

Medigadda Barrage stands tall, punches holes in Congress narrative

Hyderabad: They did everything possible to malign it. From misleading statements that ridiculously dubbed expansion joints as cracks, to saying that the entire barrage had collapsed, the Congress even said that the entire project was a mammoth mistake and that it was a big liability for Telangana. But the Medigadda (Lakshmi) Barrage is now having the last laugh, having proved that the entire election campaign of the Congress that focused on Kaleshwaram was, in fact, a bigger sham. Even as the latest round of heavy rains continue to disrupt normal life in the State, the Kaleshwaram Lift Irrigation Scheme, particularly its key component, the Medigadda Barrage, has demonstrated remarkable resilience, dispelling concerns about its structural integrity. Despite intense scrutiny and scepticism, the barrage has successfully managed significant water flows, proving its robustness.

In fact, the Medigadda Barrage discharged a record peak flood of nearly 12 lakh cusecs last month. As of Wednesday, the inflows and outflows at the barrage stand at 8.05 lakh cusecs, with more than half of this volume contributed by the Pranahita River, a major tributary of the Godavari. This consistent inflow is attributed to the extensive catchment area of Pranahita, which spans over 109,100 square kilometres, significantly larger than the combined catchment area of the main Godavari and its minor tributaries, which cover 75,600 square km. The strategic location of the Medigadda barrage was chosen due to the high water yield potential of the Pranahita river. Since the first week of July this year, the barrage has been experiencing steady inflows, even as other upstream dams are yet to receive significant water.

Following the sagging of two piers in October 2023, multiple agencies, including the National Dam Safety Authority (NDSA), were engaged to conduct thorough studies. The NDSA experts have been regularly visiting the project site since March this year. The NDSA too has been a witness to the successful handling of high water volumes by the Medigadda barrage, which underscores the effectiveness of the Kaleshwaram Lift Irrigation Scheme and its critical role in making use of Godavari water for the benefit of the water starved regions in the State. The structural issues, particularly with the twin pillars in Block 7, were blown out of proportions. Though the State's irrigation machinery, experienced in handling such structural challenges, was confident of making the barrage functional before the monsoons, the Congress government apparently had other ideas.

During a stock-taking mission, the government subjected irrigation officials to scrutiny but still did not take responsibility for rehabilitating the impacted pillars. This

paved the way for the NDSA to step in. Six months into the NDSA's investigation, no concrete rehabilitation proposals have emerged. The interim report facilitated only temporary repairs in May, just a month before the monsoons. Critics argue that the reports on the barrage's structural issues are exaggerated and politically motivated. To support their contention, water from the Medigadda, Annaram and Sundilla barrages was drained in March on the pretext of facilitating end-to-end studies, depriving the ayacut of the Rabi crop. The impact of this totally uncalled for move is still there, with uncertainty looming large over even the Vanakalam (Kharif) crop due to truncated operations. The multi-stage lift irrigation project's operations have been severely impacted in the absence of water draws and reverse pumping operations starting from Medigadda. Irrigation authorities had hoped to resume pumping operations at the Kannepalli pump house drawing water from Medigadda once the inflows reached 30,000 cusecs or 35,000 cusecs



providing the desired storage cushion. However, more than 2,000 TMCs of Godavari waters have flowed down the Sammakka Sagar barrage, with nearly three-fourths originating from Medigadda,

so far but not a drop has been drawn so far from the barrage, with the Congress government claiming that the NDSA was yet to signal the go ahead for resuming operations from Medigadda.

Services of sports coaches in Social Welfare Residential Schools discontinued by Telangana govt

Hyderabad: Having produced several international and national players from marginalized sections in the last one decade, the Telangana Social Welfare Residential Educational Institutions Society (TGSWREIS) sports academies are now facing crisis, courtesy, the Congress government discontinuing services of all sports coaches in academies run by the society.

For the past several years, these sports coaches have been pillars of the academies, transforming raw and young talent into top-notch performers. Their training and expertise guided several young athletes to success, earning medals on the national and global stage and bringing laurels to the state and the country. The society runs 28 sports academies, which have been established by the previous BRS government for creating elite athletes from the marginalized and downtrodden sections. These academies employed 35 coaches on a honorarium basis.

In a memo, the TGSWREIS recently directed its principals to discontinue any non-regular staff working in the category of part-time/additional staff including staff on honorarium basis with immediate effect. Now, without these sports coaches, not only the academies face the threat of closure but also cast a shadow on young students' careers. Majority students who enrolled into these academies after rigorous examinations are from the marginalized commu-



nities, whose parents work as daily wage labourers, autorickshaw drivers, beedi rollers and vegetable sellers. Lavanya from Kamareddy district is one such student and daughter of vegetable seller who is undergoing training in wrestling and already bagged two silver medals at national level and three gold medals at the state level. "I never knew the importance of sports until I joined the academy. My coaches played a vital role in my success. If academies are discontinued, our career will be stopped in the middle," she said. Another wrestler

Pranitha said despite not receiving enough support from her parents she went ahead with help of her coach Priyanka and bagged a gold medal at national level. "We want our academies to continue," she said. One of the coaches said the government must immediately reconsider the decision to discontinue services of the coaches. "We have been selecting students young and raw, and creating them into international and national players every year. We want the government to take back us," the coach added.

‘Light has gone out of the constitutional lamp’: A.G. Noorani was a Justice Soldier not a Litigation Lawyer

A.G. Noorani (1930-2024), whose writings this author has been following from his student days, has passed away. Condolence messages have variously described him as a great jurist, constitutionalist, eminent columnist, constitution scholar, man of great integrity and impeccable character, authoritative archival researcher etc. But he was more than a mere public intellectual and true soldier of justice, who though remained single but was indeed wedded to the constitutional values. Similarly to describe him as Muslim intellectual who extensively wrote on issues like Kashmir, Ayodhya and Hyderabad etc. and was critical of V.D. Savarkar and RSS is also an insult to his work. Noorani was equally critical of Pt. Jawaharlal Nehru, Indira Gandhi, Rajeev Gandhi and P.V. Narasimha Rao, Atal Bihari Vajpai etc. He had written that Indira Gandhi had reduced the Congress party to her praetorian guard. He also criticised the Surajkund resolution of March 27, 1993 which said that the one man, one post principle would not apply to Prime Minister. He repeatedly wrote that Congress's persistent refusal to abide by its constitution and function democratically is not a domestic affair but a matter of public concern. 'These vices abound in other political parties adds to the concern', wrote Noorani. He was critical of British as well as Indian judges when they did not adhere to due process of law.

Noorani admired legal profession and was greatly inspired by Edmund Burke who in his famous speech in the House of Commons on March 22, 1775 had said that the study of law "renders men acute, inquisitive, dexterous, prompt in attack, ready in defence, full of resources...they augur misgovernment at a distance, and snuff the approach of tyranny in every tainted breeze." Noorani's long life is a case study of how a true lawyer must inculcate these characteristics in his life, make the mission of his life to speak truth to the power (even during emergency) and never hesitate in calling a spade a spade and oppose all kinds of authoritarianism and undermining of constitutionalism. He rightly believed that law and arbitrary power are at eternal enmity. Noorani believed that civil liberties cannot survive and flourish just by the high ideals incorporated in the text of the constitution. Civil liberties, just like the constitution itself, rest on national consensus that respects dissent and mandates fair play.

He was indeed a national asset and nation's conscience keeper. Noorani started his career as an advocate, but his advocacy was not confined to the four corners of court rooms, as he largely argued though his writings in the highest court of the land i.e. the court of his people. He tried to create enlightened citizens who have complete faith in the constitutional values and ideals of due process and fairness. Noorani did appreciate framers of Indian constitution for their vision of democracy, pluralism, secularism and liberalism. He has consistently written that due to India's diversities, the framers rightly made the choice of federalism. Any effort to undermine these core values was severely criticised by him. He was pained and shocked to see that over the decades, our governments not only abandoned these

great values, but large-scale violations of civil liberties also became a norm. Though Noorani had great respect for Nehru and considered him a democrat, but he was ruthless in his criticism of Nehru on the issue of suppression of dissent. He was shocked to see that the man who himself had founded the Indian Civil Liberties Union on October 8, 1936, on becoming Prime Minister of independent India would develop such an intolerance for dissent. Noorani criticised Nehru for getting furiously angry with Nirad C. Chaudhuri for writing *The Autobiography of Unknown Indian* (1951) during his government service in All India Radio. Of course, Nehru was not like his successors and therefore in a note of July 23, 1952, he said that 'I do not suggest that he should be given notice to depart. But I do think that we require some kind of explanation from him'. Accordingly, poor Chaudhuri was issued three notices. Noorani had sarcastically written that civil liberties were fine; but none had a right to 'sit in judgment over Nehru's policies'. Noorani stood for a fiercely independent judiciary. He blamed Indira Gandhi and even Rajiv Gandhi for undermining the independence of judiciary and for the appointment of committed and few suborn judges. He believed that Article 124 required mandatory consultation with the Chief Justice of India in the appointment of judges. Is it not a fact that even after collegium rulings that had made such consultation mandatory, this consultation in Noorani's view has proved to be a frail reed

Discussing the drafting of consultation provision in the constitution, Noorani criticised even B.R. Ambedkar for blithely telling the constituent assembly on May 24, 1949, that 'judiciary decides cases in which the government has, if at all, the remotest interest; in fact, no interest at all. The judiciary is engaged in deciding the issues between citizens and very rarely between citizens and the government.' Subsequent decades proved Ambedkar wrong, and it is a common knowledge today that in 80% cases, government is one of the party. Noorani was also a great advocate of judicial accountability and had taken up this subject in his books and number of articles. He favoured a standing judicial commission to undertake probes on camera to just ascertain that prima facie a case exists against a judge. If yes, the judge be given an option to resign or face impeachment. Noorani was also a critic of impeachment process.

He had criticised adoption of this process that had fallen into disuse even in England with last impeachment taking place in 1806. He criticised P. V. Narasimha Rao's decision to issue a whip to abstain from voting on the impeachment motion of Justice V. Ramaswami as unconstitutional, since no whip can be issued when Parliament is sitting as jury during impeachment motion to pronounce verdict of guilty or not guilty. Noorani in his several conversations with this author used to agree with Eugene Ehrlich that 'there is no guarantee of justice except the personality of the judge.' Noorani consistently argued in his books on judges' accountability and in numerable articles that pliable judge earns ruler's



favours not his respect. He also favoured judicial performance evaluation mechanism. He was unhappy with some contempt of court judgments as well. His writings on judicial appointment, independence and accountability are as relevant today as they were at the time of his writings. He criticised the Supreme Court's EMS Namboodripad (1970) judgment that found him guilty of contempt for saying that judges 'were guided and dominated by class hatred, class interests and class prejudices, instinctively favouring the rich against the poor.' He welcomed the judgment in P. Shiv Shankar (1988) where the apex court rectified its mistake and Union Law Minister was not punished for the strong statement that 'Supreme Court, composed of the element from the elite class, had their uncontrolled sympathy for the haves i.e. the zamindars and anti-social i.e. FERA violators, bride burners and a whole horde of reactionaries have found their haven in the Supreme Court.'

Noorani also raised the constitutional question — can judges themselves be guilty of contempt of court? He cited the example of Justice P.N. Bhagwati who on November 21, 1986 had said in Bangalore that 'judges are drawn from the class of well to do lawyers and unwittingly they develop certain biases.' Noorani was an ardent advocate of freedom of press and was opposed to invocation of criminal defamation against the journalists. He even criticised Nehru government for proposing Ministers and Bureaucrats a summary remedy for criminal libel in respect of their public conduct. Even the British had not enacted such a regressive law. Noorani did appreciate Justice Jeevan Reddy's observations in Nakkheeran (1994) that a journalist need not prove what he has written is true but that he acted after reasonable verification of facts. Coming to so called Muslim issues, Noorani has documented in great details the role of the courts in the Babri Masjid case. He considered Supreme Court to be a party in the demolition of the historic mosque on December 6, 1992 which even the 2019 judgment of the five judges admitted as illegal 'egregious wrong.' Noorani had argued that permission for karsevaks should not have been given on the mere words of then U.P. Chief Minister Kalyan Singh when ground reports were painting a grim situation. He was

equally upset with order of January 19, 1993 in which limited worship at the makeshift temple was not stayed. Noorani was also upset with Kalyan Singh not being punished for the contempt of court for apex court's own order of November 25, 1991 and Allahabad High Court's order of July 15, 1992. His thesis was that had the Supreme Court acting on expert report invoked its contempt jurisdiction, the demolition could have been averted.

He was also quite critical of CJI M.N. Venkatachaliah who in Noorani's view refused to exercise his judicial powers when it had meaning. Solicitor General (SG) Dipankar Gupta's written statement on November 25, 1992 said that talks between parties have broken down and situation on ground is escalating day-by-day. SG also stated that huge congregation is not to be allowed, machinery and material of construction not be brought, and immediate court orders are needed. Noorani was frustrated with Justice Venkatachaliah who despite telling State government's counsel K.K. Venugopal that 'the time for reckoning has now come... we have enough of it', yet on November 25, 1995, gave 'a last opportunity' to the Kalyan Singh government.

Attorney General's Milon Banerjee's repeated requests that situation was building to a boiling point and that the 'court must do something today since one or two days may be vital' was also rejected. Since preparation was not said to be an offence, it is how huge congregation was allowed. Justice Venkatachaliah-led bench eventually did meet on December 6, 1992 to 'admit that 'unfortunately, we were not able to assess the magnitude of the problem. Only thing we can now do is to restore ad all the three domes at the earliest.' In fact, Noorani had documented all the stay orders of this momentous case and they tell quite an interesting story of this litigation. In his writings on Kashmir, Noorani not only criticised successive governments for diluting Article 370 through over forty Constitutional Orders. In his opinion, Article 370 was freely used not only to amend Indian constitution but also Jammu & Kashmir's constitution. Even the basic structure of J&K constitution was changed by the invocation of Article 370. This was the context in which this author had written that Kashmiris need not cry on Article 370's abrogation as in its operational mode,

Teach For India Celebrates Teachers Day With Leaders Week

To commemorate Teachers Day, Teach For India, an organisation working towards educational equity for children organized its Leaders Week. The event brought together over 200 influential figures from diverse fields to inspire and empower students in low income communities across India. Renowned leaders including Narayan Murthy, Dr. Ritesh Malik-Young Global Leader, World Economic Forum, Aditya Ghosh-Co-Founder & Board Member, Akasa Air, Deep Kalra- Founder & CEO, MakemyTrip, Aakash Chaudhry - Co- Founder, Aakash Educational Services Limited, Narendra Babu- CTO, PayU, Sonia Singh - Former Editor at NDTV, Susan Thomas - IRS, Krish Ashok - Global Head, Advisory Consulting AI. Cloud TCS & culinary influencer, and celebrities like Sanjana Saghi, Lakshmi Manchu, Varun Grover and Ketaki Mategaonkar visited Teach For India classrooms in Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Mumbai, Pune, and Kolkata. They shared their personal journeys, offered valuable insights, and conducted engaging workshops on leadership, problem-solving, skill building, gender equality, journalism and personal finance.

Leaders Week is also a special event to celebrate Teach For India's 15 year anniversary by recognizing the movement in which 5000 Fellows and Alumni have transformed the lives of ~50 million children across the country. On this special occasion, Shaheen Mistri, Founder and CEO of Teach For India expressed her joy for the overwhelming response, "It has been exciting to witness so many leaders, experts in their field, stepping back into our



classrooms and being a huge source of motivation for our students. Our classrooms hold the future of India and it has been a privilege to see the shared inspiration between our students and leaders. This

Teachers Day is truly special for us and we want to thank every person who chose to join the movement towards educational equity." Mr. Narayan Murthy, adds on his visit to a classroom in Bengaluru, "It was special to go back to school. I loved inter-

acting with the students and seeing their immense potential and curiosity. I truly believe that I owe whatever little I have achieved to my parents and teachers. With Teach For India's Fellows in charge I am excited for the future."

A Constitution museum: Bringing the republic to the public

On November 26, 1949, the Constituent Assembly of India adopted the Constitution of India. It came into effect on January 26, 1950, which we celebrate as Republic Day. This year, we are celebrating the 75th anniversary of adopting the Constitution. In 2015, the Government of India declared November 26 — hitherto known as National Law Day — as Constitution Day.

The Constituent Assembly met for the first time in New Delhi on December 9, 1946, and its last session was held on January 24, 1950. Its members had embarked on the herculean task of drafting the Constitution at a time of major social, economic and political upheaval in the country. The provisions of the Constitution reflect a farsighted vision on the part of the members as they were conscious of the extraordinary task ahead of them. They fully appreciated that the Constitution was not just a legal document outlining various legal rights and freedoms — they also wanted it to usher in a social revolution. Granville Austin, the author of *The Indian Constitution: Cornerstone of a Nation*, observed, "The theme of social revolution runs throughout the proceedings and documents of the Assembly. It provided the ba-

sis for the decisions to adopt parliamentary government and direct elections, the Fundamental Rights and the Directive Principles of State Policy, and even many aspects of the Executive, Legislative, and Judicial provisions of the Constitution."

The 75-year journey of the Constitution of India, including its continuous interpretation by the courts and the various amendments by Parliament, makes it among the world's most dynamic and evolving constitutions. It is indeed the right time to establish the Constitution Museum as an ever-lasting legacy that celebrates the vision and farsightedness of its founders. Such a museum ought to have five primary objectives. One, building the legacy of the Constitution as an institution. It should not only capture its history but also the evolution of the rights and freedoms enabled by the institutions established by the Constitution. By showcasing these milestones, the museum can inspire future generations to understand and appreciate their rights and responsibilities as citizens. It would also serve as a reminder of the ongoing journey of Indian democracy toward justice and equality for all.

Two, the museum would democratise the understanding of the Constitution and

the access to it. The Constitution's history, evolution, important provisions, and interpretation by the courts and the amendments need to be part of a larger understanding of the people of India. This democratisation of access to the knowledge in and about the document and appreciation of the principles and values that shaped it are critical for promoting responsible and enlightened citizenship. Thomas Jefferson, the principal author of the American Declaration of Independence and the third president of the US, famously observed in 1817, "An enlightened citizenry is indispensable for the proper functioning of a republic. Self-government is not possible unless the citizens are educated sufficiently to enable them to exercise oversight. It is therefore imperative that the nation see to it that a suitable education be provided for all its citizens."

Three, it should promote civic education in order to empower the citizenry. The history of the Constitution and its making is important as it can serve as an inspiration for institution-building and nation-building. The idea of a Constitution Museum is about creating opportunities for generations of people to participate in the understanding of a constitutional history and the evolu-

tion of rights and freedoms. Civic education must be imparted to all individuals across all walks of life so that they may work towards becoming effective participants in Indian democracy. Knowledge and understanding of the Constitution is the first step towards empowering the citizenry. When the rights and freedoms of ordinary individuals are threatened, the Constitution protects those rights and provides remedies for those seeking justice and redressal. It not only recognises rights and freedoms and the normative framework that outlines the values of constitutionalism, but it also provides the methods, mechanisms, procedures and processes for enforcing rights and seeking remedies for access to justice.

Four, the museum should celebrate and pay tribute to the framers of the Constitution and the nation's unsung heroes. It would provide information about the extraordinary history, accomplishments and vision of the members of the Assembly. It is rather unfortunate that so little is known about the majority of the members of the Constituent Assembly, including the 15 exceptional women — Ammu Swaminathan, Annie Mascarene, Begum Aizaz Rasul, Dakshayani Velayudhan.

A lethal drone attack in Manipur sparks alarm and misinformation

September began on a turbulent note in Manipur. On the first day of the month, a violent clash between Kuki-Zo armed groups and security forces erupted along the border of the Meitei-dominated Imphal West and Kuki-dominated Kangpokpi districts. The Manipur police have alleged that Kuki-Zo volunteers used weaponised drones to drop bombs on a Meitei village in Koutruk on both Sunday and Monday, flagging it as a "significant escalation." So far, two Meitei civilians have been killed and at least 12 wounded in the flare-up. The Kuki Inpi, an influential representative organisation of the Kuki-Zo community, has denied these allegations. In fact, it has claimed that the skirmish broke out as part of a planned offensive by joint forces of the state police and Meitei armed groups against Kuki-Zo volunteers in the Kangchup region. The alleged drone bombing has sparked an alarmist news cycle around Manipur, even as the state government in Imphal begins an official investigation into what it has labelled an "act of terrorism." How does one contextualise the use of drones in Manipur within a wider conflict landscape?

Drones in civil conflicts Weaponised drones capable of delivering explosive payloads were once the sole monopoly of professional state militaries. First used on a large scale by the US in Afghanistan, they were steadily adopted by other types of conflict actors in a variety of forms. In its Worldwide Threat Assessment 2023, US-based Global Guardian notes that in recent years, non-state armed groups have used armed drones in several conflict theatres, including Ukraine, Syria, Yemen and Myanmar. In most cases, they have used Commercially Available Drones (CAD) to drop bombs of various types, under a broad category of what is now referred to as 'aerial vehicle-borne improvised explosive devices (AVBIEDs).'

The use of armed drones by anti-junta ethnic armed organisations (EAO) and People's Defence Forces (PDF) in neighbouring Myanmar is notable. Initially used for little more than reconnaissance, these groups are now increasingly relying on drones retrofitted with explosive munitions to attack junta convoys, air bases, police stations, armed units and even military headquarters in the national capital of Naypyidaw. Multiple PDFs directly armed and financed by the National Unity Government (NUG), the parallel civilian administration in Myanmar, now have their own drone units. AVBIEDs have suddenly become popular among non-state armed groups across the world because they are cheaper than other long-range weapon delivery systems while being stealthy and precise. Moreover, by giving small armed entities the ability to hit targets from the air, they serve to bridge tactical asymmetries common in civil conflicts. However, these are also the distinct qualities of drones that can be misused to launch targeted attacks against unsuspecting civilians. Drones in Manipur conflict The alleged drone attack in Manipur's Kangchup earlier this week might have been the most glaring use of

AVBIEDs in the state since the ethnic conflict began in May 2023. But it wasn't the first time armed drones have appeared in the state since last year. If some social media accounts are to be believed, Arambai Tenggol, a powerful Meitei militia, used armed drones to attack a Kuki-Zo village in Churachandpur district in December 2023. One particular video published earlier and recirculated by Kuki Inpi after the recent attack claims to show an Arambai cadre retrofitting what looks like a hexacopter drone with a small mortar bomb, flying it and then dropping the payload on an empty field (it doesn't explode). In June, Assam Police detained a person named Sanjib Kumar Mishra in Guwahati for ferrying drone parts that were allegedly meant for Meitei armed groups in Manipur. Just a day earlier, another individual called Khaigoulen Kipgen was apprehended with high-end drone batteries supposedly meant for Kuki-Zo groups. In either case, it remained unclear if the parts were specifically meant for AVBIEDs or simple reconnaissance drones. In November, the Indian Air Force activated its "Air Defence response mechanism" after drone-like objects were spotted hovering around the Imphal airport. Three months later, Licypriya Kangujam, a 12-year-old Meitei climate activist, took to social media to raise money to acquire a "thermal drone" apparently for Meitei armed groups in Manipur.

Need to avoid alarmism Worryingly, the recent drone incident has been accompanied by unverified claims and misleading images. For instance, the Manipur police have claimed that the Kuki-Zo groups used drones to fire rocket-propelled grenades (RPGs). This sounds logistically far-fetched. While it is possible to retrofit a drone with the warhead of an RPG, it is



highly unlikely that a whole rocket system was used through an AVBIED. It is also very difficult to trace the exact source of a drone attack post facto given its inherently discreet nature. Further, as a fact-check by one digital media website has shown, a prominent news anchor from a TV channel displayed images of rocket systems in Gaza as part of a report on the Manipur incident. The same channel claimed that the groups received drone warfare training and material support from Chin armed groups in neighbouring Myanmar who are, in turn, backed by the Chinese. These are wholly unsubstantiated claims that only deepen the alarmism around the Manipur conflict and help no one. In fact, even in June 2023, some social media accounts circulated a clipped video of what they claimed were Kuki-Zo cadres using armed drones to attack security forces in Manipur when in reality the footage was from Myanmar's Chin State.

It is possible that the widespread use of combat drones by PDFs and EAOs in Myanmar, some of whom operate close to the India-Myanmar border, has had ripple effects across the border. However, all of them, including the Chin National Front, are occupied in their own war against the junta and have little to no direct contact with the Kuki-Zo armed groups in Manipur. More importantly, both Kuki-Zo and Meitei armed groups are likely to have benefited from any potential cross-border spillover of drone warfare from Myanmar to Manipur. So, Indian security agencies must work towards suppressing the use of armed drones by all sides in Manipur, rather than using the phenomenon to target just one side. Angshuman Choudhury is a researcher and writer from Assam, and currently a joint PhD candidate in Comparative Asian Studies at the National University of Singapore and King's College London. The views expressed are personal

US, Britain, EU to sign first international AI treaty

The first legally binding international AI treaty will be open for signing on Thursday by the countries that negotiated it, including European Union members, the United States and Britain, the Council of Europe human rights organisation said. The AI Convention, which has been in the works for years and was adopted in May after discussions between 57 countries, addresses the risks AI may pose, while promoting responsible innovation.

"This Convention is a major step to ensuring that these new technologies can be harnessed without eroding our oldest values, like human rights and the rule of law," Britain's justice minister, Shabana Mahmood, said in a statement. The AI Convention mainly focuses on the protection of human rights of people affected by AI systems and is separate from the EU AI Act, which entered into force last month. The EU's AI Act entails comprehensive regulations on the development, deployment, and



use of AI systems within the EU internal market. The Council of Europe, founded in 1949, is an international organization distinct from the EU with a mandate to safeguard human rights; 47 countries are mem-

bers, including all the 27 EU member states. An ad hoc committee in 2019 started examining the feasibility of an AI framework convention and a Committee on Artificial Intelligence was formed in 2022 which drafted and negotiated the text.

Release report on women's safety in Telugu film industry, demand actors, activists

Two years after a report on women's safety in the Telugu film industry (TFI) was submitted to it, the Telangana government has yet to make it public. The report was submitted to the then-chief secretary Somesh Kumar in 2022, women activists who were part of the committee told HT. Despite several Telugu film actors demanding the report's release after the Malayalam film industry's Justice Hema Committee report, the TS state government has taken no action thus far. Officials and activists, who have been tracking the report but asked not to be named, said that the current information and public relations commissioner under whose charge the report is placed has sought the chief secretary's opinion on its release. Given the flood and devastation in several parts of Telangana, the government fears that an ill-timed release could further dent the state's image.

"All committee members met regularly over eight months at the Telangana State Film Development Council office, which acted as the coordinating agency between the state and sub-committee. The members interviewed actors, producers, directors, and other technical staff as well," said a senior official of the TSFDC who did not wish to be named. The current I&PR Commissioner also heads the TSFDC. The sub-committee comprising nearly two dozen members from the Telangana government, female police officers, the film industry, activists, and the state women's commission was formed at the behest of the Telangana High Court.

Similar to incidents in the Malayalam film industry that triggered the formation of the Hema Committee, the Telangana state government constituted a committee in 2019 after Sri Reddy, an actress, staged a protest in front of the Movie Makers Association (MAA) office in 2019. She protested against unfair trade practices in the TFI also levelling allegations of casting couch against many senior directors and producers. After MAA failed to take action, the actress threatened to stage a semi-clad protest before the then chief minister K Chandrashekar Rao's office. Many female activists and feminists who joined the protest filed petitions in the high court and an order was passed to constitute a special sub-committee. In the same year, many female artists in the Telugu Film Industry, such as director Nandini Reddy, Samantha, and others formed the Voice of Women forum to support the causes of women in the TFI. "We made a representation to Talasani Srinivas Yadav who was then minister for cinematography. He promised to look into the issue but nothing came of it. We even gave the film industry a list of demands that included clearing dues to female artists who played junior roles in movies. While the producers agreed to it, we did not receive an appropriate response on other concerns raised," said V Sandhya, National Convenor of the Progressive Organisation of Women (POW). In the wake of the Justice Hema report, Sandhya and other women activists have decided to give the government a deadline by which it needs to release the report. "There were IAS officers who were part of the committee. It

still requires us activists to force such a report to be made public!" Sandhya said.

Gopal Menon, a human rights activist and filmmaker, said not in every state, do women need to go through the circuitous and painful process of protesting for basic rights. With veteran actresses such as Revathy and Radhika voicing their unpleasant experiences in public, Menon said the issue is not confined to the Malayalam movie industry alone. "Women, in each state where there is a prominent (film) industry, do not have to go through the harrowing experience of protesting for basic human rights. If the Telangana government has also kept the report under wraps, then there is a serious issue. Bollywood too should take cognisance of this and constitute an internal committee to check if there has been harassment of female artists," he said. Last week, after actress Samantha Ruth Prabhu posted on one of her social media pages urging the



Telangana government to make the report public, Voice of Women too made a similar request. However, neither the government

nor any of the sub-committee members have made any statements about its release.

Why America's tech giants have got bigger and stronger

When your columnist first started writing Schumpeter in early 2019, he had a romantic idea of travelling the world and sending "postcards" back from faraway places that chronicled trends in business, big and small. In his first few weeks, he reported from China, where a company was using automation to make fancy white shirts; Germany, where forest dwellers were protesting against a coal mine; and Japan, where a female activist was making a ninja-like assault on corporate governance. All fun, but small-bore stuff. Readers, his editors advised him, turn to this column not for its generous travel budget but for its take on the main business stories of the day. So he pivoted, adopting what he called the Linda Evangelista approach. From then on, he declared, he would not get out of bed for companies worth less than \$100bn.

This is his final column and, as he looks back, that benchmark seems quaint. At the time, the dominant tech giants were already well above it. Microsoft was America's biggest company, worth \$780bn, closely followed by its big-tech rivals: Apple, Amazon, Alphabet and Meta. Their total value back then was \$3.4trn. Today the iPhone maker alone exceeds that.

Since early 2019 the combined worth of the tech giants has more than tripled, to \$11.8trn. Add in Nvidia, the only other American firm valued in the trillions, thanks to its pivotal role in generative artificial intelligence (AI), and they fetch more than one and a half times the value of America's next 25 firms put together. That includes big oil (ExxonMobil and Chevron), big pharma (Eli Lilly and Johnson & Johnson), big finance (Berkshire Hathaway and JPMorgan Chase) and big retail (Walmart).

In other words, while the tech illuminati have grown bigger and more powerful, the rest lag ever further behind.

It is tempting to view this as an aberration. This column is named after Joseph Schumpeter, the late Austrian-American economist who made famous the concept of creative destruction—the relentless tide of disruptive innovation toppling old orders and creating new ones. Surely these tech firms, founded decades ago in dorms, garages and dingy offices, should be vulnerable to the same Schumpeterian forces that they once unleashed on their industrial forebears.

But creative destruction, at least as framed by the original Schumpeter, is more complicated than that. To be sure, he revered entrepreneurs. He considered them, as we do today, the cult heroes of business, driving the economy forward with new products and ways of doing things. But late in life, after he had witnessed decades of dominance by big American corporations, he changed his tune. He decided that large firms, even monopolies, were the big drivers of innovation. They had the money to invest in new technology, they attracted the best brains—and they had most to lose if they did not stay alert. That may disappoint those who see business as a David v Goliath struggle of maverick upstarts against managerial apparatchiks. But it was prescient. It helps explain why today's tech Goliaths vastly outspend, buy up and outflank startups before they get the chance to sling a stone.

The figures bearing out this Schumpeterian hypothesis are striking. Since 2019 the five tech giants and Nvidia have doubled their capital expenditures, to \$169bn last year. Tot up the 25 next firms'

capex and it was just \$135bn—up only 35%. As for brain power, over the same period, the Big Six added 1m jobs, doubling their headcount. No one can accuse them of resting on their laurels. They have invested in AI startups, ploughed fortunes into building large language models and, in Meta's case, created open-source offerings that almost anyone can use. This year they are doubling down on their AI spending if only to protect their flanks.

You could argue that startups are better incentivised to devise revolutionary ideas, that venture capitalists bankroll entrepreneurs, and that much of big tech's spending is wasteful and aimed mostly at erecting walls around their fiefs. All that is true. But do not over-romanticise the little guys. They can be as full of hot air (think WeWork, the delusional hot-desk firm, and FTX, the crypto scam) as business bureaucracies are of flab. Moreover, advancing the frontiers of technology is hard. It takes decades of incessant innovation to create products like Apple's iPhones. Amazon pioneered not just online shopping but cloud computing. Such inspired thinking creates genuine defences. The perennial gale. No doubt their walls will one day be breached—either by strong-armed governments or by new forms of competition. The possibility that America's Department of Justice could pursue a break-up of Google after this month's monopoly conviction suggests trustbusters are out for blood. Then there are the threats that Schumpeter, in his 1942 book, "Capitalism, Socialism and Democracy", said keep the capitalist engine in motion: new products, new ways of making and transporting things, and new forms of business organisation. Eventually, the tech conglomerates will tear themselves—or be torn—apart.

Will India dare to punt on Sarfaraz's X-factor in the middle-order?

For the longest time, Sarfaraz Khan must have wondered if time had passed him by. Having made his first-class debut in December 2014 as a 17-year-old for Mumbai, no less, he amassed runs by the bushel in first-class cricket, yet the dream he chased relentlessly remained elusive. Sarfaraz has a habit of tilting at history, for being in the news for one reason or the other. As far back as in early 2018, a couple of years after making his IPL debut for Royal Challengers Bangalore and not playing a single game in the 2017 edition, he was one of three players retained by the franchise, alongside stalwarts A.B. de Villiers and skipper Virat Kohli, a move that stunned aficionados. After half the season, he was benched, ostensibly due to fitness-related issues, a stigma that has accompanied him since but hasn't prevented him from doing justice to his exceptional ability. After just one season with Mumbai in the Ranji Trophy, Sarfaraz made the move to Uttar Pradesh at the urgings of his omnipresent father Naushad, representing them for two years until the realisation dawned that his best chance of playing for the country lay by returning to the domestic powerhouse which has been the cradle of Indian cricket for decades. After serving a mandatory cooling off period required by the Mumbai Cricket Association, he returned to the fold in the 2019-20 season, the prodigal son celebrating his comeback with an unbeaten half-century in the second innings, though it wasn't enough to prevent Karnataka from notching up a five-wicket victory.

Purple patch That was the start of a remarkable run that fetched him a massive 928 runs in six matches at the staggering average of 154.66. Among his three hundreds was a monumental unbeaten 301; by the end of his team's campaign, his reintegration with Mumbai cricket was complete, and he was now in a position to pursue his dream with even greater intensity. The runs continued to flow in domestic cricket, but he wasn't as prolific for India-A at a time when the Indian middle-order was just beginning to ponder life after Cheteshwar Pujara and Ajinkya Rahane. He had a great chance to state his case on the shadow tour of Bangladesh in November 2022 but made only 21 runs in two matches; even though he had age on his side, how long could he continue the Jekyll and Hyde routine? Even as India was bracing for defeat in the first Test against the English in Hyderabad, Sarfaraz tore into the Lions attack, smashing 161 off just 160 deliveries at the Narendra Modi Stadium in Ahmedabad. Despite the absence of Kohli, Sarfaraz hadn't been picked in the Test squad; that would change quickly. Sarfaraz's debut came in the third Test in Rajkot, coincidentally at the expense of his Mumbai mate Shreyas Iyer. The first signs that the tide might be turning came towards the end of last year, during another shadow tour, this time of South Africa. In the first of two four-day games in Potchefstroom against South Africa-A, the stocky right-hander made a sparkling 68; he then followed it up with 34 in the next outing in Benoni. Not massive, admittedly, but enough to ensure that the faith placed

in him wasn't without basis. It was, however, a sensational 161, allied with the slices of luck that had eluded him until then, against England Lions in January this year that emphatically turned his fortunes around. Even as India was bracing for defeat in the first Test against the English in Hyderabad, Sarfaraz tore into the Lions attack, smashing 161 off just 160 deliveries at the Narendra Modi Stadium in Ahmedabad. Despite the absence of Kohli, Sarfaraz hadn't been picked in the Test squad; that would change quickly.

With K.L. Rahul too going out of commission during the Hyderabad defeat, Sarfaraz was drafted into the side for the second match, in Visakhapatnam. He still had to bide his time, Rajat Patidar winning his maiden cap. But Sarfaraz, and the Khan family, was upbeat; younger brother Musheer was lighting up the Under-19 World Cup with his all-round prowess in South Africa and there was no doubt any more that it was just a matter of time before Sarfaraz would wear the India colours. His debut came in the third Test in Rajkot, coincidentally at the expense of his Mumbai mate Shreyas Iyer, finally dumped after failing to register a single Test fifty in 12 consecutive innings. At 26, Sarfaraz had fulfilled an ambition he nursed from the time he started playing the game. He was an Indian Test player.

The long apprenticeship period can impact different individuals differently. Some find the eventual breakthrough so overwhelming that merely getting to play seems like the end, not the beginning. And then, there are others like Sarfaraz, so keyed up for so long that having finally got the chance to showcase their skills on a larger stage to a global audience, they grow fangs and draw inspiration from the occasion. That Sarfaraz was a popular member within the Indian set-up was obvious from the time he joined the nets in Visakhapatnam. Cuddly and wide-eyed, he was lapped up by his colleagues while Yashasvi Jaiswal, his much younger Mumbai colleague who sports a serious mien, was left to his devices. Sarfaraz loved the attention, of course – he is a showman-in-the-making – but that didn't detract from his focus and concentration. In the field, while he did have fun and enjoyed himself immensely when he came out with drinks or as a substitute, you could see that he meant business. Just how much so, England was reminded in Rajkot. After an early stutter on winning the toss, India recovered superbly from 33 for three to reach 237 when Rohit Sharma was dismissed after a double-century stand with Ravindra Jadeja. Enter Sarfaraz at No. 6, to a crowded infield with Ben Stokes trying to pressure the debutant into doing something reckless. It might have been the English script, but the little fella chose to ignore it, instead penning his own breathtaking tale in a savage assault that rattled the visitors.

With Jadeja largely an admiring spectator at the non-striker's end, Sarfaraz brought all facets of his batting into play – orthodoxy, cheekiness, barndoor defence, scything stroke-play. He mocked England's



fields, he toyed with their plans, he batted as if this was an open 'net', not his first hit in Test cricket. To be able to summon that mindset – with no little help from Rohit and Rahul Dravid, one is sure – on the most important day of his cricketering life called for resolve and courage, for boldness and enterprise. Sarfaraz ticked all boxes magnificently, racing to 62 off 66 when he was left for dead by Jadeja, on 99 and first calling his partner through for a single before turning his back on him. To Sarfaraz's credit, he didn't rant and rave, he didn't throw a tantrum. In the dressing-room, Rohit flung his cap to the floor in disgust, disappointment and obvious disapproval at Jadeja's error in judgement, but Sarfaraz was as calm as one could be, given the circumstances. The young lad had become a man. This was as seminal a moment as a few hours earlier, when he had received his Test cap.

Sarfaraz had a terrific time thereafter, making an unbeaten half-century in the second innings and then backing it up with a fierce 56 in the final Test in Dharamsala. He has made three scores in excess of 50 in his first five Test innings and averages an even 50. India haven't played a Test since Dharamsala, so one would expect Sarfaraz to be a shoo-in for the opening Test of the next season, against Bangladesh in Chennai from September 19, but fact can often be stranger than fiction. India's selection panel led by Ajit Agarkar, Rohit and new head coach Gautam Gambhir are now saddled with a problem of plenty – a happy headache, as they say, though how anyone can be happy

with a headache beggars belief. Kohli and Rahul are back in commission, and even if one were to assume that the latter isn't guaranteed his place in the XI, that means that there is, at best, just one middle-order slot up for grabs. The contenders are numerous, needless to say, because such is the depth in Indian cricket. Patidar might have played him out of the reckoning for the immediate future after failing to impress in his three Tests, but apart from Rahul, there are others in the running too, including Devdutt Padikkal, who crowned his Dharamsala debut with a flowing half-century. The tall left-hander, who primarily bats in the top three for Karnataka, is in the middle of an excellent run in the Maharaja Trophy T20 tournament. The format might be different, but he is in form and will look to take that confidence into the first round of the Duleep Trophy from September 5, which in all likelihood will serve as an audition for Test selection. Sarfaraz is used to waiting, maybe even comfortable doing so now that he has had so much practice, but having tasted success in Test cricket, it's inevitable that he will be hungry for more. All he can do is what he has been doing for the last four seasons or so – make the mountain of runs that will eventually be impossible to ignore. He brings energy and enthusiasm with his ebullient presence, and it's sometimes easy to forget that he isn't a teenager any more, not by a long way. But more than anything else, he carries that X factor that comes to only a very few. Despite Rahul's class, experience and pedigree, the temptation to punt on Sarfaraz will be massive. After all, he has earned his spurs, hasn't he?

Telugu NRI from Saudi Arabia scales Europe's highest mountain

Jeddah: A passionate climber, Bandaru Annapurna first started climbing nearby ghats in her native place near Guntur in Andhra Pradesh, following a long dilemma over whether girls could also climb mountains, which was predominantly a pursuit for boys only according to social norms at that time. Annapurna, who works now as a teacher in Jeddah, Saudi Arabia, has come so far ahead that she has scaled

the highest peak of Europe, Mount Elbrus, located in Russia on Monday. Several Telugu expatriate community members celebrated her achievement. Determined to climb the Seven Summits in the world, Annapurna says it was made possible only after her marriage with Mahesh Reddy, who believes in equal rights for women and is strong advocate of women's independence.

Asian cities are growing upwards more than outwards, satellite data show

Cities around the world, but especially in Asia, are growing upwards faster than they are spreading outwards, a new study published in *Nature Cities* has found. In an increasingly urban and urbanising world, taller buildings can accommodate more people in less space but they can also negatively affect existing infrastructure, the local environment, and even the climate. "Urban population, roughly from 1990 to 2020, increased by about 2 billion people," Steven Frolking, an earth scientist at the University of New Hampshire and the lead author of the current study, said. "So cities have had to grow in order to accommodate those 2 billion people. The question is, how have they grown?" A team of earth and urban scientists came together to answer this and look at more than 1,500 cities around the planet from the 1990s to the 2010s. They used remote-sensing satellite data to gather information about cities' vertical growth and two-dimensional (2D) outward spread. To understand how cities grew, the team examined their footprint: the rate at which ground area was getting covered by buildings. They also used data from scatterometers — satellite-borne sensors that send out pulses of microwaves to the earth's surface and collect the data reflected back — to get a sense of how city structures have changed in volume. "So by combining these 2 data sets, we thought we could get a better picture of how cities are growing both laterally and vertically," Dr. Frolking said. They found that the rate at which the 2D spread was increasing wasn't as high: that is, cities weren't expanding as much as they used to. But the microwave data suggested the volume of city structures was soaring.

"Only paper in the literature" "The microwave data is sensitive to both lateral growth and vertical growth, but we see it accelerating, growing at a more rapid rate in most cities over this three-decade period," Dr. Frolking explained. "So if the cities are not accelerating in the rate at which they cover the ground with buildings, but they're building volume — which is what we think the microwave correlates to most reliably — the implication of that is that it's vertical [growth]."

Based on their analysis, the researchers found an upward-growing trend of cities worldwide, with some east Asian cities, especially in China, in the lead. Cities with populations in excess of 10 million people had more prominent vertical growth, and this effect became more pronounced in the 2010s. "This is the only paper in the literature looking at upward growth for such a long-time span and for this large sample of cities," Richa Mahtta said in an email. A co-author of the paper, she is a Yale graduate student with Karen Seto, one of the world's leading experts on the topic and also a co-author of this study. "3D urban growth could open a new paradigm for remote sensing research and its applications in advancing our understanding of urban growth and its impacts on local climate," Ms. Mahtta said. "Up to a certain extent, a city can grow, right? Beyond a point, it will start to densify," said H.S. Sudhira, who has a PhD in urban planning and governance from the Indian Institute of Science, Bengaluru, and is currently the director of



Gubbi Labs. "What is critical from a more policy and pragmatic view is to understand the threshold at which it shifts from outward growth to densifying in a way that it goes vertical." "It's a nice attempt to really look at it from a global context," he said. Indian cities did not show a uniform upward growth, with only the large ones with more than 5 million people showing upward and outward or just outward growth, mostly in the 2010s. "In India in particular, there's much more regulation compared to China, in building heights that cities will allow. So cities haven't been able to grow as rapidly vertically in India as they have been able to in, say, East Asia or Southeast Asia," Dr. Frolking said. In Delhi, for example, most of the growth was outwards in the 1990s and 2000s, with some upward growth in the 2010s. "Cities aren't like naturally-occurring beings," Surajit Chakravarty, an urban planner and policy scholar at IIT Delhi (speaking in a personal capacity), believes we must exercise caution before ascribing a global trend to cities in very diverse contexts. "This is a very interesting paper about the morphology of cities from a comparative international perspective," Dr. Chakravarty wrote in an email to this correspondent. "But cities are not like naturally-occurring beings. Their shapes and forms are not dictated by rules of nature but rather by policies, regulations, jurisdictional boundaries, economic conditions, and historical patterns. These are all socially constructed. In addition, physical geography plays an important role." Detailing some of the regulations to which Dr. Frolking alluded, Dr. Chakravarty said that in some places like New Delhi, the most expensive central Delhi real estate — or the "Lutyens bungalow zone" —

is very well protected. This leads to most of the taller buildings coming up in the outskirts of Delhi, for example in Noida and Gurugram. Similar heritage areas or protected zones may exist in central parts of many other South and Southeast Asian cities as well. This situation is not comparable with most cities in North America. Another reason the current paper could be missing out on some areas of Indian urbanisation is because of its low resolution: the scale used in the paper is about 5 km. "It's a very coarse resolution for India," Dr. Sudhira said. But he admitted that increasing the spatial resolution for a global study like this would have generated a massive amount of data too complex to analyse. Cities are less efficient "In India, a large part of the urbanisation is occurring outside the study's parameters, in very small towns and through the process of villages turning into urban places," Dr. Chakravarty pointed out. Vertical growth can increase population density, and if the costs are reasonable, can also house many more people (i.e. greater density). But such growth needs to be supported with more jobs and good public transport to reduce transport emissions and improve walkability. Strong infrastructure with decent sewage and water systems are also required to sustain a large number of people. Taller buildings will also need specialised resources and will have a greater energy demand. While growth is important, how this is achieved — keeping sustainability and climate resilience in mind — is crucial in this time of unprecedented climate change. Despite the rapidly rising rates of urbanisation, Dr. Sudhira is thankful that the majority of Indians are still in rural, dispersed settlements, which he said

are more efficient and climate-resilient. More tall buildings without any tree cover can also cause an urban "heat island" effect, which can affect temperatures and rainfall in cities. A study published on June 11 in the *Journal of Advances in Modelling Earth Systems* studied Shanghai's growth and reported more built-up area could slow wind speeds by up to half. "It's not easy to say doing it this way is better than that way. There are trade-offs in all of these things," said Dr. Frolking. "We want to be able to know how cities are developing, have a way of looking at these trajectories, and see if there are patterns that can help us anticipate energy and resource use. 3D urban structure has implications for a whole bunch of factors, including disaster relief, sustainability, and liveability."

"Dated master plans Fire personnel evacuate the residents of Rainbow Layout after the Halanayakanahalli Lake breach following heavy rains, on Sarjapur road, Bengaluru, September 5, 2022. Fire personnel evacuate the residents of Rainbow Layout after the Halanayakanahalli Lake breach following heavy rains, on Sarjapur road, Bengaluru, September 5, 2022. | Photo Credit: Murali Kumar K. We [India] seem to be following the trajectory that China is going through, at least some in terms of the population and to some extent some bit of industrialization and economic growth as well," Dr. Sudhira said. "In that context, I would see this paper as an alarm call; we need to really sit back at the drawing board and say, should we really allow for more high rise and what should be the policy on that?" Most cities and States in India, including Bengaluru, are working with dated master plans,

For solo explorers, a solitude-friendly 'Paradise' amid the crowds

Public space, by definition, is meant to be shared. So why are architects throughout the world designing parks, airport lounges, museums, shops and other communal areas to accommodate the lone individual? Americans are spending an increasing amount of time alone, and we do not need political candidates to remind us that single-person households are rising throughout the world. Last year, the World Health Organization deemed loneliness a "global health threat." With more of us flying solo, more spaces are catering to visitors who may or may not be in the company of others. Urban planners and architects are recognizing a paradox: Public spaces designed to increase opportunities for social interaction may have the unintended consequence of making isolated people feel marginalized, whereas spaces that support solitary experiences in the midst of a crowd may encourage a feeling of belonging. Wutopia Lab, an architectural studio in Shanghai, used this paradox as a springboard for its design of the Monologue Art Museum, a cultural center for visitors to explore in collective solitude. Opened in 2022 in Qinhuangdao, a popular seaside resort in northeast China, the center fosters "the peaceful solitude that emerges only when you're experiencing it in public," said Yu Ting, the co-founder of Wutopia Lab.

The museum is laid out as a sequence of locations, including a tearoom, a yoga room, an art gallery and a water garden with six trees. (The arboreal arrangement pays homage to "Six Gentlemen," a 14th-century painting that is a representation of seclusion.) Yu said he and his team designed the museum to be a "paradise for the individual" where "one can find solitude and express their inner thoughts." He described the surrounding city as a cacophonous tourist destination that chips away at "the opportunity to be with oneself." The museum is a form of compensation, offering visitors something they do not normally experience in their own homes. Because even introverts frequently like company. According to Erin Peavey, a design leader in health and well-being at the global firm HKS Architects, shared public spaces can allow lone individuals "to feel a part of the world but not have to engage in it or feel a responsibility to perform."

Peavey cited prospect-refuge theory, or the concept that people feel secure in spaces that allow them to observe their surroundings while remaining hidden themselves. Originally formulated in 1975 by Jay Appleton, a British geographer, the theory was later applied to built environments that were developed with four features: a view or outlook, partial framing of that view, a degree of visual complexity and a degree of "discoverability." Harvey Milk Terminal 1 at San Francisco International Airport, whose final section opened in June, is one of Peavey's examples. HKS designed the terminal to include a row of lounge chairs looking out to the flight line. The seats are buffered from behind by a tall planter that prevents other travelers from getting too close. This space, Peavey said,



allows its solitary occupants a moment to close their eyes or read or write. And where better? "For many of us, traveling is an opportunity to reflect," she said. Views to the world beyond the terminal provide the visual complexity that prospect-refuge theory calls for, she added. The act of watching planes land and take off "legitimizes" solitude in the way that the comfortably distracting sight of an open kitchen in a restaurant may appeal to solo diners. "You feel entitled to just sit there and enjoy the beautiful view with passive fascination as your brain goes into a relaxed state," she said. In contrast, spaces where individuals feel noticed by other people (becoming the "view" themselves) are more menacing — which is why sitting in the center of a restaurant is many solo diners' idea of hell.

Neil Hubbard, a partner at the London design and architecture firm Heatherwick Studio, said subtle details can prevent the unpleasant feeling of exposure. As the lead architect on Azabudai Hills, a mixed-use development in Tokyo that was completed last year, Hubbard worked with the natural undulations of the 6-acre valley site (the ground level varies by about 36 feet) to break up the space and create flexibility. Nooks and crannies in the form of small parks and courtyards coexist with larger gathering spaces and a 30-foot-long communal bench, all at different elevations. Something so simple as a terrace raised a few feet above ground level offers refuge, Hubbard said: "You're sitting at people's shoulder height, looking over their heads, rather than through a crowd of bodies." Poets' Park, a .06-acre pocket park in the Fitzrovia neighborhood of London, offers a similar sense of seclusion despite its central urban location. "Tall planting screens off the busy road and creates an acoustic buffer from the outside world, allowing you to hear your own

thoughts," said Peter Greaves at Make Architects, the London studio behind the design. The park's modest size — itself a nook within a big city — achieves the "difficult balance" between privacy and being hidden away, "which can feel unsafe," Greaves said.

Urban pocket parks get that balance right, said Cecilia Lindström, an urban researcher in London, which accounts for the popularity of tiny forests, or the dense, layered planting of tree species native to an area. The practice was pioneered by Akira Miyawaki, a Japanese botanist, and has been adopted in places as disparate as Amsterdam and New Delhi. In contrast, larger green spaces may hold a "sense of danger," especially at night, Lindström said. As long as a safety requirement is met, nature is an important element of solitude-friendly design, allowing us to "retreat without feeling like we're necessarily lonely," Lindström added. Research has also linked natural sounds and smells to lowered anxiety and stress. Should solitude no longer be desired, urban green space promotes greater social cohesion. An environment that welcomes individuals is also primed for connections, fulfilling the fourth principle of prospect-refuge theory: discoverability. Simply put, chance meetings are far more likely to happen when people venture from their homes. A gentle,

nonprescriptive approach is best, Greaves said: "If you just put people together and say, 'OK, be friends now,' it doesn't work." Can a space have it all? Heatherwick Studio's Little Island, the three-year-old Hudson River park off Manhattan, aimed to get the balance right by combining sizable public environments (including a 687-seat amphitheater) with playful elements (like a boulder scramble, spinning discs and chimes) that can be enjoyed alone or with companions or strangers. "Whimsy" was key to this design, Hubbard said, together with the principle of togetherness. "We wanted to inject these different modes, together with spaces for meditation and jogging," he said. In the studio's social impact study, he added, visitors most commonly reported feeling "relaxed" and "happy," with "peaceful," "calm" and "comforted" close adjectival contenders. Perhaps most indicative of Little Island's mass appeal, 94% of the survey's respondents, whether lone joggers or sociable concertgoers, indicated that they felt the park was "for people like them"; 92% said they "felt comfortable" there. Solitude-first design is not designing for loneliness; it is creating opportunities for the isolated individual to be out in the world, alongside groups of people, without feeling excluded. It is that "variety" of opportunity that makes a space feel good to all, said Katy Ghahremani, a partner at Make Architects.

Irrigation projects in Nirmal receive copious inflows

Nirmal: Irrigation projects received copious inflows following heavy rain in upstream areas, with a downpour continuing to lash the district for the second day on Monday. The Kaddam Narayana Reddy project in Kaddampeddur mandal centre

recorded 51,067 cusecs of inflows. The water level reached 691.450 feet as against the storage capacity of 7.603 tmc. Surplus water was discharged by lifting 10 gates and the project recorded outflows of 83,250 cusecs.