has been a long-running debate that has ranged governments and regulators across the world against technology companies and privacy activists. The authorities want such platforms to provide access to messages, calls, and their logs to law-enforcement agencies to aid them with investigations. India, too, has made demands for traceability of communications from instant messaging platforms.

Why is TRAI looking at lawful interception of online messaging apps?

The telecom sector watchdog has been carrying out consultations to build a regulatory framework for over-the-top service providers (OTTs) — or platforms that use the infrastructure of traditional telecom companies like the Internet to offer their services. TRAI has been looking at the regulation of OTTs since 2015, when mobile companies first raised concerns over services such as WhatsApp and Skype causing loss of revenues by offering free messaging and call services.

The other argument made at the time was that these services do not fall under the licensing regime prescribed by The Indian

Telegraph Act, 1885, and effectively operated in a regulatory dark spot.

Over time, TRAI looked at various aspects of the lack of a level playing field between telecom companies and OTT service providers, including the economic aspect. However, with the boom of data consumption in the country over the last two or three years, primarily led by OTTs, TRAI officials indicated that the economic aspect did not hold ground anymore. With this realisation, the regulator began looking at the security facet of the regulatory imbalance between the two kinds of players. While telecom players are subjected to lawful interception as per the telegraph law, OTT platforms, by virtue of not being licensed, are currently not subject to interception by law-enforcement agencies.

How will the regulator proceed with the proposal now?

TRAI will submit its views to the Department of Telecommunications (DoT), which will decide on the next course of action. Currently, the regulator is learning to be studying global practices as far as lawful interception on online platforms is concerned. It is also looking into whether other regulators and authorities have provided any facilities for interception of communications, and could suggest that the platforms should provide the same facilities to the Indian government.

Under which laws are telecom firms currently subject to lawful interception?

The Indian Telegraph Act, 1885 states that on the occurrence of any public emergency, or in the interest of public safety, the central gov-

ernment or a state government can take temporary possession — for as long as the public emergency exists or the interest of the public safety requires the taking of such action — of any telegraph established, maintained or worked by any person licensed under the Act. This mandates telecom companies to provide access to messages, calls, and logs of these in case a court order or a warrant is issued. However, the government, while clear on demanding access to message logs for law-enforcement purposes, is not relying on The Telegraph Act to meet this objective. Instead, it wants the platforms to come up with a solution to enable traceability.

So, are messages sent and received on these platforms not traceable?

Apps such as WhatsApp, Signal, Telegram, etc. claim to provide end-to-end encryption of their messages. This has caused some uncertainty among the authorities on how they can seek access to messages.

On the FAQ page on its website, WhatsApp states: "We will search for and disclose information that is specified with particularity in an appropriate form of legal process and which we are reasonably able to locate and retrieve. We do not retain data for law-enforcement purposes unless we receive a valid preservation request before a user has deleted that content from our service."

It also says that in the ordinary course, WhatsApp does not store messages once they are delivered. "Undelivered messages are deleted from our servers after 30 days. As stated in the WhatsApp Privacy Policy, we may collect, use, preserve, and share user in-

formation if we have a good-faith belief that it is reasonably necessary to (a) keep our users safe, (b) detect, investigate, and prevent illegal activity, (c) respond to legal process, or to government requests, (d) enforce our Terms and policies," it says. "We also offer end-to-end encryption for our services, which is always activated. End-to-end encryption means that messages are encrypted to protect against WhatsApp and third parties from reading them."

And what is the situation elsewhere?

Currently, there is no jurisdiction anywhere in which messaging apps have been known to provide access to their messages. However, pressure on such services to provide access for law-enforcement purposes has been rising everywhere. The United States Department of Justice has made fresh arguments for access to encrypted communications. *The New York Times* reported on October 3 that Attorney General William P Barr, jointly with his British and Australian counterparts, has written to Facebook CEO Mark Zuckerberg, pointing out that companies should not "deliberately design their systems to preclude any form of access to content even for preventing or investigating the most serious crimes".

In India, Law and IT Minister Ravi Shankar Prasad has repeatedly stressed the need to be able to trace messages to prevent serious crimes. While the Indian government has conceded that encrypted messages may not be accessible, it has asked the platforms to provide origin of messages that could possibly incite violence or other mischievous acts.

Behind Nobel, Chemistry of mobile batteries

AMITABH SINHA
PUNE, OCTOBER 9

THIS YEAR'S Nobel Prize in Chemistry recognises the work that led to the development of something that we all are familiar with, and depend very heavily upon — the rechargeable lithium-ion batteries that power most of the portable devices that we use, such as mobile phones.

The prize has been given jointly to Stanley Whittingham, now with Binghamton University, State University of New York; John B Goodenough, now with the University of Texas at Austin; and Akira Yoshino of Asahi Kasei Corporation. Whittingham developed the first functional lithium-ion battery in 1976. Goodenough brought in a major improvement in 1980, while Yoshino made the first practical-use lithium-ion battery in 1985. Commercially manufactured lithium-ion batteries, based on what Yoshino had developed, made their first appearance in 1991.

How batteries work

Batteries convert chemical energy into electricity. A battery comprises two electrodes, a positive cathode and a negative anode, which are separated by a liquid chemical, called electrolyte, which is capable of carrying charged particles. The two electrodes are connected through an electrical circuit. When the circuit is on, electrons travel from the negative anode towards the posi-



From left: Stanley Whittingham developed first functional lithium-ion battery; John B Goodenough improved on it; then Akira Yoshino made it even better.

tive cathode, thus generating electric current, while positively charged ions move through the electrolyte.

Single-use batteries stop working once a balance is established between the electrical charges. In rechargeable batteries, an external power supply reverses the flow of electric charges, so that the battery can be used again.

The winners' recipe

STANLEY WHITTINGHAM: When

Whittingham began working on batteries in the 1970s, rechargeable batteries were already available, but were bulky and inefficient. Whittingham worked with newer materials to make his battery lighter and more efficient. The older rechargeable batteries used to have solid materials in the electrodes which used to react with the electrolyte and damage the battery. Whittingham's innovation came from the fact that he used the atom-sized spaces within the cathode material, titanium disul-



NOBEL IN CHEMISTRY

phide, to store the positive lithium ions. The choice of lithium was dictated by the fact that it let go of its electron quite easily and was also very light.

phide, to store the positive lithium ions. The choice of lithium was dictated by the fact that it let go of its electron quite easily and was also very light.

JOHN B GOODENOUGH: Whittingham's battery worked at room temperature, making it practical, but was prone to short-circuits on repeated charging. An addition of aluminium, and a change of electrolyte, made it safer, but the big breakthrough was made by Goodenough who changed the cathode to a metal oxide instead of metal sulphide (titanium disulphide) that Whittingham had been using. Goodenough's battery was almost twice as powerful as Whittingham's.

AKIRA YOSHINO: Yoshino started working on Goodenough's battery and tried using various lighter carbon-based materials as the anode in order to bring down the weight further. He got excellent results with petroleum coke, a byproduct of the oil industry. This battery was stable, lightweight, and as powerful as Goodenough's.

Lithium-ion still best

Researchers have continued to look for other materials to make more efficient batteries, but so far none of these has succeeded in outperforming lithium-ion battery's high capacity and voltage. The lithium-ion battery itself has, however, gone several modifications and improvements so that it is much more environment friendly than when it was first developed.

Going back 1,300 yrs, story of Mahabalipuram's China connection

NIRUPAMASUBRAMANIAN
MUMBAI, OCTOBER 9

MAHABALIPURAM, OR Mamallapuram, 56 km south of Chennai on the Tamil Nadu coast, where Prime Minister Narendra Modi will meet China's President Xi Jinping on October 11 & 12 in an informal Wuhan-style summit, had ancient links with Buddhism and China through the maritime outreach of the Pallava dynasty.

The setting speaks to several contemporary themes in India-China relations — and of contacts, both continuous and changing, across space and time. While the powerful symbolism of Mahabalipuram will likely not succeed in influencing China's hard-nosed assertion over J&K and other issues with India, the remarkable historical significance of the venue bears underlining.

When the Pallavas ruled

The name Mamallapuram derives from Mamallan, or "great warrior", a title by which the Pallava King Narasimhavarman I (630-668 AD) was known. It was during his reign that Hiuen T'sang, the Chinese Buddhist monk-traveller, visited the Pallava capital at Kanchipuram.

Narasimhavarman II (c.700-728 AD), also known as Rajasimhan, built on the work of earlier Pallava kings to consolidate maritime mercantile links with southeast Asia. Most interestingly, as historian Tansen Sen



The Descent of the Ganga/Arjuna's Penance in Mahabalipuram. Bernard Gagnon via Wikipedia

recorded in his 2003 work *Buddhism, Diplomacy and Trade: The Realignment of Sino-Indian Relations, 600-1400*, Narasimhavarman II sent a mission to the Tang court in 720 with a request that would seem unusual in the context of India-China relations today.

The emissaries of the Pallava king sought the permission of Emperor Xuangzong to fight back Arab and Tibetan intrusions in South Asia. And, "Pleased with the Indian king's offer to form a coalition against the

Arabs and Tibetans, the Chinese emperor bestowed the title of 'huai de jun' (the Army that Cherishes Virtue) to Narayansimha II's troops", Sen wrote. The offer of help by the Pallava ruler, Sen noted, may have had more to do with furthering trade and for the prestige of association with the Chinese emperor, rather than any real prospect of helping him to fight off enemies in the faraway north.

The Descent of the Ganga/Arjuna's Penance, a rock carving commissioned by

Narasimhavarman I, with its depiction of the Bhagirathi flowing from the Himalayas, may serve as a reminder of the geography of India-China relations, and their shared resources.

Hindus, Muslims and China

Tamil-Chinese links continued after the Pallavas, flourishing under the Cholas as the Coromandel coast became the *entrepot* between China and the Middle East. The links extended to a wider area beyond

Mahabalipuram, through a layered history that has left a rich tapestry of society, culture, art and architecture, which is diverse and complex, and reaches up to modern times.

If he looks south from the platform of the 7th century Shore Temple, President Xi might be able to spot a key symbol of 20th century — the white domes of the Madras Atomic Power Station at Kalpakkam, 15 km down the coastline. MAPS, built in the 1980s, is India's first indigenously constructed power station.

India's secularism and diversity would not be on the agenda of the two leaders — however, their meeting ground is in a part of the country where this ethos is a lived reality. Hindu- and Muslim-majority villages alternate along that coast, each community having lived next to the other for centuries.

By the time Islam arrived on south India's east coast in the 9th century, Muslims had already started trading with China by maritime routes, Sen wrote. The trading missions that the Cholas sent to the Song court included Muslims. A trader named Abu Qasim was second-in-command of a mission sent in 1015; the next mission, in 1033, included one Abu Adil. "It is possible that both Abu Qasim and Abu Adil were members of the Tamil-speaking Muslim community on the Coromandel coast known as Ilappai," Sen wrote. Today, the ancient port of Marakanam is a fishing village, known for its Muslim boatmakers.

Continuing connections

In later centuries, the Coromandel coast

retained its importance for trade between China and the west. In the 17th and 18th centuries, it was a staging post for the Dutch, French and British for control of the seas between South Asia and Southeast Asia, as the Europeans fought to protect their trade routes with China and other countries in the region.

The ancient port city of Pondicherry, 80 km south of Mahabalipuram, was a French colony famous for its Chinese exports known as "Coromandel goods", including *crepe de chine*. Today the Union Territory, with its French legacy, Tamil residents, Bengali and international devotees of Sri Aurobindo, is among the most diverse and cosmopolitan of cities in South India.

After establishing their writ on the Coromandel Coast, the British expanded eastward and established control over the Straits of Malacca, essentially to protect their trade routes to China and the rest of the region.

Among the colonial outposts on this coast is Sathurangapattinam, or Sadras, right next to Kalpakkam, where the Dutch East India Company built a fort, their second one on the east coast after establishing a capital at Pulicat, north of Chennai.

Sadras became a huge centre for the Dutch-controlled manufacture of cotton and muslin. The Dutch presence in the region grew rapidly after they established themselves in Java in 1603. They traded within Asia, buying textiles, metal, and porcelain, importing and exporting between India, China and Japan, to keep the spice trade going.



The Indian EXPRESS

FOUNDED BY
RAMNATH GOENKA

BECAUSE THE TRUTH INVOLVES US ALL

DENYING DENMARK



PRATAP BHANU MEHTA

Serial authoritarianism picks out targets one by one, and tires out challenges

The test in protest

Government says it's sure-footed on global stage. So, its refusal to let Delhi CM attend climate summit overseas is petty, cussed

ARE THERE SOME in this government, that rules the Centre with such a handsome mandate, who feel insecure by the prospect of an Opposition leader going overseas — especially if the latter also has a perceived success story to showcase? This is the dispiriting question prompted by the curious denial of permission by the Ministry of External Affairs to Delhi Chief Minister Arvind Kejriwal to attend the C40 Cities Climate Summit this week in Copenhagen. Look at the sequence of events. Delhi's CM is scheduled to join leaders of the world's major cities in deliberating on urban strategies and solutions for climate change at a global forum that brings together mayors, climate experts, business leaders, innovators. Kejriwal is all set to highlight the work his own government has done — of course, together with the Centre, neighbouring states, pollution watchdogs — in reducing air pollution in Delhi over the last five years. It is enough, at the very least, for the metropolis to be seen to be working to combat its notoriety as one of the world's most polluted. He would speak of experiments and innovations, like the odd-even campaign, slated to return to Delhi soon, perhaps face questions on what has worked, what hasn't. But after days of being kept hanging by the MEA — according to protocol, the giver of political clearance — permission is refused. It reeks of politics, not bureaucracy. Is it any wonder, then, that it should invite accusations of Central petty-mindedness?

As an elected chief minister, Kejriwal would have been among unequals at a mayors' conference, it has been suggested. But by the same token, surely an elected chief minister has the right to decide to attend, or not to. And since when has the BJP government become such a zealous minder of the AAP leader's status, anyway? While the BJP has seldom been seen to be respectful to rivals and opponents, or a keeper of the federal spirit, the jousting and hostilities between the BJP-led Centre and AAP's Delhi government, relatively muted for some time, have always been special. The upcoming Delhi election early next year is likely to renew and sharpen this rivalry. If fought on local issues, the record of the AAP government on school education, mohalla clinics and air pollution could matter. It is this possibility, presumably, that is now preying on the mind of the BJP leadership, and holding its hand. Or, it could be sheer, no-reason, cussedness.

Either way, the scuppering of Kejriwal's travel plans sends out messages unflattering to the BJP — and to India. The government prides itself on being more self-possessed and sure-footed on the global stage. That image is dented when it is seen to show mean-spiritedness to another leader, especially of the Opposition, in full view of the world.

LESSONS FROM AAREY

Governance cannot be a cat and mouse game with the people. They must be treated as stakeholders

THE TUMULT in Mumbai over the cutting of trees for building a depot for one of the many metro lines coming up in the city carries many governance lessons. One of them is transparency, to which governments pay much lip service, while acting in exactly the opposite way. In the case of the Aarey controversy, this has been quite literally so. The Bombay High Court had ruled in favour of felling over 2,000 trees in a small patch of Mumbai's largest green area to make way for the project. Those opposed to the cutting believed they had recourse to further legal options, but felt cheated when Mumbai Metro Rail Corporation Limited, acting with secrecy and stealth and under cover of darkness, began cutting trees in Aarey within hours of the judgment. There was no need for this unseemly haste, even if the government feared appeals against the High Court order and further delays. After all, governance cannot be a cat and mouse game with the people. It is not as if those opposing the specific location of the car shed are against the metro.

Delhi Metro showed the way in how people can be won over by the simple method of talking to them. The first managing director of Delhi Metro Rail Corporation, E Sreedharan, placed much emphasis on interactions with residents along the metro route to explain to them the benefits the transport system would bring. As a result, Delhi Metro was able to cut more than 31,000 trees and transplant 6,000 more without much opposition, while also finding a way to accommodate the concerns of tree activists at the location of one car shed.

Another issue that the controversy has highlighted is the high value people accord to trees, green areas, and open spaces in India's overcrowded, poorly planned cities. Aarey is spread over 1,278 hectares, and the car shed will take up just 33 hectares of this space. Environmentalists have made the case that this patch is a vital part of the entire "urban forest", precious in concrete-filled Mumbai. As more and more small towns become cities, and generate demands for better infrastructure, clearer definitions of forests and green areas are needed. Regardless of whether one opposes big infrastructure projects, or supports them, debate of the kind that has been sparked over the environment costs of the Aarey Metro Line 3 car shed since the time the project was first mooted, is healthy and necessary. India cannot aspire to leadership in the fight against climate change in the international arena, and at the same time dismiss or discourage conversations on the environment at home

THE noose is tightening around all independent institutions in India. The episode featuring seditious charges against eminent writers and directors — now belatedly withdrawn — is a reminder of the peculiar nature of the crisis of liberal institutionalism in India. The true register of the crisis is not that liberal ideas might be losing, or that elites identified with liberalism might be discredited. Both those phenomena have occurred in the past. What is new is the choking up of the channels of protest in the time of civic oppression. Where does a politics of resistance to civic oppression go?

We cannot rely on the law. A liberal polity relies on unglamorous institutions and processes to keep open the windows of light against the darkness of untrammelled power. We have often relied on some putative motivating power of the law to deliver a modicum of protection, if not justice. The law has often disappointed deeply; and it often protects elites more than others. But the cowardly, almost impeachable, abdication of the judiciary in the face of threats to civil liberties has now made an appeal to the law akin to an appeal to the majestic benevolence of an odd judge at best, and a laughing joke at worst.

We cannot rely on discussion. The liberal faith in discussion is not so much that liberal ideas might win, as it is a faith that there is something addictive about the commitment to discussion itself; it is the habit itself that is the triumph of a liberal sensibility. This is why authoritarian politics disdains discussion. Again, this space will privilege some more than others, but its availability is a form of insurance against worse evils. So long as there is a commitment to "politics through speech," some basic norms of reciprocity will be preserved. But the idea of public discussion is itself under severe threat. There is direct intimidation using law and violence. The main channels of public debate — the media — are now, for the most part, supply-side driven propaganda. Social media can accelerate tribalisation even faster than it accelerates democratisation.

We cannot rely on artfully using fragmentation of power. Let power check power. But the fragmentation of power that we took for granted as a check against undue concentration no longer holds. Regional parties are as

likely to navigate with this authoritarianism, as against it. India's fragmented social identities are now available for new forms of re-configuration in the nationalist project; they are fuelling nationalism as much as they are resisting it. In any case, a fatalistic belief in sociological determinism to save us was the Left's version of anti politics, as if there were ready-made coalitions of minorities and other oppressed groups who will automatically appear to resist.

But if social power is not fragmented, in the same way neither is the power of money — Indian capital was seldom a defender of liberty. But now its taciturn silences are being replaced by a demonstrable alignment with not just state power, but the ideology of the state. It is having to devote all its capital, political funding, philanthropic commitment, media ownership, and even its symbolic capital, to the BJP and RSS. The BJP's insurgency against the Congress was always sustained by deep material support, from Nusli Wadia in the Eighties to regional capitalists more recently. No opposition, political or in civil society, can now count on that kind of material support.

It is undeniable that advocates of liberal institutionalism in India have always been uncomfortable with the grammar of civic protest. The preference for process over protest, discussion over organisation, law over civil disobedience, order over a fear of anarchy, petition over movement, individual authenticity over social solidarity, leaves it open both to the charge of passivity and elitism. But it could survive these preferences when the institutional windows through which this sensibility could do some moderate work, were open. But that time seems to be long gone.

It is a fair criticism of liberals that they have seldom aligned with social movements: Farmers, labour, Adivasis, Dalit etc. Often, they have worked against them, in weakening the legitimacy of their claims. In the lead up to protests against the Emergency, many of these movements were the disruptors that fuelled a general sense of discontent. But now there are two challenges that make it difficult to enlist these demands in a broad-based protest against civic oppression. There is no mechanism by which these movements translate into electoral politics and prove a threat to the

ruling party. And, it is actually easy for the government to satiate the demands that fuel these movements. For instance, each time there is the hope that Dalit discontent will translate into a movement, whether over SC Atrocities Act or something else, the government can satiate demands; each time there is a farmers' movement, the government can announce a policy change. A movement centred on policy change does not necessarily translate into a movement for defending civic freedom. That is how the government has outmanoeuvred those who thought social discontent will erupt.

The protest against civic oppression does not have a focal point. Nationalism has a single focal point, one thing that keeps BJP supporters and organisations united. Gandhi's organisational acumen, feel for organisation and exemplarity is invoked a lot these days. But it is sobering that even those techniques worked largely in the context of nationalism. Civic freedom does not seem to give that focal point for this reason. The government engages in what you might call serial authoritarianism, picking out targets one by one. The advantage of this strategy is not just that others are complacent that they will not be the victims of civic oppression. It is also that it tires out protest, by making each transgression require a separate and discrete form of protest. So we don't yet have a contest between democracy and authoritarianism. What we have are protests against individual transgressions — sedition, lynching, NRC, Kashmir. These are still seen as individual transgressions in a system that is still, overall, legitimate.

But even as we prepare our legal challenges, write in public, organise protests, mobilise and look for slivers of social resistance that can be harnessed in the service of civic freedom, we should be prepared that things will have to get worse before they get better. After all, if we still have the luxury of acting as if the system is legitimate, the system will hoist us with our own petard of legitimacy. This is not a counsel of despair, only an analytical judgement, that the crisis will have to be projected as deep, systemic and wide-ranging, before resistance finds a focal point.

The writer is contributing editor, The Indian Express

Nationalism has a single focal point, one thing that keeps BJP supporters and organisations united. Gandhi's organisational acumen, feel for organisation and exemplarity is invoked a lot these days. But it is sobering that even those techniques worked largely in the context of nationalism. Civic freedom does not seem to give that focal point for this reason.

A VISION FOR BHARAT

RSS chief's Vijaydashami speech highlighted a culture that has no place for violence



RAJIV TULI

THE YEAR 2019 will hold a special place in the history of Bharat. It not only marks the 550th "prakash varsh" of Guru Nanak and the 150th birth anniversary of Mahatma Gandhi; the celebration of Dattopant Thengadi's birth centenary is also starting from November 10. All three figures shared the same cultural values and civilisation. They are the guiding spirits of this nation. This was one of the key messages sent by the RSS across the globe as the sarsanghchalak shared his thoughts at the Vijaydashami celebration in Nagpur.

The annual address by the RSS chief holds great importance as the organisation is seen as an ideological mentor to not only to the ruling government but many other organisations that are run throughout the country by swayamsevaks, with a vision of building character to rebuild the nation.

He appreciated the decision made by the present government to revoke Article 370. The people of Bharat showed faith in the strong leadership of the country in the elections. And the government responded by delivering its promise of "one nation, one constitution".

Mohan Bhagwat focused on the Indian economy and areas that Bharat needs to work on. The speech highlighted the misguiding of the Indian masses by spreading the fear about the alleged slowdown of the economy. He emphasised the importance of self-reliance by focusing on the need for the growth of the

MSME sector. He revisited Thengadi's vision for a "third way" by not looking at the capitalist or communist models of development but developing an indigenous Bharatiya model.

The great emphasis given in our culture to unity in diversity is also important. The RSS's idea of diversity is that one might follow any path of worship but we all consider ourselves Hindu. Some may prefer to use "Bharatiya" instead of "Hindu". The RSS doesn't have a problem with that. Bhagwat made it clear that "terminologies" are not that important, what is really important is the "essence" and "intention".

Bhagwat also took up the key issue of Swadeshi. The Sangh believes that Bharat does not need FDI in low-tech products. He categorically reiterated that we need to be careful about who the real beneficiary is and not be misguided by mere optics when it comes to FDI. A classic example to understand what Bhagwat meant comes from the mobile manufacturing market in India. Indian mobile manufacturing companies once had a market share of 58 per cent. This has been reduced to 8 per cent as their manufacturing facilities are being taken over by Chinese companies.

This core idea of the oriental model of economic development is discussed in length by Thengadi in his book, *Third Way*. Thengadi is one of the most prominent ideologues of the Sangh. He was instrumental

in the formation of Bhartiya Mazdoor Sangh, Bhartiya Kisan Sangh and Swadeshi Jagran Manch. He also predicted the fall of communism and rise of Bharat in 21st century in 1989, which happens to be the birth centenary year of K B Hedgewar.

Bhagwat's speech also discussed the fear that has been spread among minorities by introducing words which are alien to Bharat, like "lynching". Efforts are underway to defame our country and the entire Hindu society. Many of these cases have been found to be false or exaggerated. He highlighted that the legal system in India is competent to curb such incidents. Indian culture has no space for violence but only for peace and acceptance to all. It goes beyond tolerance to coexistence.

For the first time, the need to look at the borders beyond land is highlighted. The world is moving towards new dynamics in maritime security. With huge maritime boundaries, Bharat needs to take care of its islands as well.

Bhagwat concluded his speech by discussing the need to realise the symbolic meaning of Vijaydashami celebration. The victory of the good over evil is only possible if we strengthen ourselves as individuals, as a community and a nation and to lead the world with an example.

The writer is member of the state executive of Delhi RSS. Views are personal

OCTOBER 10, 1979, FORTY YEARS AGO



SC STAYS EXECUTIONS

THE SUPREME COURT stayed all executions in the country on an application by a convict under sentence of death who has challenged the constitutionality of capital punishment. The SC order was ex-parte, but the acting chief justice, PN Bhagwati, and Justice V D Tulzapurkar, ordered that copies of the apex court's order be communicated to all states and Union Territories. The court listed the matter to come up for further directions on October 10. It also allowed the petitioner, Mal Singh, to amend his application to implead all state governments and Union Territories as parties so that appropriate orders can be passed.

CHINA FOR BOURGEOISE

IN ITS ZEALOUS efforts to catch up with the modern world in economic development, China is turning to its former capitalists inside the country and to the masters of commerce outside — the overseas Chinese. The most famous of the businessmen who stayed in China when the communists took over 30 years ago was Rong Yiren, head of a giant textile works. Today, Rong is back in the Peking limelight as chairman of a huge new state-sponsored corporation designed to entice foreign investors into joint ventures in China.

FACING FAMINE

"BOLL LUKHRI PHULA kaans, barsa ka ghar

hoi gaya naas", is a saying in the local dialect in Banda, Uttar Pradesh. It means that the howling of jackals and the blooming of kaans — a variety of grass — are indications that the rains have come to an end. The kaans is in full bloom here even as the farmers are trying desperately to sow their rabi crops. Surrounded by the waters of the Jamuna and Ken rivers on three sides, this Bundelkhand district is in the grip of a drought raging in the region. The kharif crop has been declared destroyed. Ten per cent of it that still stands will not bear fruit. For the rabi crop, farmers are keeping their fingers crossed while their women have undergone all penances to please the rain god, but without luck.

15 THE IDEAS PAGE

Just blame it on millennials

After all, they are investing in experiences, not consumption and commodities



BHASKAR CHAKRAVORTY

"The automobile and components industry has been affected by BS6 and the mindsets of millennials, who now prefer to have Ola and Uber rather than committing to buying an automobile" — Finance Minister, Nirmala Sitharaman explaining why the Indian economy is in so much trouble.

"Today, I have the honour to introduce you to my family" — Prime Minister Narendra Modi to US President Trump in Houston, referring to the US Indian diaspora, disproportionately comprised of millennials.

OH, THOSE MILLENNIALS. They were supposed to be Midnight's Grandchildren, who had shoved all vestiges of their parents' Gandhian guilt and Nehruvian socialism into history's cluttered closet. They were meant to represent the consumerist, urbanising, digitally exploding India. They were the embodiment of what McKinsey had — in an early fit of enthusiasm about the emerging Indian middle-class — called the "bird of gold."

Indian millennials had been handed a political bonanza: Two terms of Modi, a leader they adore at home and in Houston; a muscular post-Article 370 India, which seems to have left a mark on relatively few millennial consciences; and demonetisation, a bad idea then, worse idea now, but popular nevertheless with the demographic. This privileged class has been handed an India with streaming video, teeming cities and gleaming malls. All that was asked of them was to fulfill that promise of gluttonous gratification. Is it really that difficult to just go out and buy a car and join those teeming millions on clogged roads across India? Is it not their patriotic responsibility? It turns out millennials are too busy tracking how many minutes it will take for their Uber to wend its way so they can settle comfortably into the so-called "sharing" economy — in other words, an economy that consumes less stuff. It all seems like a frightening return to Gandhianism.

Finance Minister Sitharaman, of course, called a spade a spade; and since they are the Prime Minister's "family", I suppose it is okay to be honest about family members. There are three dreadful ways in which millennials are killing the economy: they are marrying late; they spend on experiences rather than on manufactured products; they are jobless or can't seem to get jobs paying decent salaries.

Consider each in turn. Marriage and milestones beyond it, such as having children — besides myriad other benefits — translate into greater engagement with the economy. The very act of marriage is accompanied by shopping for exorbitantly-priced products. If gold buying is one barometer, we are in trouble, thanks to these millennials. According to the World Gold Council, Indian millennials are buying less gold than their predecessors. Even millennial-friendly innovations, such as "digital gold", being pushed by the likes of Google, aren't helping.

A key culprit is, clearly, the marriage-averse millennial. According to the dating site, OKCupid, Indian millennials don't think marriage is necessary for a serious relation-



C R Sasikumar

ship to be classified as successful or happy. Of course, Indian millennials are mirroring trends elsewhere. The move away from "getting settled" (as they used to say back in the good old days) is a global phenomenon. In the US, millennials are paying fewer visits to supermarkets because of these misguided unsettling habits.

Indian millennials, of course, share another thing in common with their peers elsewhere. More than any generation preceding them, they have grown up with an awareness of the mobile phone and the internet. Their digital lives are lived by learning about, sorting and sampling a string of "experiences", such as entertainment, food or travel. Moreover, Indian millennials are the largest demographic block of social media users in the country. Social media is, of course, a beast that must be fed with shares, posts, links and likes. What this means is that millennials are steering disposable income towards "shareable" experiences.

You can imagine the impact on the GDP. For one, experiences are bought in bite-size pieces and may contribute less than a big product purchase. Also, these experiences are more service oriented and do little to help with growing the manufacturing sector. Finally, feeding the social media beast is time-consuming. It is mighty inconvenient to update your posts sitting behind a steering wheel; another reason to get the Uberwallah to do the driving.

Speaking of disposable income, millennials don't seem to have much of it. While those social media companies give you stuff for free as long as you leave them your data, companies that make real things insist on being paid. This can prove to be a serious hindrance to economic participation since India's millennials don't have the jobs they were promised by the head of their family, Prime Minister Modi. Even the ones that do have jobs, don't earn enough.

Joblessness is at a 45-year high and millennials are bearing the brunt of it. The auto

sector, which employs 3.5 crore, has laid off 3 lakh, with another 10 lakh jobs at risk. And it is not just the auto sector, of course. The real estate sector anticipates one lakh jobs to disappear over the next few months. Medium- and small-scale industries, the biggest job creators in the past four years, were supposed to deliver another crore jobs in the coming five years, but they are stalling because of a demand slowdown and a liquidity crunch. Jobs are being cut across textiles, diamond-cutting, consumer goods in what is deemed the "worst slowdown" in a decade, with no relief in sight. Even if the economy climbs back up, less than 5 per cent of the workforce has the necessary formal training, which means that even if the need exists, the jobs may not be filled.

Moreover, the Periodic Labour Force Survey suggests a wages crisis. Seventy five per cent of regular workers earn less than Rs 20,000 a month, with millennials comprising almost 50 per cent of the workforce. It is worth noting that India at 21.7 per cent lags far behind other emerging economies, such as China (53.1 per cent), Brazil (67.7 per cent), Russia (93.4 per cent) and South Africa (84.8 per cent) in the share of salaried jobs. This sorry state should explain why so few of them are rushing to buy an automobile.

Sitharaman would be well served by sparing the millennials and inquiring why the economy isn't delivering jobs, skills and better pay that Modi promised. But that would require deeper introspection and the tedious job of formulating and implementing policies for job-creation. Somebody has to own — and fix — the economy. Maybe the finance ministry could try that for a change.

Sitharaman would be well served by sparing the millennials and inquiring why the economy isn't delivering jobs, skills and better pay that Modi promised. But that would require deeper introspection and the tedious job of formulating and implementing policies for job-creation. Somebody has to own — and fix — the economy. Maybe the finance ministry could try that for a change. Till then, just let Modi's millennial family members call their wretched Ubers for now.

The writer is Dean of Global Business at the Fletcher School at Tufts University, founding executive director of Fletcher's Institute for Business in the Global Context and a non-resident senior fellow of Brookings India

WHAT THE OTHERS SAY

"The prime minister (Boris Johnson) continues to play fast and loose with parliament, the courts and Britain's interests. His plans must be blocked." — THE GUARDIAN

A case for deletion

The Boilers Act needs to be done away with. In fact, the entire Seventh Schedule of the Constitution needs a relook



BIBEK DEBROY

BOILERS, THAT IS, steam boilers, have been important enough to engage the attention of both the Union and state governments. Boilers figure as entry number 37 in the Concurrent List. I don't think anyone paid much attention to boilers in the Constituent Assembly debates. Boilers figured in the "Concurrent Legislative List" (entry no 21) of the Government of India Act of 1935 and got included in the Seventh Schedule by default. In the Government of India Act of 1919, boilers figured in the list of provincial subjects, but warranted no separate entry. They were simply mentioned as a sub-head under industrial matters (entry 26), along with "factories, settlement of labour disputes, electricity, gas and smoke nuisances".

Between 1919 and 1935, boilers increased in importance. It is easy to see why. The Indian Boilers Act of 1923 was passed "to consolidate and amend the law relating to steam-boilers". This was amended in 2007 and the then minister of state in DIPP (Department of Industrial Policy and Promotion) moved the bill, stating, "The Indian Boilers Act of 1923, which this Bill seeks to amend, served its purpose well in the initial years of its operation, but with revolutionary technological changes, with the expansion of the economy, with new technologies becoming available for boiler manufacturers and for boiler component-manufactures as also for users, it was considered necessary to introduce certain necessary amendments to the bill to make it more effective, to lend it efficacy, practicality and a user-friendly ambience."

He also added, "You will also know that the state government inspection gave rise to long delays, corruption; and there were complaints of inappropriate certifications, etc. All of that is sought to be addressed by introducing new organisations and making other inspecting agencies in the private sector to come forward and render this extremely critical function."

Irrespective of whether boilers needed oil and grease or not, inspectors did. Since 2014, there have been more relaxations, with self-certification pushed, though this is primarily the domain of states. Nevertheless, one should read the "State Business Reform Action Plan" — the implementation guide DIPP prepared for states.

I am indebted to Arghya Sengupta of the Vidhi Centre for Legal Policy for asking an interesting question. Why must boilers continue to be on the Concurrent List? This doesn't mean boilers should be moved from the Concurrent List to State List. Why must boilers have a separate entry? Why can't they be covered under the industrial safety clauses, as used to be the case under 1919 Government of India Act? To state it more strongly, this isn't a ques-

tion of amending and tweaking the Indian Boilers Act. Why can't the Indian Boilers Act be repealed?

Between 1919 and 1935, what ostensibly changed was the enactment of the Indian Boilers Act. In my view, what really changed was the report of the Boilers Law Committee. This was a committee set up in 1920 (F D Ascoli was the president) and it submitted a report in 1921. It was this committee's report that led to the Boilers Act of 1923. People often refer to this committee and to the explosion that occurred in Calcutta in 1863. I don't know how many have read the Ascoli committee's report. It begins with the sentence, "The necessity for boiler legislation is due to the fact that the steam boiler is an extremely dangerous instrument, that is liable to explode with disastrous consequences, on account of faults in design and construction, the effects of wear, tear and usage and as the result of careless handling and management at the time of working."

The world (and boilers) has moved on since then. The Calcutta explosion in 1863 led to a loss of 13 lives and resulted in Act VI of 1864, which applied to Calcutta and its suburbs. Thereafter, two accidents in Bombay led to Act VI in Bombay in 1869, later extended after explosions in "Broach and Ahmedabad in 1871". Following the committee's report, uniform all-India legislation, with government inspection, was introduced through the 1923 Boilers Act.

Reading the Ascoli report, I find the discussion comparing the United Kingdom and India extremely interesting. "It is important to remember that in the United Kingdom it is the custom to insure boilers against the risk of accident of explosion, and that on this account steam boilers are subject to inspection and control by influential Boiler Insurance Companies and Associations."

Therefore, beyond provisions that applied to factories and workshops, Britain didn't have any system for government inspection of boilers and no such legislation. "It has been suggested that it might be possible to adopt in India a system similar to that prevalent, in the United Kingdom. We have carefully considered the suggestion, but have arrived at the conclusion that it is impracticable. The evidence that we have heard shows unanimously the popularity of official inspection and the confidence resulting from the fact that it is done by a Government agency. The inspection is generally efficient, effective and economical — far cheaper than would be possible in the hands of a private commercial concern, the ultimate aim of which must be the payment of a dividend to its shareholders. It is obvious that in India the same confidence would not be placed in inspection at the hands of a private commercial company."

It is this perception that has changed. That's the reason we no longer need amendments to the Boilers Act. We no longer need that specific legislation and the specific entry in Seventh Schedule. Boilers are only an example. The entire Seventh Schedule needs a relook.

The writer is chairman, Economic Advisory Council to the PM. Views are personal.

LETTERS TO THE EDITOR

SUPPLY SIDE MATTERS

THIS REFERS TO the editorial, 'Trouble with credit' (IE, October 9). The main factors behind the decline in credit flows are subdued demand and low capacity-utilisation. It is surprising that instead of addressing the demand-side problem, the government implements supply-side measures like the corporate tax rate-cut. Although well intentioned, it is a step in the wrong direction. It has only added to the economic woes in the form of a ballooning fiscal deficit and attendant problems like a depreciating rupee, rising import bills and cuts in public expenditure.

S Bhalerao, Mumbai

FARM HOLDS THE KEY

THIS REFERS TO the article, 'The wrong way out' (IE, October 8). The conventional approach of fiscal and monetary stimulus methods is a temporary solution to the economic slowdown. The key to addressing the slowdown lies in reforms in the agriculture sector. There are limits to what a central bank can do — the government needs to increase investment. The problem is that the central bank can only facilitate lower rates and push banks to lend but it can't force people to borrow money from banks.

Sagar Ghorad via e-mail

CHANGE MINDSETS

THIS REFERS TO the article, 'Learning from Bhavkhedi' (IE, October 9). The writer has shone a light on the state of the country's marginalised classes. Centuries-old practices of segregation and untouchability persist in rural ar-

LETTER OF THE WEEK AWARD

To encourage quality reader intervention, The Indian Express offers the Letter of the Week award. The letter adjudged the best for the week is published every Saturday. Letters may be e-mailed to editpage@expressindia.com or sent to The Indian Express, B-1/B, Sector 10, Noida-UP 201301. Letter writers should mention their postal address and phone number.

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PANKAJ CHATURVEDI AND HITESH SINGHAVI

Nipping it in the bud

E-cigarette ban prevents a disease from becoming life-threatening

THIS REFERS TO the editorial, 'Vapourised' (IE, September 20). It states that the "ban on e-cigarettes is symptom of a larger malaise — governing by the brute force of a hammer when the subtlety of a scalpel is required". We disagree. The ban is targeted at removing a cancer that was threatening the life of unsuspecting users.

Smoking-related diseases rank among the greatest public health problems of the last century. Smoking, it is feared, will kill around a sixth of the world's population in the 21st century. However, it is not enough to see smoking as just another bad habit. Commerce, social factors and the absence of state regulations play important roles in people getting hooked to tobacco. However, there are positive signs. As per the second Global Adult Tobacco Survey 2016, India has seen the steepest decline in tobacco consumption (17 per cent) in any part of the world. There could be several reasons for this, but certainly not because e-cigarettes, "offer a path to quitting" to older smokers.

E-cigarette is a nicotine containing device that is owned or promoted by the cigarette industry. The basis of e-cigarette promotion was its safety vis-a-vis conventional cigarettes. E-cigarettes are claimed to contain nicotine minus the carcinogens in tra-

ditional cigarettes. However, nicotine is even more addictive than cocaine. Currently, there is no treatment for nicotine addiction. Moreover, nicotine even in its pure form is potentially carcinogenic. A dose of 30-50 mg of nicotine can kill an adult human.

Needless to say, tobacco is the cheapest source of nicotine. Therefore, pure nicotine is a myth and not a reality. The government of India is working towards the reduction of tobacco cultivation. The use of e-cigarettes stood in the way of this endeavour.

The wolf in the sheep clothing now stands exposed. The US has been rocked by vaping related cases of severe lung sickness. There have been 21 deaths in the past three months. The use of tobacco should be seen as a historical mistake. We now have opportunity to correct this mistake and protect next generation from the killer tobacco industry.

The editorial notes that like conventional

cigarettes, "the use of e-cigarettes should be regulated". However, we feel its better to nip the problem in the bud. The editorial also talks of the rise in the share prices of ITC following the e-cigarette ban. This is inconsequential because cigarette use is declining steadily in India. Globally, the cigarette business is no more lucrative. And, in fact, e-cigarette seems to be the tobacco industry's biggest hope.

Till date, there is no conclusive evidence that e-cigarettes prove beneficial in quitting cigarettes. On the contrary, it is known that among those who use e-cigarettes to stop smoking, 25 per cent use along it with cigarette and 75 per cent continue to use it even after quitting smoking.

As a thumb rule, nearly 10 per cent of smokers quit through the dint of will power. Approved drugs (nicotine tablets), under medical supervision, double this quitting rate. An e-cigarette, even if it's proved to help people quit smoking, is a far more expensive proposition compared to medically-approved methods. Fears that

DEAR EDITOR, I DISAGREE

A fortnightly column in which we invite readers to tell us why, when they differ with the editorial positions or news coverage of 'The Indian Express'