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FACT CHECK, GROUND REALITY

CAN SPACE TRAVEL CAUSE HARM TO AN ASTRONAUT'S JOINTS?

FOLLOWING A novel study of mice aboard a Russian spaceflight, researchers have raised a question for astronauts of tomorrow: could travelling in space be bad for your joints? They found early signs of cartilage breakdown in the mice, suggesting that the reduced biomechanical forces of spaceflight are at play on the musculo-skeletal system.

The study, published online in the journal *npg Microgravity*, was done by researchers of Henry Ford Hospital in the United States. While they agree that it is premature to translate the finding to humans, they also note that previous research has shown that living and working in space leads to many changes in the human body including the immune system, blood pressure and the shape of a person's eyes.

In the new study, evidence of articular cartilage breakdown in the mice was "clear-cut", according to lead author Jamie Fitzgerald. "We believe this degradation is due to joint unloading caused by the near lack of gravity in space. If this were to happen to humans, given enough time, it would lead to major joint problems," Dr Fitzgerald was quoted as saying.

The research team analysed the molecular changes in the cartilage of mice that spent 30 days in animal research enclosures aboard an unmanned Russian Bion-M1 spacecraft in 2013. This included performing tissue stains and gene expression studies on the cartilage. The results were compared to mice observed on Earth during the same period. The changes were found to be consistent with those associated with osteoarthritis. In comparison, the mice on Earth showed no discernible cartilage degradation.

The study was funded by NASA, which is keen on developing a better understanding of what happens to the human body in space. The researchers said more studies are needed, especially given that there is a potential trip to Mars in the future.

Source: Henry Ford Health Systems



Study was on mice in space, raises question on humans. NASA

quoted as saying.

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Source: Henry Ford Health Systems

THIS WORD MEANS

ITERATIVE EVOLUTION

How a bird that went extinct came back from the dead

THE WHITE-THROATED rail is the only flightless bird known in the Indian Ocean area. New research has found that it had once gone extinct, but rose from the dead thanks to a rare process called "iterative evolution". It means the repeated evolution of similar or parallel structures from the same ancestor but at different times.

The study, from the University of Portsmouth and the UK's Natural History Museum, is published in the *Zoological Journal of the Linnean Society*. It found that on two occasions, separated by tens of thousands of years, a rail species was able to colonise an island called Aldabra and subsequently became flightless on both occasions. The last surviving colony is still found on the island.

The white-throated rail is a chicken-sized bird, indigenous to Madagascar. Migrating to Aldabra, the rails evolved so that they lost the ability to fly. However,



White-throated rail. Wikipedia

Aldabra disappeared under the sea during an inundation event around 136,000 years ago. The researchers studied fossil evidence from 100,000 years ago when the island was recolonised by flightless rails, and compared with fossils from before the inundation event. They concluded that one species from Madagascar gave rise to two different species of flightless rail on Aldabra in the space of a few thousand years.

Source: University of Portsmouth

EXPRESS NEWS SERVICE

NEW DELHI, MAY 22

INDIA'S seven-phase Lok Sabha election, spanning two-and-a-half months and 542 seats, ends on Thursday. The counting of votes will begin at 8 am, and strong result leads will be known by noon — unless it turns out to be a neck-and-neck fight like the Madhya Pradesh Assembly elections. Here's what will happen.

Who will be in charge of the counting?

The Election Commission of India (ECI) specifies that the counting of votes is to be done by the Returning Officer (RO), who is an officer or a local authority nominated by the Commission for each constituency. In most cases the RO is the District Magistrate of the concerned district.

Assistant Returning Officers too, are legally empowered to supervise the counting, and they take over especially if the RO has been assigned more than one constituency.

Where will the votes be counted?

Rule 51 (Time and place for counting of votes) of The Conduct of Election Rules, 1961, says that the "returning officer shall, at least one week before the date, or the first of the dates, fixed for the poll, appoint the place or places where the counting of votes will be done and the date and time at which the counting will commence..."

In its *Handbook for Returning Officer, February 2019 (Document 23, Edition 1)*, the ECI says that "for the sake of uniformity, the date and time of counting of votes is fixed by the Commission". The place of counting is decided by the RO — and while it should "preferably" be at the RO's headquarters in the constituency, the ECI says "there will be no legal objection even if the place so fixed is outside the limit of the constituency".

Votes for a particular Assembly constituency are counted at one place. However, the ECI says, "each Assembly constituency or an Assembly segment of a parliamentary constituency is to be counted in separate hall and under no circumstances can the counting of more than one Assembly constituency be taken simultaneously in a hall".

Each counting hall "shall be a separate room walled on all sides preferably with separate exit and entry facilities"; "where pre-constructed separate rooms are not available but large rooms are proposed to be divided for creating halls, each part constituting a hall will be separated by temporary partitions".

There can be no more than 14 counting tables, apart from the RO's table, in one counting hall.

How will counting centres be secured?

The ECI specifies that a 100-metre periphery around a counting premise/campus should be made a pedestrian zone and barricaded. A three-tier security cordon — at the periphery of the pedestrian zone, the gate of the counting premise, and the door of the counting hall — manned by the police, the State Armed Police, and Central Armed Police Forces (such as the BSF, CRPF, CISF, ITBP, etc.) respectively, will be in place.

To ensure "smooth flow of EVMs between the respective strong rooms and the counting halls", the ECI directs that "proper barricading of the path used for transport-

SIMPLY PUT QUESTION & ANSWER

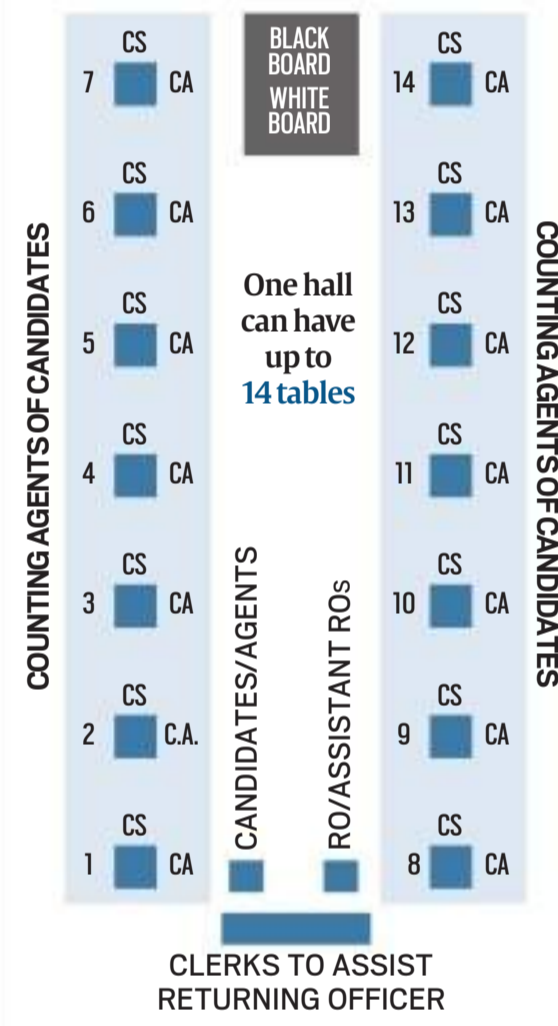
How votes will be counted

60 crore votes locked in EVMs will be counted today as the world's largest democratic exercise nears culmination. Counting is scheduled to begin at 8 am — here's what will happen through the day



Outside the counting centre in Goregaon East, Mumbai, on Wednesday. Nimal Harindran

INDICATIVE LAYOUT OF COUNTING HALL



CS: Counting Supervisor
CA: Counting Assistant
Blackboard/Whiteboard: Candidates' names and round numbers pre-written; results of each round are filled in as counting progresses
Counting of ETPBs and PBs takes place at RO's table
Source: Annexure 34, Handbook for Returning Officer, February 2019 (Document 23, Edition 1), pp 431-2

ing EVMs between the strong room of an AC (Assembly constituency) and the counting hall for that AC should be done so that the transportation is not interrupted by the presence of non-officials and media persons",

and that "no unauthorised persons should be able to breach that barricade and access the area/path nor should the path of two different ACs crisscross".

No one except the following can enter the counting hall: counting supervisors, counting assistants, and micro-observers; ECI-authorized individuals and Observers; public servants on election duty; and candidates, election agents, and counting agents. Police officers and government Ministers are not considered "public servants".

No one (not even the candidate, RO, or Assistant RO) other than the ECI's Observer can carry a mobile phone inside the counting hall.

Who will be doing the actual counting?

The RO appoints the counting staff. The number of counting staff depends on the number of counting halls, and the number of tables in each hall, with some reserve staff. For each table, there is one counting supervisor (the ECI says they should preferably be gazetted officers of the central or state government or officers of comparable rank from central/state government undertakings), one counting assistant, and one Micro-Observer, who is a central government/PSU employee, and is "responsible for the purity of counting process on his/her respective table".

The counting officials are randomised in three stages: first, a week before counting, a list of 120% of the required staff is randomly generated; second, 24 hours before counting begins, Assembly constituency-wise randomisation is done; third, counting tables are allotted at 5 am on the date of counting.

What process will be followed?

At the designated time, the strong rooms, where the polled EVMs are kept under safe custody, will be opened in the presence of the RO/Assistant RO(s), candidates/election agents and ECI Observers. After making entries in the log book, the seal of the lock will be checked and broken under videography and date-time stamping.

Rule 60 of The Conduct of Election Rules,

1961, lays down that "the returning officer shall, as far as practicable, proceed continuously with the counting". The Electronically Transmitted Postal Ballot Papers (ETPBs) and Postal Ballots (PBs) will be counted first at the RO's table. Counting of votes in the EVMs can start after 30 minutes, even if the counting of postal ballots has not been completed by then.

After all EVMs of a particular round have been counted, and the ECI Observer has done a parallel counting of two randomly selected EVMs, a tabulation for the round will be done, and the RO will announce the result of that round of counting and sign the relevant record (Part II of Form 17C).

Thereafter, the RO/ARO will give verbal clearance for the EVMs for the next round to be brought from the strong room into the counting hall. In case of simultaneous elections (Odisha, Andhra Pradesh, Arunachal Pradesh, and Sikkim), the next round of counting will be taken up only after the previous round of counting for both the Assembly and Lok Sabha elections have been completed.

How will VVPAT slips be counted?

This is the first Lok Sabha election in which VVPAT slips will be compulsorily verified with the EVM count in five randomly selected polling stations of every Assembly segment. Mandatory verification was introduced with the Gujarat and Himachal Pradesh Assembly elections in 2017, but it was limited to one VVPAT per Assembly segment. This was increased to five polling stations by the Supreme Court on April 8.

VVPAT tallying will be taken up after all rounds of EVM counting are over, and will be done sequentially — and not simultaneously — for all five polling stations. On an average, it takes an hour to verify slips of one VVPAT machine. Hence, the EC anticipates a delay of almost four hours (since the SC has ordered tallying for an additional four machines for every Assembly segment) in the final announcement of results. In case of a mismatch between the VVPAT and the EVM count, the VVPAT count will prevail.

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Making of a conflict zone: humans vs tigers in a Maharashtra forest

VIVEK DESHPANDE
NAGPUR, MAY 22

HUMAN DEATHS in wildlife attacks have been rising in the forests of Brahmapuri in Maharashtra, from six in 2006 to 18 in 2018, most of them in tiger and leopard attacks (*The Indian Express*, May 20). A look at the factors leading to the area's emergence as a human-wildlife conflict zone, and the mitigation measures taken or explored:

The area

The 1,200-sq-km Brahmapuri forest division of Chandrapur district — home to 41 tigers (16 males, 25 females, besides some 15-16 cubs) as well as 80-90 leopards — is not a tiger reserve. It has been a mix of about 1,000 sq km territorial forest and about 200 sq km Forest Development Corporation of Maharashtra area. About two years ago, 153 sq km of it was declared as Ghodazari Wildlife Sanctuary. It is a protected area from the perspective of commercial forestry, but not so from a wildlife point of view. Contiguous with the 625-sq-km Tadoba-Anandhari Tiger Reserve (TATR) with over 44 tigers, Brahmapuri is today the most precious tiger-bearing non-protected area in the country.

Tiger population

Among the reasons for Brahmapuri emerging a hotspot for human-wildlife con-

flict, the most obvious is the growth of tiger numbers, from about 15-16 in 2013 to 41 now. With TATR packed with tigers, part of its population has dispersed to adjacent forests in Brahmapuri and other areas. Chandrapur district as a whole has more than 100 tigers, possibly the highest for a district anywhere in the country. Also, outside TATR, the tigers are spread mostly in Brahmapuri area. But while TATR's 44 tigers have to live with only two yet-to-be-rehabilitated villages, Brahmapuri's 41 tigers have to live with over 610 villages, half of them close to the forest.

Cattle density

Among other reasons for the conflict are high fragmentation of the forest and high cattle density. "Brahmapuri has one of the highest numbers of roads for a forest teeming with tigers. In recent years, it has been bisected by network of huge-sized canals of Gosikhurd irrigation project. And then there are agricultural fields all around. So, tiger dispersal or movement is bound to trigger conflict with humans," said Wildlife Institute of India scientist Bilal Habib, who has been working in the area.

According to Mohammad Talib, Chandrapur's Deputy Commissioner for Animal Husbandry, Brahmapuri *tehsil* (part of which is in Brahmapuri forest division) had a livestock population over one lakh in the 2012 census. The forest division also includes parts of Nagbhid, Sindewahi and Chimurtah-



A tiger in a forest of Chandrapur. Deepak Daware

sils, with cattle populations of 70,000, 36,000 and over 90,000 respectively. Cattle being easy food for tigers, cattle kill cases have risen from 305 in 2009-10 to 852 in 2018-19.

Migratory preferences

Habib explained that the tiger population in Brahmapuri has increased also because of more breeding tigresses. "Unlike males, females don't migrate long distances through fragmented forests. When they breed, the male cubs again can go long distances after separation but not the females.

That's why we have females involved in most cases of conflict," he said.

Habib and colleagues have recently radio-collared five tigers, including four females. One of the three radio-collared sibling females has been found responsible for one death this year.

Other factors

One major factor for the rise in tiger numbers has been a major crackdown on organised poaching gangs that had been operating since 2013. "Earlier, the annual

takeoff from Brahmapuri was about 6-7 tigers. That is not happening now. And there have been no local revenge killings either," said Nitin Desai, Central India director of the Wildlife Protection Society of India.

Another reason for rising conflict is the spread of the canal network of the Gosikhurd project, which has broken wildlife corridors connecting Brahmapuri to other forested areas. "We had then suggested to the Water Resources Department that it build bridges across those canals to facilitate wildlife movement," former Divisional Forest Officer Sanjay Thavre said. The WRD eventually built some, and wildlife have started using these.

Mahua flowers

As with any forest, human-wildlife conflict is mostly due to people's interface with wildlife. People go inside the Brahmapuri forest to collect minor forest produce and firewood. The conflict is generally intense during April-May, when people enter the forest to collect *mahua* flowers and *tendu* leaves, the latter used to make *beedis*. *Mahua* flowers are nutrient-rich and edible, and are also used to make liquor.

Mitigation measures

During his stint in Brahmapuri from 2008 to 2013, then DFO Thavre had systematically mapped the trouble-spots. "We undertook a massive awareness campaign and expedited compensation cases that used to remain



The Indian EXPRESS

FOUNDED BY

RAMNATH GOENKA

BECAUSE THE TRUTH INVOLVES US ALL

When the big guys fight

US-China spat presents little opportunity for India, will aggravate the economic slowdown



BHASKAR CHAKRAVORTI

SHOOTING THE MACHINE

Whoever wins and loses today must know the EVM did not do it. It is futile — and dangerous — to target the rules of the game

THE OPPOSITION'S CLAMOUR on EVM tampering is not new. In some elections in the past, parties that lost have sought to talk up apprehensions about the manipulation of electronic voting machines by the victor. The first such prominent spectre was held up at the national level in 2010 by L K Advani — patriarch of the party that had lost the Lok Sabha polls in 2009 and is now, strenuously, ironically, trying to shout down the Opposition on EVMs. On different occasions, the Congress and the BSP have articulated their suspicions about EVMs. It can be nobody's case that the EC or the poll process is above questions. In fact, the protocols of the poll monitor are currently being interrogated from within. And despite the layered security systems designed to insulate the EVM, aberrations can arguably creep into an electoral exercise of this size and complexity. Yet, the current chorus led by 22 parties, and apparently backed by a former President of India and a former Chief Election Commissioner, is troubling. Involving a larger number of political actors than before, and armed with nothing more substantial than suspicion, it seeks not just to flag specific concerns — for instance, parties demanded, and the EC rejected, that VVPAT verification should come before, not after, the counting of votes — but to question the integrity of the poll process.

Given that no evidence of serious electoral wrong-doing has been presented and every EVM bogey has been slain, the EC is going by what the Supreme Court ruled, the current questioning of EVMs, like the old questioning of EVMs, only points to the ungracious loser. Or in this case, suspected loser. The exit polls vary but they have all projected the NDA's return to power. In that context, parties that fought the BJP, be it the Congress or regional parties, would appear to be taking preemptive steps to avoid confronting their own political failure. Whoever wins and loses today, however, parties must know the EVM did not do it. And that it is futile — and dangerous — to target the rules of the game.

India's democracy is diverse and argumentative, but its sprawl is anchored by a shared faith in the credibility of the poll process. Even as everything must be done to make it error-free and more transparent, the bar for questioning its good faith and integrity must remain very high. If it gets a new lease of life, the BJP's electoral dominance poses a challenge that must be countered politically. Its political opponents will need to summon a will to power to match the BJP's. They will also need to craft the contours of an alternative politics, and to tell stories that engage the voter, speak to her hopes and aspirations. For the loser of Election 2019, there is no easy way out — no fall guy or machine.

ARUNACHAL OMEN

The murder of a legislator ahead of assembly poll results raises the spectre of renewed militancy in the region

THE MURDER OF 11 persons, including a National People's Party MLA in the outgoing Arunachal Pradesh legislative assembly, his son and security guard, by suspected Naga militants on Tuesday is a challenge to the government's efforts to end militancy in the Northeast. Tirong Aboh was on his way to Khonsa, the headquarters of Tirap district, when he was ambushed by militants suspected to be from the NSCN (I-M). Aboh, reportedly, had been speaking out against the NSCN (I-M), the Naga insurgent group engaged in peace talks with the Centre, for threatening his supporters during the recent election campaign. Whatever be the motive, and whoever be the culprit, the government should send out a strong message that it will not let anyone take the law in their hands.

The incident comes a month after the Armed Forces Special Powers Act (AFSPA) was partially lifted from Arunachal Pradesh, 32 years after the law was first introduced in the state. However, it continues to be in force in Tirap, which borders Assam and Myanmar. Militant groups, among them various NSCN factions and the ULFA, have a presence in Tirap district because of its terrain and proximity to the international border. These have come under pressure after the Myanmar military began to target their camps, forcing them to relocate to India and even surrender to the armed forces. Naga civil society groups in India have raised the concern that the military action in Myanmar is no longer limited to militant groups but extended to the indigenous Naga population as well. The Naga insurgency has a transnational imagination and conceives of Naga populations outside Nagaland, including in Myanmar, as part of the Naga homeland of Nagalim or Greater Nagaland. Groups like the NSCN claim to speak for all Nagas, a claim fiercely contested by dominant ethnicities in Manipur, Assam and Arunachal Pradesh. The demand for Nagalim, which will need a redrawing of the existing state boundaries, is a major stumbling block as the Centre and the NSCN (I-M) work towards a final peace accord.

The new Arunachal Pradesh government — the assembly election results will be out today — should see Tuesday's incident as a warning: It needs to step up the vigil against militancy. It calls for a co-ordinated effort involving the various state administrations, armed forces and the Centre. A clean and effective administration can help ensure that militancy has no ground to stand on.

AFTER THE GAME

The final season of 'Game of Thrones' has fans fuming. Perhaps they are being unkind

THE PROBLEM most addicts face — the biggest roadblock to their recovery — is admitting they have a problem in the first place. Usually, the debilitating reality of dependence hits home only when you "hit bottom", after time, money and human interaction have all suffered as a result of your obsession. The millions around the world — addicts masquerading as "fans" — who watched with anticipation the eight-year culmination of *Game of Thrones* on Monday, must thank the show's creators for facilitating their recovery. Such was the bottom that the world's most popular TV show achieved in its final season that many are considering giving up visual entertainment all together.

David Benioff and D B Weiss, the show's creators, have been "off-book" for the last couple of years — GOT has outpaced its source material, the series of novels by George R R Martin. In that time, the TV show which thrived on inverting the themes of traditional fantasy stories by killing of heroes and introducing mundane adult themes such as incest, excrement and the gore that accompanies violence, seemed to slip into typical storytelling clichés and the most insipid crutch of all, VFX. But even the biggest small-screen budget in history seems unable to compensate for the lack of the most basic, and ineffable, of skills — story-telling.

But perhaps fans, aware that they have had their last "hit" of dragons and direwolves, are being too unkind to Benioff and Weiss. After all, time was that an over-the-top battle scene would be more than enough to give them their fix. And maybe part of the reason that GOT's final season does not shock and awe is because the real-life games of thrones, from India, to the US, from Brexit to Ukraine, holds far more viciousness, comedy, high-mindedness and tragedy than a mere TV show can provide.

"CHINA SHOULD NOT retaliate — will only get worse." That was just another late evening tweetstorm from the White House. China will turn "peril into opportunity," retorted China Central Television, reminding the people engaged in this "people's war" that as a nation that has "experienced 5 years of wind and rain," it was ready for pretty much anything. The US-China trade war has not only added tariffs and jitters but is headed towards a tweet-for-tat escalation with no clear end.

In case you missed it, here is a quick recap. Donald Trump rides into office with many promises, one of them being standing up to the Chinese for currency manipulation, unfair trade practices, intellectual property theft and taking away American jobs. In January 2018, he starts following through in earnest with an enquiry into Chinese intellectual property theft, followed by a string of tariffs on Chinese imports, to which the Chinese — predictably — retaliate. Then, the situation escalates as talks to de-escalate fall through. The US jacks up tariffs on \$200 billion worth of Chinese goods to 25 per cent from the previous 10 per cent and threatens to add another 25 per cent tariff on an additional \$325 billion worth of goods. Again, predictably, the Chinese retaliate with tariffs hiked from 10 per cent to 20-25 per cent on \$60 billion worth of US goods.

Here are three questions you should ask about what happens next: How long can the standoff last? How will it end? Why should India care?

To get a sense of how long the standoff might last, it is useful to keep in mind that other than Trump, neither party should really want to do this. Trump, buoyed by a strong US economy and blissful ignorance of elementary economics, claims that the Chinese will pay for all this. Even his — otherwise loyal — television economist, Larry Kudlow, who directs the National Economic Council, admits both sides will pay. Kudlow has been wrong on many things in the past; this time, for a change, he is right. Both are hurt by a trade war and ought to prefer a swift end. American soybean exports to China have plummeted, while the Chinese risk losing share among the US consumers and firms that voraciously use Chinese-made products and US consumers and firms pay higher prices when there are few alternatives to the Chinese import. The Chinese have fewer

products on which to levy retaliatory tariffs and would have to turn to other weapons in their arsenal if the standoff lasts too long — selling part of their enormous holdings of US treasuries or weakening its currency, making its exports more competitive despite the tariffs. Both sides desperately need off-ramps.

As a sign that there has been some cautious thinking, tacticians on both sides have left a window of opportunity for a deal — or either side coming to their respective senses. China's tariff hike goes into effect on June 1, while the US has imposed the higher levies on goods shipped from China on May 10 only when they eventually arrive on American shores. Then, of course, both presidents, Trump and Xi, are due to meet at the G20 summit in late June. In other words, there are a few opportunities in the near future for a resolution.

For the standoff to end, both sides need to score a win; neither Trump nor Xi can emerge from behind closed doors looking like a loser. Here is one scenario for closure: Trump ticks the box that lets him say he has been tough on China, as he had promised. A period of extreme tweeting, high tariffs and declaration of victory which can be used as proof of toughness in campaign rallies can serve that purpose. His base has, thus far, not been too finicky about the facts; so why would this time be different? The Chinese should just give him room to let him do that. In the meantime, Xi has already declared himself president for life. This means he cannot afford to appear weak by making any substantive concessions that could hurt China's growth, especially in an already slowing economy. Ironically, if Xi were to concede there would be even more reason for American companies to do business with and in China — this would mean even fewer jobs for American workers. Trump's only real option is to let Xi get away with some minor or superficial adjustment in China's trade or intellectual property practices.

Will Trump readily see this logic? Not necessarily, since he has been an ardent believer in tariffs and protectionism since the 1980s, when the Japanese were the bad guys preying on the US. Other than replacing the Japanese with the Chinese, his worldview has remained ossified. Time will, however, run out on him as the US elections pick up steam and the trade war begins to bite and his base com-

plaints that the jobs are not returning, soybeans are not selling and the economy is slowing. It will be easier for him to reach a deal now than in the thick of the election year.

It's a bilateral spat, but others, such as India, are affected both positively and negatively. Theoretically, India ought to emerge as a beneficiary from a US-China trade war, since Indian exports could become more competitive. Shrimp exporters, for example, are reporting an opportunity to grow in the ready-to-fry, ready-to-eat and other value-added seafood products. How big are these benefits? Not much. There is relatively limited overlap between India's primary exports to the US (diamonds, generic pharmaceuticals and machinery being the top three besides services) and China's primary exports to the US (electrical and other machinery, furniture and toys and sports equipment). Even in the category of machinery, there is gigantic difference in scale; India's machinery exports to the US last year were \$3.3 billion versus China's \$152 billion in electrical machinery and \$117 billion in machinery. It is hard to see how China's pain will result in a significant gain for Indian exporters.

There is a genuine concern that excess unsold inventory of Chinese exports will be dumped in India. A more significant concern for India is the global slowdown being predicted by the IMF, partly due to the US-China trade war. India's exports have been suffering of late and a global slowdown will make the situation even worse. The crisis can have an impact on the Indian economy and jobs — and make the life of Indian exporters more difficult.

The Cold War was an escalation of bombs that were, thankfully, not deployed. This trade war is an escalation of bombast. Unfortunately, the bombast is also accompanied by genuinely value-destroying tariffs and protectionist policies. When the warring parties are the world's two biggest, and entangled, economies, everyone gets hurt — even in countries such as India, supposedly sitting on the sidelines.

The writer is the 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 non-resident senior fellow of Brookings India

THE EVM EXCUSE

Bogey of EVM switching is an outrageous attempt to deny public opinion



AKHILESH MISHRA

SCOTT SPENCER COULD well have had the EVM bogey raised by the Congress party and its co-travelers in mind when he said "the trouble with excuses is that they become inevitably difficult to believe after they've been used a couple of times".

It is not difficult to see why the current manufactured controversy on EVM reliability has been met with universal derision, except among members of the Khan Market gang. In the age of social media and screenshots, the public memory has been enhanced. They remember that Rahul Gandhi and his compatriots had raised a similar din just a few months ago and then happily accepted the results when it favoured them. The public remembers that in fact the originator of EVM bogey posted on February 4, 2015, that he suspected massive EVM tampering in Delhi and proceeded to accept the verdict a week later.

The information disseminated by the Election Commission has convinced most sane people that hacking EVMs is not possible, since they are stand-alone machines with no networking with the external world. This is why the din this time is not on EVM rigging or manipulation, but EVM replacement. EC procedures make it impossible for anyone to replace even one EVM. But even if we consider the outrageous theory plausible, consider what it entails: Madhya Pradesh, West Bengal,

Rajasthan, Chhattisgarh, Kerala, Andhra Pradesh, Delhi, Telangana, Punjab, Karnataka, Odisha and Tamil Nadu all have non-BJP governments. Some states have never had a BJP government. Even in states where BJP is currently in office, like Uttar Pradesh, regional parties have networks at all levels.

From the people who pack and transport the EVMs, to those who man the CCTV cameras in strong rooms to those who provide the outer security ring, all are drawn from the local state machinery. If the EVM replacement theory were true, it would mean the BJP is orchestrating a nationwide conspiracy involving millions of people who are all keeping the secret. Even the scriptwriters of *Game of Thrones* would envy such a perfect plot.

If the Opposition had been more honest in accepting public opinion, it would perhaps not have been reduced to trying to discredit India's electoral democracy. Every survey after the 2014 elections has held that Prime Minister Narendra Modi has not just maintained his popularity but actually increased it in many places, even over his party. In many states, the BJP has been voted to power without a chief ministerial candidate, purely on the basis of votes for Modi. Would it not be logical, then, that when Modi himself is on the line, his popularity would translate into votes?

As the recent CSDS-Lokniti pre-poll sur-

veys notes, Modi's popularity has increased substantially, among both BJP as well as non-BJP voters, as compared to 2014. In fact, when CSDS-Lokniti surveyors asked voters, in a close-ended question, what they had kept in mind while voting (the party or the candidate), around 17 per cent chose neither option and instead said that what had mattered to them the most was the prime ministerial candidate (Modi). The same survey notes that the difference between the preference for Modi and his nearest rival is as high as 20 per cent.

In the last five years, there has been no finding in any pre-poll survey, reporting from the ground, anecdotal evidence, social media trends, participation in political rallies and in any of the just-released exit polls which would suggest that there was any disenchantment with the Modi-led BJP. None of these involved the use of EVMs. The result of the final exam, which will come on May 23, through EVMs, have been preceded by five years of a series of rigorous multi-pronged tests, each of which Modi has passed with flying colours. So, if the EVMs only confirm what every other indicator has been pointing at — that Modi is the defining Indian political phenomenon of this century — will it be a surprise?

The writer is CEO, Bluekraft Digital Foundation and former director (content), MyGov

MAY 23, 1979, FORTY YEARS AGO

POLICE PROTEST

AS THE POLICEMEN'S agitation spread like wildfire in Madhya Pradesh, sources close to the agitators told Express News Service that they may resort to "direct action" by the beginning of next month if their demands for better working conditions and pay-scales were not conceded by then. The policemen were reportedly continuing their secret discussions all over the state. Messengers are going to different places to spread the word and to coordinate the voices of discontent. Leaders are emerging from within the policemen and by the end of this month, they hope to have elected associations at most of the district headquarters. Bhopal and Indore policemen

would reportedly elect their leaders respectively on May 26 and 28.

CPI INFILTRATION

FOLLOWING CONFESSIONS BY a few policemen in Punjab that they were CPI card holders, the Centre is trying to assess the extent of communist "infiltration" into the police force throughout the country. The fact that the state intelligence departments — as recently happened in Punjab — has worried Delhi the most. The politicisation of police forces is a cause for concern. The impression has grown that political parties in power in different states have over the past few years have "recruited" their own men in the police force. Perhaps some of these political

parties nourish the hope of "trouble from within" at an appropriate time.

PRICE RISE

THE PROBLEM OF spiralling prices proved rather intractable for the Union cabinet which debated the issue for 90 minutes on May 22. At the end of the meeting, which discussed two papers by the Union Finance Ministry and the Planning Commission, no decision was forthcoming. The Planning Commission was asked to work out a rational price structure for kerosene, high-speed diesel oil and petrol, as the increase in the prices of these commodities was considered to have contributed significantly to price rise in general.



13 THE IDEAS PAGE

WHAT THE OTHERS SAY

Chinese people do not know whether we should call US approaches hegemonic politics or profiteering politics. But in short, they are crooked means. The threat of tariffs will not work.” —GLOBAL TIMES, CHINA

The message, from the road

This was a general election where the BJP campaign exuded energy, the opinions of women mattered, and the Congress seemed to come up short in answering the tough questions



ANANT GOENKA

IT COSTS Rs 20 to enter Patna's three-year-old Eco Park which is divided into two distinct areas: One for families and children to play on swings, trampolines, slides and rope ladders, and another, where the lights don't work. Here, young couples embrace on benches or behind bushes in the park's darkest corners.

I retreated to the family area to get a sense of how the Patna Sahib constituency was likely to vote. In this part of the country, people seem especially happy to strike up a political conversation. And whether it's at the park, in rural Bihar, or the conversations I had with lawyers inside the illegal chambers — neatly constructed underneath the flyover, a few yards away from the Patna High court — most suggest a Ravi Shankar Prasad victory.

But you don't need such conversations to tell you that Patna Sahib — an 80 per cent urban constituency spread over 40 km — is a safe seat for the BJP. You just need to compare the energy in Ravi Shankar Prasad's campaign to that of the Congress party's candidate Shatrughan Sinha.

The *Indian Express's* Patna correspondent Santosh Singh describes Sinha best: A man who is confusing selfie requests for votes. The actor left the BJP in a sulk, only a few months ago, having won the past two terms from Patna Sahib on a BJP ticket.

Lok Sabha debutant Ravi Shankar Prasad — who was born to a well-known lawyer in Patna and is currently the country's law and IT minister — isn't taking any chances. He's visiting almost every village that his team asks him to, holding jan sabhas for as few as 100 people, stopping for bathhaks at every cluster of 25-40 people.

Prasad is a seasoned orator: Every speech of his connects. At the first village we stopped, he asks people, How many are on Facebook and WhatsApp? Around half of them raise their hands. “*Shabhash*,” he says, proceeding to credit his government for empowering them with data in the digital age. He mentions various national schemes, the work of the BJP's alliance partner, Nitish Kumar, with respect to schools, roads and power, and also that of Ram Vilas Paswan to subtly display the formidable caste arithmetic his alliance offers.

But one wonders why every speech of his carries a mention of national security: Asking people to vote in the name of soldiers. “*Is chunav ka mudda hai — kya aapko shahidon ki shahadat ka saboot chahiye, ya Bharat Mata ke suput chahiye? Yeh aapko tay karna hai.* (Do you want to vote for those who ask our armed forces for proof of their sacrifice, or do you want to vote for the brave sons of Bharat? This is the decision you have to make).”

Based on the uniformity of the audience's response across all his meetings, this query seems to draw the biggest applause.

And that frightens me. What our services need is an upgrade across the board — men, women and material (including fighter aircraft). What they do not need is the message that military action can be used by the political establishment to reap an electoral harvest.



MY TRAVELS ACROSS THE COUNTRY, during this election, have reinforced one trend that I had begun to ponder on well before the elec-



CR Sasikumar

tion process started: This will be India's first election where women have their say. Issues such as Sabarimala, triple talaq, Me Too, demonetisation, Ujjwala and toilets, have activated political opinions of women who — up until now — generally voted in line with their family preferences.

Consider Sabarimala — an issue that 15 years ago would have been confined to the region, today elicits impassioned opinions from women across the country. Our Marathi daily's website — *loksatta.com* — had thousands of comments from women on Sabarimala. I won't hazard a guess on their politics but that they are speaking their mind will change the perception that families (or even small towns, for that matter) vote as a unit.

So the political activation of women in this election could throw long-held assumptions out the window: That Muslim and Yadav women would vote for the RJD, or that Brahmin women in Eastern UP would vote for the BJP. Given the unsurprising hesitation of any voter (even more so, one voting differently from her family) to publicly divulge her politics, I wonder if our pollsters have been able to capture this.



IRRESPECTIVE OF THE Congress's tally this evening, I don't think any number can absolve the party of the pressing need for a long hard look in the mirror.

And for various reasons. First: Shockingly little has changed in the Congress that delivered 44 seats in 2014 and the Congress that went into this election.

The party has had a confused, disorganised campaign and has failed on multiple opportunities to pick fights with the BJP. Rafale was a rare (and surprising) exception to an otherwise poor communication effort that stalled before it could really take off.

Second: Even at 44 seats, the Congress is the second largest political party by popular vote. In 2014, the Congress brand still pulled 10.7 crore of the 55 crore votes across the country. These are people who have an affinity for a legacy, and for a national brand that's taken decades to build.

It's a legacy that deserves a leadership that can script a single, clear message. And that message has to be more powerful than “Defeat the incumbent”.

Because, third: With the current management, money bags in Mumbai and Delhi don't want (or are, maybe, even too scared) to fund the Congress party. It forces the broke party to put up lacklustre candidates whose most attractive qualification is the ability to fund their own campaigns.

Like the Congress candidate from Indore

Shockingly little has changed in the Congress that delivered 44 seats in 2014 and the Congress that went into this election. Even if we hypothetically consider the most generous numbers given to Congress - MyNeta's 130 for UPA — that should not give the party a license to continue to maintain status quo. The party has had a confused, disorganised campaign and has failed on multiple opportunities to pick fights with the BJP. Rafale was a rare (and surprising) exception to an otherwise poor communication effort that stalled before it could really take-off.

The writer is executive director, The Indian Express Group

Short on science

Election manifestos have pushed matters of scientific research and policy to the margins



M S SANTHANAM

ELECTION MANIFESTOS HAVE a short shelf-life in public memory. Except for the big-ticket announcements such as NYAY or doubling farmers' income, political parties are rarely held accountable for the other, often significant, commitments they make in their manifestos. This selective accountability encourages breaching the election promises with impunity, especially in areas such as science and technology (S&T) that remain outside the media limelight. If manifestos ever grapple with issues that have implications beyond the election cycle, it is in these critical areas that determine the nation's long-term competitiveness. As a marker of India's technical prowess, S&T issues have been a part of manifestos since many decades, though with an unenviable track record of delivery on promises.

For election manifestos, science is a tool for societal transformation. Few recognise the intrinsic value of the worldview it offers. Even as far back as the 1945-46 elections, the Indian National Congress's manifesto had stated that “scientific research is a basic and essential activity of the state and should be organised and encouraged on the widest scale”. The Jana Sangh, the ideological precursor of the BJP, declared in its 1951 general election manifesto that their “policy will aim at the provision of facilities for the highest scientific education and research”. Post-independence, such platitudes gave way to specific policy commitments.

The Congress manifesto (1967) focussed on brain-drain and service conditions, recurrent issues that have figured in all the manifestos in subsequent decades. It called for improving the “conditions of work and service as to attract our best men from whichever part of the world they may be working in now... no foreign aid can replace the loss of skills as a result of the drain of some of our ablest students to other countries”. In the first few decades after Independence, self-reliance was another popular manifesto theme across the party lines. In 1977, the Janata Party and CPI manifestos emphasised self-reliance through the application of S&T, while the latter also committed to provisioning more research funds.

Even a cursory analysis reveals a huge gap between these promises and actual delivery. After the 1960s, migration of scientists to the Western countries increased. The Economic Survey (2018) estimates that 9,50,000 India-born scientists and engineers work in the US alone, up by 50 per cent since 2003. This is partly related to the working conditions that have not kept pace with the changing times. Acknowledging this issue, the then prime minister, Manmohan Singh, addressing the Indian Science Congress in 2010, spoke of the need to “liberate Indian science from the shackles and deadweight of

bureaucratism and in-house favouritism”. From 2004 onwards, both the BJP and Congress had repeatedly assured more autonomy and less procedural hurdles for the scientific institutions, with little follow-up action. Self-reliance, the dominant development idiom in the last century, has ceased to be a favoured option since the economic reforms of 1991. Over the years, most of the manifestos, with the exception of CPM in 2014, have replaced self-reliance with collaboration and transfer of technology to reap quicker benefits.

By far the most elusive promise is for enhancing the budgetary support for research to 2 per cent of GDP to help maintain India's competitive edge. For decades, India's research spending had stagnated at about 0.7 per cent while the global norm is about 2-3 per cent of GDP. Since the 1990s, election manifestos of all the major national parties have responded positively with varying levels of commitments. Outside of the election arena, Atal Bihari Vajpayee and later Manmohan Singh led governments supported this cause, with a rider that the private sector must contribute in equal measure. This election is witnessing a rerun of this old classic: The Congress has renewed this pledge again, while the BJP remains non-committal.

In a rare consensus across the political spectrum, all the manifestos in the last 10 years have supported open-source standards and software to run IT hardware. There are many positives to open-source software, and one of the attractive features is that it comes free of cost. It can potentially save costs associated with software procurement. Both the BJP and CPM have supported it since 2009, while the Congress has joined the bandwagon this year. In 2015, the government adopted a policy framework favouring open-source software. It is a partial success story. In the future, manifestos must focus on its implementation.

In the 2019 manifestos, the yesteryear issues of self-reliance, brain drain and autonomy, even if not entirely resolved, have faded out in favour of a slew of futuristic promises, ranging from harnessing the power of quantum technologies (by the BJP) to setting up a think tank to evaluate medium-to-long term strategic future opportunities and risks (the Congress). In 2014, the BJP committed to establishing an institute for big data and analytics. Five years later, this remains unfulfilled, but found a mention in the BJP and Congress manifestos. Had scientists been consulted, manifestos would have also reflected one of their existential concerns: more budgetary support and timely release of funds for all the research projects and students.

As we wait for the results of an acrimonious election, even the significant manifesto announcements seem like a distant memory crowded out by emotive issues and vitriolic speeches. The non-contentious issues related to science and technology are struggling to find a foothold in this narrative. These need debating space, scrutiny and accountability as well.

The author is a professor of physics at the Indian Institute of Science Education and Research, Pune

LETTER TO THE EDITOR

CONGRESS NEEDED
THIS REFERS TO the article, ‘Why Congress can't’ (IE, May 22). The Congress has the wherewithal to revive itself. Not too long ago, it was the single-largest party in India. Though diminished, it has a solid support base. The Modi-led BJP openly calls for a “Congress-Mukt Bharat”. But the performance of the Narendra Modi government has also been poor. That is why we need the Congress.
Tapamoy Ghosh, Kolkata

IT SHOULDN'T DIE
THIS REFERS TO the article ‘Dear Yogendra, I disagree’ (IE May 22). Yogendra Yadav's comments may have come as a surprise but they are just a reiteration of Amit Shah's “Congress Mukht” rhetoric. In a democracy the left, right and centre must co-exist. They may switch places in terms of political power but wanting the “death” of a party comes from a lethargic mindset.
Abhinaba Maitra, Kolkata

WRONG PRECEDENT
THIS REFERS TO the article, ‘A one-sided justice’ (IE, May 22). Justice Madan B Lokur's argument on the Indira Jaising precedent not being relevant in the case related to the allegations against Justice Ranjan Gogoi deserves contemplation. The non-furnishing of a copy of the internal committee report to the complainant points to a serious shortcoming in the justice delivery system, since the matter is related to the apex court. This in-house procedure has set a

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.
THE WINNER RECEIVES SELECT EXPRESS PUBLICATIONS

wrong precedent for situations where CJI is the prime accused.
Ankita Srivastava, Delhi

WIDEN THE DEBATE
THIS REFERS TO the editorial, ‘No laughing matter’ (IE, May 22). The editorial rightly argues there is a need to strike down the “sedition” and “defamation” laws. But, they are not just laws that impose restrictions on the freedom of expression of the citizen. There are many others like “Parliamentary Privileges” enjoyed by the MPs and MLAs.
Suchak Patel, Ahmedabad

Five years of missteps

The government has failed the economy, farmers and mainstreamed corruption



ABHISHEK SINGHVI AND MUHAMMAD KHAN

WITH A RESOUNDING mandate, historically-low oil prices and unprecedented average growth rates in the 2004-2014 period, the Narendra Modi government had no excuses for performing poorly. Yet, it chose to spend its five years inventing them. It believed propaganda was a substitute for governance. This was compounded by furthering a politics that pandered to the worst prejudices. The Modi government is certain to be remembered for missteps in eight areas:

First, with devastating missteps like demonetisation and the hurried roll-out of a broken GST, the government proved ill-equipped to make sound economic decisions. Unemployment figures reached a 40-year high a few months ago. Instead of course correction, the methodology for calculating GDP was rewritten and employment figures suppressed, while critics were denounced as anti-nationals. Never before have international economists (including the IMF chief) questioned the credibility of India's data. The index of industrial production stands at a negative and car sales, a reliable indicator of rising incomes, stagnate at an eight-year low.

Second, the defiant mainstreaming of corruption. The prime minister's office allegedly, interceded in the Rafale deal, sacrificing sev-

eral key safeguards (as attested to by the CAG). A private party, who lacked any qualifications, was included as an offset partner. The misleading contents of the sealed envelopes in the Supreme Court (SC) betrayed a government that has much to hide. High-value defaulters fled the country to evade the law.

Third, the isolation of farmers. The BJP manifesto of 2014 promised to implement the M S Swaminathan committee's recommendations on MSP. An affidavit contrary to that was filed in 2015 in the SC; this was followed by a 55-month silence. The last budget announced a face-saving but meaningless improvement in the MSP. Farmer suicides rose rapidly and protests by people from all over the country took place even in the government's own backyard, the Jantar Mantar. Yet, the government tried repeatedly to pass a draconian and dishonest land acquisition law.

Fourth, no institution survived from a run in with the Modi government. The CBI crisis, created entirely by the government playing favourites, could not be resolved amicably, even by the apex court. The Election Commission made history by giving clean chits to multiple and egregious violations by the PM and BJP president, while taking prompt action against others accused of iden-

tical charges. Government bodies were, reportedly, staffed with men and women whose highest qualification was an endorsement from the RSS. The RBI was bypassed on crucial decisions and the IT, ED and the CBI became instruments of vengeance against those who did not chant, “tussi great ho”.

Fifth, large sections of the media are embarrassingly reluctant to question the PM. Some channels compete to prove their loyalty by asking tepid questions that embarrass the viewer. Journalists seeking hard answers are subject to vile trolling and abuse.

Sixth, hate. On social media, several vituperative serial abusers proudly declare themselves “blessed” to be followed by the PM. The PM and the BJP president rarely condemn, regret, recriminate, suspend or punish. The PM himself demonises an entire constituency as one where the majority is in a minority. The BJP president says that a procession in the streets of that constituency is indistinguishable qua India or Pakistan, forgetting that all inhabitants are Indian citizens.

Seventh, Uri, Pathankot, Pampore, Nagrota and Pulwama marked some of the worst security lapses the country has seen. Unprecedentedly, the PM invited a Pakistani delegation to India to see the results of their

dastardly acts. There was a 72 per cent increase in soldiers martyred in the first three years of the BJP government. The last five years saw the most inept handling of Kashmir.

Eighth, the reduction of foreign policy to an anonymous foreign minister and personal aggrandisement of the PM. Countries like Nepal and Maldives actively engaged with China. Sri Lanka's engagement with China has increased exponentially. A foreign policy has to be more than just an advertising campaign to create a personality cult.

The PM's obsession with the Gandhi family is the sign of a leader without a vision. Repeated co-optation of the achievements of the armed forces (the first Indian leader in 70 years to do so) demonstrates the trait of dictators who confuse strength for governance. It also reflects a disconnect from the problems of those he was elected to govern. References to minorities and religion highlight a blatant disregard for law and its consequences.

A government with a large majority can jeopardise its first term by malice or ineptitude. In PM Modi's case, it is a lot of both.

Singhvi is a MP and national spokesperson, Congress. Khan is an advocate at the Supreme Court