

A Dark Lesson From Shining China

Liu Xiaobo's life and death, and 'human progress'

For many of us in India — and, indeed, in the rest of the world — the Chinese economic story has been seen for what it is: a country determined by its leadership's sheer will to lift its people first out of paddy fields, then out of Dickensian factories, and finally into the First World, all in the span of almost a human lifespan. Such is the glow of this truly impressive progress, conducted in breakneck, monomaniacal speed, that the same 'many of us' may believe that the means to achieving such an end is worthwhile. Any means. This 'You can't make an omelette without breaking eggs' wisdom received a reality check with the news of the death of Chinese human rights activist, dissident and Nobel Peace Prize winner Liu Xiaobo on Thursday. Detained for almost a decade on the charge of "inciting subversion of state power", Liu, not allowed to receive medical attention for his liver cancer available only abroad, died, under guard, in a Chinese hospital.

What was it that made the Chinese leadership want Liu behind bars? His words. "Hatred can rot a person's wisdom and conscience. An enemy mentality will poison the spirit of a nation and inflame brutal life and death struggles, destroy a society's tolerance and humanity, and hinder a country's advance toward freedom and democracy." This is just a sample of Liu's criticism of a State in perpetual paranoia. He also advocated something that many of us in India still take for granted, "To kill free speech is to insult human rights, to stifle human nature and to suppress truth."

In Liu's example, both what he believed in and what he had to go through because of his beliefs, we can choose to learn two valuable lessons. One, bartering freedom of speech, and the human dignity that comes with it, is not necessary to push progress. China, one must remember these days, is not the only 'rich nation'. And two, we should be aware — and thankful — that for all its discontents and inanities involving censorship of the most banal things, for all its Irom Sharmilas and Vinayak Sens, Indian democracy has not made brutality its default position. May we remember that India is not China in this aspect. And ensure it never does.



Pahlaj Nihalani, Censor-in-Chief?

Nobel Prize-winning economist Amartya Sen's views on politics in general, and on the ruling dispensation at the Centre, which is also the ruling dispensation in 13 states, are no secret. These views are aired off and on, both by Prof Sen and by like-minded individuals, ranging across the dominant themes of Indian politics. Outrage on social media over the temerity of a mere intellectual to question the authenticity and wisdom of popular choice in India has accompanied such views, as well. Sen's exit from his pet project, the Nalanda University, did not embarrass the government or prevent the BJP from sweeping the Uttar Pradesh and Uttarakhand elections.

So, when the Central Board of Film Certification (CBFC) seeks to eliminate words that it thinks would offend the powers that be, was its chief Pahlaj Nihalani carrying out the mandate of those who appointed him? Or was he merely strutting like the rooster who imagines his rousing call makes the sun rise in the morning? What has Nihalani achieved? He has once again given grist to the intolerance mill. Sen being the academic of global stature that he is, seeking to gag his opinion and, childishly, to eliminate references to the cow and to Gujarat from a documentary on Sen, has drawn global attention to the state of free speech and expression in the world's largest democracy. Does Nihalani imagine he would be rewarded for his exemplary loyalty?

Indians, in other words, remain at risk (sundry newspaper, online forum of TV channel could expose them to toxic words such as cow) and, at the same time, Nihalani's exertions have brought to the government criticism on curtailment of freedom of expression and censorship. Nihalani should, perhaps, stick to his usual turf, of guarding tender Indian morals from anatomical liberties on celluloid.



Why do potential wrongdoers forget that the devil lies in the small print?

A Case of Sans Serif to Sans Sharif

Being 'done in' by a typeface has all the makings of a Sherlock Holmes case, but more Benedict Cumberbatch than Jeremy Brett. Clearly, those scouring the reams of documents connected with the Panama Papers have Sherlockian instincts. Divining that a document handed in by the family of the Prime Minister of Pakistan purporting to be from 2006 could not possibly have been written in a font that became commercially available only the year after, is quintessential Holmes. After all, the great Victorian era detective not only "wrote" a monograph on "The Typewriter and its Relation to Crime", he analysed the peculiarities of that instrument's keyboard to home in on the diabolical felon in A Case of Identity (1891), four decades before the FBI began scrutinising documents as a matter of course in crime detection. More confounding, however, is the fact that the individuals who helped the Sharif family to allegedly fabricate those documents did not take into account the need to properly "age" them, even if they were virtual and not printed on actual parchment. The simple act of switching to Times Roman would have done the trick. The irony of a situation in which a popular sans serif font becomes the possible cause for Pakistan's government becoming sans Sharif would most certainly have tickled the scribe in Dr Watson.

The 14th President of India can choose to not just be a ceremonial head of state but a working one

Friend, Rashtrapati & Guide



Nilanjan Mukhopadhyay

The near-certain election of BJP nominee Ram Nath Kovind as India's 14th president will trigger an awkward paradox whenever Prime Minister Narendra Modi and his colleagues address him as 'Rashtrapati'. Groomed in the fold of the RSS from an early age, the presidential election marks a significant accomplishment in Modi's career for securing victory for a presidential nominee politically reared in the BJP stable.

A leap in achievement when compared to A P J Abdul Kalam's election in 2002, there is a certain irony in the situation as the title of 'Rashtrapati' was, in the words of a senior member of the Constituent Assembly, "in use for a number of years in the Congress parlance" during the years of the Freedom Struggle and before the Constitution was adopted.

The Congress president was called 'Rashtrapati' during British rule, as Indians were ineligible for the highest post, the viceroy's. Consequently, nationalists chose a grandiose title for the Congress chief, despite it not being an exact Hindi rendering of 'president'.

After much debate, the Constituent Assembly stayed with the word after Independence despite old connotations. The government even renamed the Viceroy's House as Rash-

trapati Bhavan. Constraints stemming from a political system set in place by inheritors of the national movement, with which the Sangh Parivar has elemental disagreements, is not limited to mere designations. Despite Modi terming the Indian Constitution as the "only holy book", the BJP under Atal Bihari Vajpayee initiated an exercise to review it.

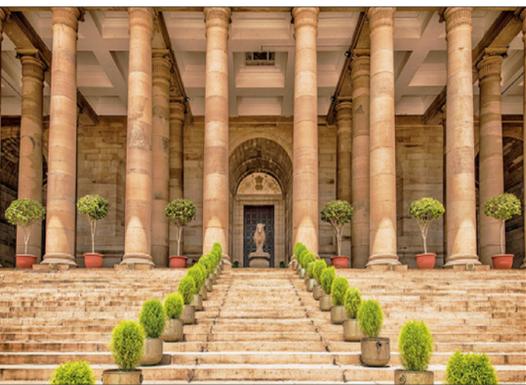
However, the cascade of reservations made from multiple quarters, including from the then-President K R Narayanan, forced conversion of the initiative into a simple 'assessment' of the Constitution's functioning. Yet, the episode added to doubts over the BJP and its associates' commitment to uphold the document in its present form.

An Oathetic Post

The second quirk of fate, if one can call it so, stems from various characteristics of the oath of office for the President being different from that of the prime minister or his ministerial colleagues. On July 25, when India's new head of State assumes office, he will pledge "to the best of my ability to preserve, protect and defend the Constitution and the law".

In contrast, the PM is only committed to "bear true faith and allegiance" to the Constitution. Senior RSS leaders have, in the past, questioned the Constitution and called for its radical transformation. Yet, Kovind would be committed to prevent such attacks and protect it against subversion.

To do so, K R Narayanan, the first Dalit President, can be the perfect role model for Kovind, but not for reasons of his social identity. On the contrary, Narayanan's candidature was opposed by other Dalit Congress leaders who were keen to become president in the year the nation turned 50.



Leading up to more than just pomp and show

Called the "best man in the country" by Prime Minister I K Gujral when all parties except the Shiv Sena backed him, Narayanan confessed that initially he was unaware of the power his oath conferred on the office.

Like his predecessors, Narayanan considered he was just a titular head. After assuming office, he comprehended the weight of the oath and realised that a President could do a lot if he opted to follow his pledge in letter and spirit. The operative part — "I will devote myself to the service and well-being of the people of India" — was interpreted by him as words that gave him the right to act like a 'working President'.

According to him, the post could be "used with a philosophy of indirect approach", adding that there were "one or two things" that could be done directly "in very critical times". He explained that the President could exert "indirect influence" on state affairs and that this was "the most important role he can play". Narayanan also believed that "there must be some equation between the people and the President".

Even the first head of State, Rajendra Prasad, observed that "people do

look upon" the President as someone with "authority in the governance of the country". This influence could be justified only "by tendering such advice and giving such suggestions as he considers necessary".

President and Precedent

Narayanan realised that his hands were not tied, and he could exercise his powers. This enabled him to check processes undermining the Constitution during both the Gujral and Vajpayee years of governance.

He then established his non-partisan stance and interpreted work for people's welfare and well-being diversely, including by ensuring that fundamentalism did not threaten the secular fabric.

As Bihar governor — who swears the same oath as the President, except the former being limited to a state and its people's welfare — Kovind has already earned his spurs, an accomplishment that ensured Bihar chief minister Nitish Kumar's support. The people will expect the in-ings to continue, which can be embellished by taking leaves out of his illustrious predecessors' books. He will then be Sabka Rashtrapati.

Former President K R Narayanan exercised his powers to enable himself to check the processes undermining the Constitution during the Gujral and Vajpayee years

WIT & WISDOM

"Cats are intended to teach us that not everything in nature has a garrison."

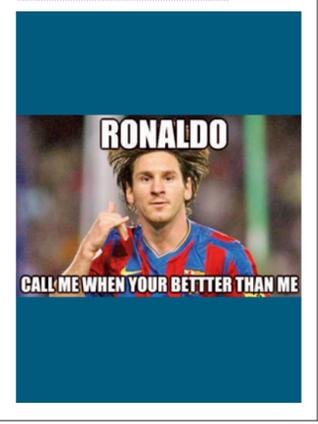
Garrison Keillor
Writer

Population in Coastal Zones

In many countries of Asia and the Pacific, the share of the national population located in low-elevation coastal zones (LECZ) is typically much larger than the relative area of the zones. Unfortunately, these coastal areas are strongly exposed to adverse changes associated with climate change. By 2000, some 403 million people were estimated to be living in such zones in the 10 countries listed below. This number would have gone up substantially by now...

Country	LECZ area as share of total country area (%)	LECZ population as share of country total (%)
Bangladesh	40.2	48.7
Cambodia	7.5	25.7
China	2.0	11.3
India	2.6	6.1
Indonesia	9.1	18.4
Myanmar	7.3	27.8
Pakistan	2.9	3.2
Philippines	6.8	16.7
Thailand	6.8	26.0
Vietnam	20.2	54.7

MEME'S THE WORD



Citings

Workplace Uncivility

JEREMY YIP

We conceptualise trash-talking as competitive incivility. That is, uncivil remarks or aggressive communication that is expressed between opponents. More specifically, we define trash-talking as boastful comments about the self or insulting remarks about competitors that are delivered by a competitor, before or during a competition....

But how prevalent is trash-talking in the workplace? To initiate our study, we conducted a pilot study in which we recruited full-time office workers at Fortune 500 companies and asked them to recall an incident where they heard or said a boastful or insulting remark at work while competing for resources or recognition....

We found that 57% of the employees indicated that trash-talking occurs on a monthly basis or more often. Across our studies, we demonstrate that trash-talking increases the psychological stakes of competition, and motivates targets to outperform their opponents. Also, participants in a competition who were targets of trash-talking outperformed participants who faced the same economic incentives, but were not the targets. Perceptions of rivalry explain the effect of trash-talking on performance. That is, trash-talking shifts targets' perceptions of opponents to view them as rivals, which motivates targets to compete harder and perform better on effort-based tasks.

From "How Trash-Talking Affects Performance"

Chat Room

They Are Here Till They Are

Appropos the Edits, 'Rethinking Old Age To the Benefit of All' and 'Innovative Saving Products for Seniors' (Jul 13, 14), seniors are not wanted by the family, society and the government, even as their numbers have swelled to around 6% of the population, thanks to increasing lifespan. The cost of living, particularly health expenditure, has gone up beyond the means of the old. Concessions in the form of additional interest on fixed deposits, tax incentives and so on are gradually vanishing. The rapid erosion of values also hurts them emotionally. The government should take serious steps to mitigate the seniors' woes.

TV GOPALAKRISHNAN
Bengaluru

NUCLEAR ENERGY

Time to Go Fission in Deep Waters



R B Grover

In 2015, India communicated its intended nationally determined contribution (INDC) for the period 2021-30 consisting of eight elements. Of these, two have a direct relationship with nuclear energy: to achieve about 40% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030, and to reduce the emissions intensity of its GDP by 33-35% from 2005 levels. To achieve the first target, India also commits to make efforts to achieve 63 GW installed capacity based on nuclear generation by 2032, provided nuclear fuel supply is ensured.

GoI clearly indicated its intention to accelerate growth of nuclear energy when in his Budget 2016 speech, finance minister Arun Jaitley announced the need to diversify sources of power generation for long-term stability. He spoke about drawing a comprehensive plan, spanning the next 15-20 years, to augment the investment in nuclear power generation, and budgetary allocation up to ₹3,000 crore a year. Considering that investments in power in India generally involve a debt-to-equity ratio of 70:30, this means an investment of ₹10,000 crore a year.

On May 17, 2017, the Cabinet approved the construction of 10 units of indigenous pressurised heavy-water reactors (PHWRs) of 700 MW each. This was followed by the landmark event of a general framework agreement signed with Russia on June 1 for setting up another two reactors of 1,000 MW each at Kudankulam, Tamil Nadu. The joint declaration reiterated the commitment of both sides to the vision document signed in 2014, which included the

construction of six reactors, each of 1,200 MW, at a new site.

Reactors having a total installed capacity of 6,780 MW are in operation. One Prototype Fast Breeder Reactor (PFBR) having a capacity of 500 MW is under commissioning. Four PHWRs, each of 700 MW, are under construction. The foundation stone for two PHWRs of 700 MW rating was laid in 2014, and the Nuclear Power Corporation of India is moving towards first pour of concrete. And agreements for the construction of four reactors of 1,000 MW rating at Kudankulam have been signed.

Negotiations with the US and France are ongoing to tie up constructions of more nuclear power plants. Overall, the country is progressing to achieve the target of 63 GW by 2032.

This development should be examined with India's evolving electricity mix. Fuelled by GDP growth, electricity demand is rising. Aspiration-

al India demands reliable electricity supply. For the year ended March 31, 2017, total electricity generation was 1,242 billion units, with coal contributing 964 billion units. Generation by captive power plants was additional and could be about 170 billion units, mostly from thermal power plants. Nuclear and Variable Renewable Energy (VRE) sources contributed about 40 billion and 81 billion units respectively.

VRE sources are intermittent. Therefore, integrating VRE sources in the grid results in high system cost.

Two issues regarding energy generation should be highlighted. One, 'external costs'. The term is used to denote the cost that the party responsible for generating emissions does not account for and, consequently, consumers of electricity do not pay for. They are paid in terms of health effects (deaths, serious and minor illnesses, etc) by those exposed to emissions and may not be even using electricity.

The EU's ExternE project studied external costs during 1990-2005. It concluded that nuclear has the least health effects among the electricity generation technologies studied: lignite, coal, oil, gas, biomass and nuclear. The EU's New Energy Externalities Development for Sustainability study also concluded that nuclear has very low external costs as compared to other technology options. It also favours wind and solar; the two also having low external costs, but also having low energy density, constraints on their location and being intermittent, resulting in high system cost.

The second issue is the ratio represented by Energy Returned (ER) over Energy Invested (EI). Governments, business houses and individuals are all concerned about energy use efficiency. How about efficiency of energy production? Energy economists have devised a term EROI to represent the ratio of ER over EI in output. Net energy gain, or useful energy available to society, is the difference between ER and EI. EROI's value depends on factors



No longer tilting at windmills

like system boundary used for analysis, method of handling heat energy and electricity, and how one addresses the dynamic effect. The issue of dynamic effect arises from the fact that the grid has a certain EROI and this could be higher than the EROI of the energy source under evaluation.

For input, one will draw energy from the grid and use it to produce, say, photovoltaic cells, which have a low EROI. A significant amount of energy is used up in building energy infrastructure when energy demand is increasing. To evaluate inherent characteristics of an energy technology, it is appropriate to make adjustments for this factor. This is termed as dynamic effect.

According to a Princeton University study for a particular electricity growth scenario for the period 2010-2100, dynamic EROI is as follows: nuclear (62), hydro (57), wind (39), coal (38), gas (8) and solar (6). This data does not factor in energy associated with grid integration, which is very high for solar and wind.

A low value of EROI means more flow of material per unit of electricity generated. Higher the flow of material, larger the ecological footprint. A value less than about 10 raises issues of sustainability. At present, VRE sources contribute a small fraction of energy to the grid. If their share is increased beyond about 10%, they will not only make grid management difficult, but they will also have an adverse effect on the EROI of the grid.

So, as India embraces an ambitious growth path based on low-carbon energy sources, an approach that integrates positive features of all sources needs to be adopted. India must do everything to achieve the target of 63 GW nuclear-installed capacity by 2032 and set an aggressive target of nuclear generation, say, 25% of total generation, to be achieved by the middle of the century.

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