



## Pay to publish

An M.P. Minister's disqualification underlines need to make paid news an electoral offence

The Election Commission's order disqualifying Madhya Pradesh Minister Narottam Mishra for three years is an important step in curbing 'paid news' in the electoral arena. It is not the first such order. An Uttar Pradesh MLA, Umlesh Yadav, was disqualified in 2011 on the same ground, of suppressing expenditure incurred in the publication of paid news. The EC has called paid news, a term that refers to propaganda in favour of a candidate masquerading as news reports or articles, a "grave electoral malpractice" on the part of candidates to circumvent expenditure limits. In a typical inquiry into the paid news phenomenon, the newspaper or publication concerned denies that it was paid for publishing the material and insists that it was part of its normal election coverage. The candidate denies authorising the publication and takes the plea that he or she could not possibly account for something that was not paid for. Mr. Mishra was no exception. He, in fact, argued that his rivals could be behind the 42 reports that the EC's National Level Committee on Paid News found to be nothing but election advertisements, without any disclaimer. However, the EC did not buy his arguments, mainly because it was difficult to believe that he had not seen reports that appeared in his Datia constituency during the campaign for the 2008 Assembly elections, often with his picture and the Bharatiya Janata Party's symbol. Many of these reports carried identical words, and in some there was a direct appeal for votes on his behalf.

Paid news is not an electoral offence yet, but there is a case to make it one. The EC has recommended to the government that the Representation of the People Act, 1951, be amended to make the publishing, or abetting the publishing, of paid news to further a candidate's prospects or prejudicially affect another's an electoral offence. Until this is done, contestants who use paid news can only be hauled up for failing to include the expenses involved in their campaign accounts. In Mr. Mishra's case, the EC has taken the view that even if it were true that he made no payment, he ought to have included a notional amount in his accounts. Also, candidates cannot simply claim that these reports were not authorised by them. As long as the intention to boost someone's prospects was clear, and there was no objection from the candidate, the EC can rule that there was 'implied authorisation'. Mr. Mishra's case pertains to the 2008 election, and by the time the Commission has given its verdict he is into his next term, having been re-elected in 2013. It is difficult not to notice that the enormous delay in adjudicating such questions is often created by candidates approaching the courts to stall inquiries. A legal framework in which electoral issues are expeditiously adjudicated must also be put in place if election law is to be enforced in both letter and spirit.

## New tech, old values

The EC's massive fine on Google points to the changing role of regulators

The long arm of the European Commission has once again struck the technology world with the imposition of a €2.42 billion (\$2.7 billion) fine on Google for the company's abuse of its market position. The Commission found that Google abused its dominance in the Internet search market to give itself an unfair advantage in another market – comparison shopping services. Google's comparison shopping service disadvantaged competitors by placing them lower in its search results, systematically giving Google's own services higher placement and greater visibility, leading to more clicks. Google, which is required to pay the fine within 90 days, may appeal the decision. While the fine itself is unlikely to pose financial problems for Google, whose parent company, Alphabet, posted a profit of over \$55 billion in 2016, the impact on how Google does business is likely to be significant; the Commission has said, and rightly, that it would leave it to Google to remedy the situation. The European Union's Competition Commissioner, Margrethe Vestager, also said the ruling could guide future decisions on complaints around Google favouring its own products and services via its search engine. The verdict is the latest in a long list of actions the EU has taken against tech companies from across the Atlantic. From a fine earlier on Microsoft for bundling its browser and operating system together, to a record €13 billion tax bill slapped on Apple last year for back taxes owed to Ireland, Brussels has signalled in no uncertain terms that it is determined to take on large tech companies, some of which have become gargantuan transnational entities, in the interest of its citizens.

The old idea that market power cannot be used to stymie competition, a result of which is a lowering of consumer choice and welfare, is good even when the market is new and changing rapidly, as happens at the technological frontier. Attempts to cast Google's run-in with the Commission as a game of trans-Atlantic dominance have quietened down, partly reflecting the wariness with which the current White House views tech giants, many of whom spoke vociferously against Donald Trump's 'travel ban'. In contrast to criticism from the U.S. government when the Google complaint was first lodged and for the Apple tax bill of 2016, the White House refrained from getting involved after the EU fined Google. The fault lines between tech giants, which often act as supra-national entities, and national and multinational governmental bodies, are changing fast as the relationship between citizens, their governments, media and technology is transformed. In the years to come we can expect new lines to be drawn as technological frontiers are crossed. While technology is constantly changing, valuing choice, competition and consumer welfare never gets outdated or obsolete.

# Promises in the Rose Garden

In a well-calibrated programme, Prime Minister Modi's U.S. visit reaffirmed an indispensable partnership



NIRUPAMA RAO

Prime Minister Narendra Modi's much anticipated visit to Washington has come and gone. The chemistry was positive, and the physics (that is, the structural content and equilibrium) and the geometry (the angles and alignments along which the visit was pitched) well-calibrated. Mr. Modi's fifth visit to the U.S. as Prime Minister concluded on a note of reassuring affirmation about relations between the world's most important and largest democracies.

President Donald Trump is a man of many moods and 'humours', a personification of impulse and impetuosity. The fact that the two leaders struck a good rapport, marked by mutual "respect and friendship", despite the difference in their personalities, augurs well.

In Mr. Trump's own words, he had "tremendous success" in his meeting with Mr. Modi. Progress in bilateral relations over the last few years received the imprimatur of endorsement of the new President, and there were no missed heartbeats or gut-wrenching moments.

### Arc of cooperation

Besides claiming that both leaders were "world leaders in social media", Mr. Trump's Rose Garden statement spoke of both countries working together to create jobs and grow their economies (a foundational ideology for Mr. Trump which is not antithetical to priorities in Mr. Modi's India) and ensuring a trading relationship that is fair and reciprocal. Mr. Trump announced that the U.S. will sign major contracts with India for the sale of natural gas, although he was trying "to get the price up a little bit".

On the security front, he expressed the joint determination of both countries to destroy "radical Islamic terrorism" as also to en-



hance military cooperation, with mention of the forthcoming "Malabar" naval exercise involving the Indian, American and Japanese navies. He had a good word for India's efforts to help Afghanistan and for India's joining in sanctions against the North Korean regime – a regime that was causing "tremendous problems" and which had to be dealt with, "and probably dealt with rapidly". This last aside, where Mr. Trump departed from prepared remarks, should get East Asia analysts and experts ready with their dissection tools to understand what looked like a clenched warning to Pyongyang.

Mr. Modi, as an astute student of human psychology, was effusive in both body language (the three "diplohuks" directed towards what some call a "germophobic" President!) and words of warm appreciation for the First Lady and Mr. Trump. He invited Ivanka Trump to India, and she has accepted. His key words were "mutual trust" and "convergence" to describe his meeting with Mr. Trump, as he referred to the "common priorities", and the "robust strategic partnership" that unites the two countries. He called the U.S. the "primary partner" for India's transformation, stressing convergence between his vision for a new India and Mr. Trump's vision of "making America great again".

Striking a high note, Mr. Modi spoke of Mr. Trump's successful experience in the business world as lending "an aggressive and forward-looking agenda to our relations". For his part, he said, he would remain "a driven, determined and decisive partner" of the U.S. The two leaders have set aside the "hesitations of history", it would seem.

### Close watch on Afghanistan

Interestingly, on Afghanistan, Mr. Modi spoke of maintaining "close consultation and communication with the U.S. to enhance coordination between our two nations", and terrorism in that country being "one of our common concerns". This space must be watched to determine the contours of future cooperation. So too, the reference to the increasing consultations on West Asia in the joint statement, "in accord with India's Think West policy" flags an issue of important ramifications, requiring more elaboration. The triangulations involving Saudi Arabia, Qatar and Iran are extremely complex today, and common India-U.S. perspectives (apart from eradicating Islamic radicalism) await more specific identification.

The delineation of shared interests as "democratic stalwarts" and "responsible stewards" in the joint statement ("Prosperity Through Partnership") on the Indo-Pacific (a formulation more India-inclusive than earlier ones) is to be noted. There is clear messaging to China in the call for respecting sovereignty and international law, with a distinct echo of the Indian position on China's Belt and Road Initiative, when the statement called for "bolstering regional economic connectivity through the transparent development of infrastructure and the use of responsible debt financing practices, while ensuring respect for sovereignty and territorial integ-

ity, the rule of law, and the environment". That is a good screen grab of Indian concerns about China's strategic overreach and suggests that the U.S. has no fundamental disagreement with this assessment.

The defence and security partnership (of interest was the Foreign Secretary's designation of "defence, security and connectivity" as key concerns), and counter-terrorism remain central to the relationship. The naming of Hizbul Mujahideen's Syed Salahuddin by the U.S. State Department as a Specially Designated Global Terrorist as well as the launch of a new consultative mechanism on domestic and international terrorist listing proposals was a definite boost. The call on Pakistan to "expeditiously bring to justice the perpetrators" of the Mumbai and Pathankot terror attacks was reiterated. The reference to these attacks being perpetrated by Pakistan-based groups is to be noted. The expansion of intelligence-sharing and operational-level counterterrorism cooperation signals greater mutual confidence about working to eliminate terrorist threats. It remains to be seen whether the affirmation of U.S. support for a UN Comprehensive Convention on International Terrorism will translate into a more coordinated India-U.S. approach.

Deepening security and defence cooperation between India and the U.S. has marked this bilateral relationship for some years now. Interoperability, given the growing proportion of U.S.-bought equipment with the Indian armed forces, is a concrete possibility. The offer of sale of Sea Guardian Unmanned Aerial Systems to India was confirmed and this will provide for an enhancement of Indian capabilities in maritime defence and deterrence. India's offer of support for U.S. observer status in the Indian Ocean Naval Symposium was flagged. The organisation has a membership of 22, including Iran and four observers, including China and Japan. Levels of activity have not been high in recent years.

### Unfinished agenda

Digital partnership was a concept projected in the briefing by the For-

eign Secretary and found mention in Mr. Modi's remarks and the joint statement. This is an omnibus term that can encompass many meanings – including innovation, technology flows, as well as the give and take of knowledge in the cyber sector (and its human-resource, professional component). The H-IB visa issue did not come up for specific mention in these public statements, but obviously remains on the agenda.

Finding creative ways to enhance bilateral trade and increased market access including in agriculture (a particular U.S. concern) and information technology (of Indian interest), as mentioned in the joint statement, will be monitored carefully. The energy partnership has survived the visit, contrary to apprehensions, and besides U.S. natural gas (read shale), there was mention of clean coal and renewable resources and technologies for India – in order to "promote universal access to affordable and reliable energy".

Civil nuclear energy cooperation merited a brief mention, but just that. The resolve to sealing the contractual agreements between the financially stressed Westinghouse Electric Company and the Nuclear Power Corporation of India Ltd. and related project financing over the next few months offers hope without the promise of finality. On another front, U.S. support for India's permanent membership of the UN Security Council, Indian membership of the Nuclear Suppliers Group, the Wassenaar Arrangement, and the Australia Group has been reiterated.

There is a final footnote to the visit. And it involves President Abraham Lincoln. There are some in India who regard Mr. Modi as similar to the 16th U.S. President, as unusual as this may seem. The fact that Mr. Modi chose to give Mr. Trump a commemorative stamp issued by India in 1965 to mark the 100th anniversary of the death of Abraham Lincoln should offer interesting and intriguing insights about our Prime Minister.

Nirupama Rao is a former Foreign Secretary and was Ambassador of India to the U.S.

# Fighting an old battle

The disabled have been affected by the high GST rates on essential aids and appliances



JAVED ABIDI

There are just a few days left. On June 30, at the midnight hour, when the new Goods and Services Tax (GST) regime kicks in, almost all aids and appliances that disabled people use such as a wheelchair, or a Braille typewriter or a hearing aid will become at least 5% more expensive. And, if the confusion over Chapter 90:9 in the GST Bill is not resolved between now and then, then some orthopaedic appliances such as crutches and surgical belts will get 12% more expensive.

### Making matters worse

Even small cars in India are treated as some type of a luxury item; the GST Council has levied a whopping 18% tax. It is another matter that in the absence of accessible buses or even taxis, modified cars specially

adapted for the physically disabled are not really a luxury item but an absolute necessity.

Since 2006, these items were not taxed! So, even 5% GST, let alone 12% or 18%, will make life that much more difficult for persons with disabilities. It is already extremely difficult for the average disabled person in India with accessibility issues and additional costs of living. Now with the GST, things of daily use/necessity which are already beyond their reach, will become even more expensive.

It is not clear why the GST Council is taxing disabled citizens of India. While items such as *kajal* are being taxed at 0% and rough precious and semi-precious stones are being taxed at a mere 0.25%, most disability goods are being charged at 5% – the same as kites (*patang*) and *agarbattis* and cashew nuts. This decision of the Council blatantly violates the provisions of the newly passed Rights of Persons with Disabilities (RPWD) Act, 2016.

Chapter 8 - Duties and Responsibilities of Appropriate Governments of the RPWD Act clearly states: "The appropriate Govern-



ment shall develop schemes programmes to promote the personal mobility of persons with disabilities at affordable cost to provide for, - (a) incentives and concessions; (b) retrofitting of vehicles; and (c) personal mobility assistance."

### Precedent for zero tax

It has been six months since we passed the new disability law. By now, the Ministry of Finance and the Department of Empowerment of Persons with Disabilities should have at least set up a committee or a working group to seriously look into the mandate imposed by Chapter 8, i.e. to develop incentive schemes and concessional programmes to ensure that disability

aids and appliances are made available at an affordable cost. Instead, the Finance Ministry has decided to ruthlessly tax its disabled citizens! In the first round, Braille typewriters were taxed at 18% GST and Braille watches at 12% GST. It is only after the disability sector was up in arms that these two and some other items have been brought down to 5% GST. This happened in the June 11 meeting of the GST Council. When we found out a few days later, we could have proclaimed victory and had a celebration, but we chose not to. We are very clearly demanding a complete rollback. We are asking the government for a zero-tax regime as was the case in the last decade, from 2006 onwards.

I have the misfortune of working on this issue for the second time. It is like going back in a time capsule to the 1990s when wheelchairs were taxed at 30% and crutches at 25%! I remember taking up this issue, for the first time, in 2001 when Yashwant Sinha was India's Finance Minister. At the meeting, he heard us out patiently and decided not to do anything. A few years

later, when Jaswant Singh became the Finance Minister, he brought down the taxes to a 5% slab. Again, in 2006, the then Finance Minister, P. Chidambaram, brought down the tax from 5% to 0%. It has been like this for the last 10 years. Now it seems that all that hard work will once again go down the drain and we will be back to the 2002-2004 position.

### Investing in the disabled

India must invest in its disabled population – there are 70 million of us. If the disabled are able to step out of their homes; go to schools and colleges; get jobs on merit; and go to their workplaces and perform, they will obviously contribute to the nation's growth and its economic progress. Good quality and affordable aids and appliances are an essential prerequisite to this dream story of the disability sector thought leaders like me.

Javed Abidi helped set up the National Centre for Promotion of Employment for Disabled People (NCPEDP). He is also the Global Chair of Disabled People's International

## LETTERS TO THE EDITOR

Letters emailed to letters@thehindu.co.in must carry the full postal address and the full name or the name with initials.

### Bonhomie in the U.S.

There was nothing spectacular in the Narendra Modi-Donald Trump meet; the handshakes and bear hugs don't mean much. Whether branding Hizbul Mujahideen chief Syed Salahuddin – who is now a spent force – as a "global terrorist" would have any bearing on terror emanating from Pakistani soil is anybody's guess. On China, the aversion by both leaders to antagonising Beijing was obvious by the way in which there was an indirect commitment to "maritime cooperation".

It is very unlikely that a country such as China would be rattled by a routine meeting between the two global leaders. That Mr. Modi shied away from raising issues such as the contentious H-IB visa was disappointing. One is also in the dark about the possibility of the two leaders having discussed India's bid for a permanent

membership to the United Nations Security Council and the Nuclear Suppliers Group. It is quite obvious that Mr. Modi's visit was aimed at fostering goodwill with Mr. Trump. Unlike Barack Obama, a spontaneous charmer, our leader may need more one-on-one deliberations with Mr. Trump to carry forward what was achieved in the maiden meeting (Editorial - "Warm in Washington", June 28).

GANAPATHI BHAT, Akola, Maharashtra

### On the Left

It is clear that Sitaram Yechury is reluctant to acknowledge the way the Right has ascended to power using the democratic institutions of the country, which are open to any political force in India including the Left ("The Wednesday interview - Sitaram Yechury", June 28). The Left often takes recourse to agitations but

fails to develop a counter-narrative with an alternative model. The absence of a proper national economic agenda or a wish list if elected to power is what eludes the national Left. It has been successful in its stronghold States only because of its presentation of an alternative to the people.

JITHIN VARGHESE, Ernakulam, Kerala

### Agrarian distress

Small and marginal farmers toil right through the day to eke out a living by selling whatever little they produce – their primary lifeline. Their second lifeline is livestock which they can count on as a dependable liquid asset. Two recent government steps have aggravated their sense of despondency. While demonetisation and its slow replacement have snapped their first lifeline, confusion and uncertainty surrounding the trade of

livestock have rendered the second one unreliable. This distress situation is not one of the farmers' making alone. Along with the vagaries of the weather, governments – past and present – too must share the blame. The major share of the farming cost, mostly raised through loans, goes to the government much before the farmer earns a rupee. Therefore, the first thing a government can do – and without any corruption and discrimination – is to do away with all direct and indirect taxes on agricultural inputs such as fertilizers, pesticides, seeds, agricultural tools and implements, electricity, packing materials, and local taxes. Such a drastic but direct intervention will help the farmer grow his produce at a lower cost, reduce his need for borrowings and bring down rural indebtedness. Exorbitantly high taxes on

diesel have increased transportation costs, which constitute the single largest component of the end consumer price of many farm products. To facilitate a remunerative price to the farmers and contain inflation, taxes on diesel, and on a whole set of vehicles primarily meant for the transport of "peoples' goods" need full exemption. Movement of "peoples' goods" must be completely exempted from road tolls, and all direct and indirect Central, State and local taxes. Herein lies a long-term economic solution to the problem but it calls for strong political will to implement it.

JOSE AUGUSTINE, New Delhi

### Saving the elephant

Distressing reports of large-scale elephant deaths show that the "Project Elephant" programme started in 1992 – to address various issues such as man-animal conflict

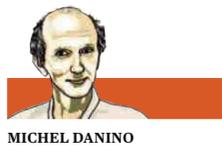
and the conservation of elephants – needs to be revived on a war footing ("Four elephants electrocuted in Kodagu" and "In Kerala, 14 have died in captivity this year", both June 28). States can implement initiatives to strengthen Centrally-driven wildlife conservation programmes and work with establishments in formulating steps to address problems such as electrocution. Without the participation of local residents in and around forest areas, such issues cannot be resolved. Protecting primary species will ensure overall protection of the ecosystem. States should uphold Article 48A of the Constitution – on the environment, forests and wildlife.

ARCHANA VENKATA MADHVA RAJ, Thoothukudi, Tamil Nadu

MORE LETTERS ONLINE: www.hindu.com/opinion/letters/

# The problematics of genetics and the Aryan issue

To brandish genetic studies as the clincher to the Aryan debate is hasty, if not misplaced



MICHEL DANINO

Tony Joseph's article ("How genetics is settling the Aryan migration debate," June 17) heavily leans on two recent studies (which I will refer to after their first author: "Silva et al." and "Reich et al.") but conceals important methodological issues.

Indeed, most genetic studies suffer from shortcomings and flaws, and the larger public should be all the more aware of this problematics as they come to us in a scientific garb; actually, they are scientific only in part.

**Holes aplenty**

Silva et al.'s study mainly revisited older samples with new techniques; though it stressed India's "remarkable genetic diversity" and "very complex history", its data set of some 2,400 samples, which left out thousands of communities, was inadequate.

Such was also the case of Reich et al.'s construct of Ancestral North Indians (ANI) and Ancestral South Indians (ASI); the study had no samples from eight major Indian States, while another eight were represented by a single population!

With such a skewed distribution, the ANI/ASI construct lacked scientific validity and was simply expected to conform to predetermined results.

Mr. Joseph found that the study "proved that most groups in India today can be approximated as a mixture of these two populations", while it only "proved" how good scientists are apt to bungle when their theoretical framework remains amateurish. Reich et al. themselves were careful to warn that their models were "over-

simplifications", which means there are no "true ancestral populations of India", barring the original immigration from Africa some 70,000 years ago.

A second flaw is therefore circularity. "ANI is likely to have resulted from multiple migrations," cautions Tony Joseph, "possibly including the migration of Indo-European language speakers", while Silva et al.'s paper refers to "multiple dispersals into the Subcontinent". If so, what criteria allow us to associate one of them with "the" presumed Indo-Aryan immigration?

As Nicole Boivin, an archaeologist from Oxford University with wide experience of the Subcontinent, observed, "In reading the genetics literature on South Asia... perhaps the single most serious problem concerns the assumption, which many studies actually start with as a basic premise... that the Indo-Aryan invasions are a well-established (pre)historical reality."

Besides, migrations out of India are not factored in, al-

**Migrations out of India are not factored in, although there are clear archaeological trails present**

though, in the Bronze Age, there are clear archaeological trails for a Harappan presence in central Asia, the Persian Gulf and Mesopotamia.

**Complexified picture**  
Sustained interactions also occurred along trade networks and are bound to have complexified the genetic picture.

Why not investigate such trails in the R1a debate, instead of positing, as Silva et al. do, that "the Y-chromosome haplogroup R1a... spread with pastoralism and the Indo-European languages into South Asia"? Why should this spread be wholly unidirectional?

Another pitfall is illustrated by Silva et al.'s endorsement of another study regarding the "freezing of In-

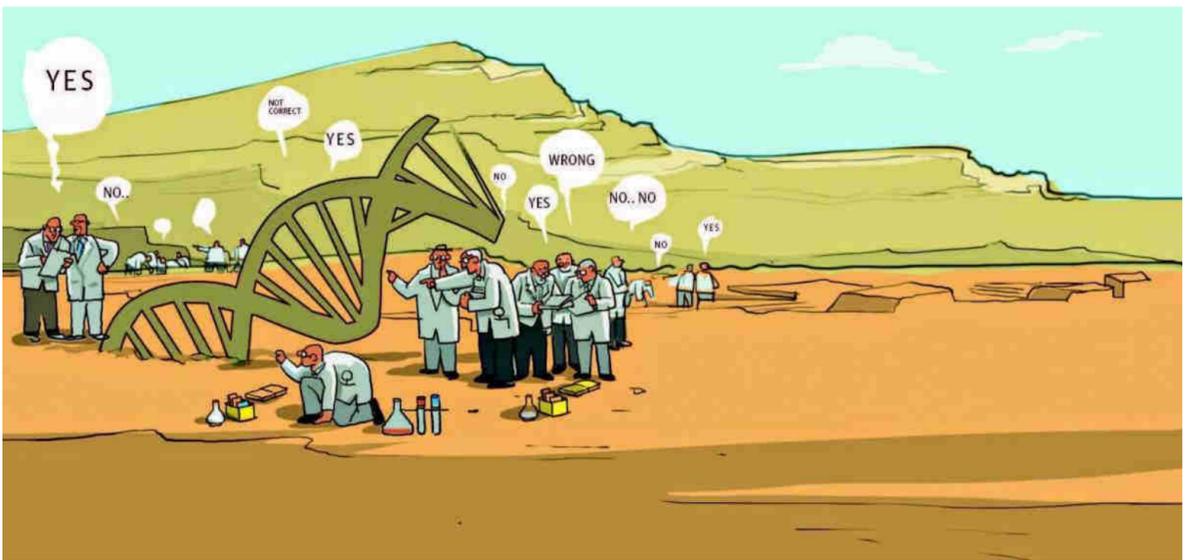


ILLUSTRATION: DEEPAK HARICHANDAN

dia's population structure" some 1,500 years ago. Ms. Boivin noted the "problematic assumption... that caste is unchanging", and there is indeed sound historical evidence of some amount of caste mobility; endogamy was also not always strict. India's population has been

anything but "frozen", and genetic studies reconstructing a past picture on the basis of today's castes are liable to error.

Silva et al. speak of the "re-peopling [of South Asia] after the Last Glacial Maximum" (about 18,000 years ago); even if there must have

been migrations at the time, there is no question of "re-peopling", since substantial Palaeolithic populations thrived in many parts of the Subcontinent.

The study also naively correlates the "spread of agriculture" with a few haplogroups, suggesting that agriculture came into the Subcontinent through migrations, but good evidence exists for the indigenous spread of agriculture not only in the Northwest but independently in the Ganges valley. Silva et al. attribute the "spread of Dravidian languages" to those first farmers, while recent studies from genetics and agro-linguistics have tended to show that those languages originated in south India.

Finally, the study opines that "genetic influx from Central Asia in the Bronze Age was strongly male-driven, consistent with the patriarchal, patrilocal and patrilineal social structure attributed to the inferred pastoralist early Indo-European society".

Again, a patriarchal social structure is "attributed" to an "inferred" pastoralist Indo-European society, and

**The Aryan debate has involved thorny linguistic, textual, archaeological issues which need to be addressed**

results are interpreted accordingly. Anthropologically, "pastoral" migrations that leave their womenfolk behind make no sense; a "male-dominated arrival of Indo-Aryan speakers from Central Asia" is conceivable only in the context of an aggressive military campaign, invasion and conquest (which archaeology has emphatically ruled out), not with waves of pastoral immigrations.

**No definitive answers yet**

To brandish this study as the final solution to the Indo-European problem while ignoring many others that reached vastly different conclusions reflects a personal choice.

In fact, divergences among geneticists are a useful reminder that the discipline still has much room for subjective interpretations. Twenty years hence, most of the grey areas may be

settled, but we are still far from that, especially in the absence of ancient DNA from the Subcontinent.

Besides, the Aryan debate has involved thorny linguistic, textual, archaeological, bio-anthropological, archaeoastronomical issues: the Indo-European problem will be laid to rest only when a theory effectively answers all those disciplines.

Mr. Joseph is right in stating that "We are all migrants." As regards his conclusion that "We are a multi-source civilisation, not a single-source one, drawing its cultural impulses, its tradition and practices from a variety of lineages and migration histories", I only partly agree: Indian civilisation is something more than a *khichri* of ethnicities, even if they all did enrich it: culturally, it has been more a creator and a giver than a recipient, as most Indologists recognised long ago.

Michel Danino is a guest professor at IIT Gandhinagar and a member of the Indian Council of Historical Research

A longer version of the article and the response can be found at <http://bit.ly/AryansDebate>

**Tony Joseph responds:**

Michel Danino's response suffers from multiple deficiencies, the first of which is that he fails to recognise that my piece rests heavily on five studies (not two). Four of these were published between 2013 and 2017 and one in 2009. This is important because in a field making rapid advances, it is misleading to depend on older studies.

Second, the doubt that Prof. Danino tries to throw over population genetics is peculiar because until recently, this science was being used to argue that the migration theory had been disproved! That doubts about the science are being

cast precisely at a time when it has started using better techniques such as whole genome sequencing to arrive at clearer answers is noteworthy.

Prof. Danino questions the methodology of these studies, but the proper way to question commonly-accepted methodology in a scientific field might be to get a peer-reviewed article published in a well-regarded journal.

An intriguing aspect of Prof. Danino's response is his opposition to the ANI-ASI framework. From 2009 onwards, this framework was used to argue against migration.

Now when it is shown that the study actually supports it, he says the framework is

faulty! A case of wanting to have it both ways, one would think.

Prof. Danino asks what criteria allow us to associate one of the dispersals with the Indo-Aryans.

The answer lies in the phylogenetic and geographic structure of haplogroups which allow scientists to associate migrations with regions. The answer also lies in the discovery of R1a in ancient DNA across Europe and Central Asia (especially in Sintashta, Andronovo and Srubnaya remains).

Prof. Danino next moves on to suggest that 'Out-of-India' is a reasonable theory, and not a far-out hypothesis. Again, the best way to demonstrate this might be

through a peer-reviewed article in a well-regarded journal. That he quotes not a single study to back his conviction is informative. The sections dealing with caste are irrelevant to my piece, which doesn't anywhere link the caste system to the arrival of migrants.

Lastly, that Prof. Danino doesn't like *khichri* seems to suggest a discomfort with diversity. As citizens of a great civilisation, we take delight in having a multitude of things in common – and comfort with diversity is one of them.

Tony Joseph is a writer and former editor of BusinessWorld. Twitter: @joseph0010

**SINGLE FILE**

## Quantifying outrage

Bookkeeping cannot be the response to gratuitous mob violence

VAISHNA ROY



How much is too much? How do you measure out in coffee spoons the amount of sorrow you are allowed to display? In surreal fashion, that is what the debate focusses on today after a 15-year-old is lynched. Not the event, but whether and how much it is being "blown up". When a boy is beaten to death over a seat dispute, how much worse can you "make" it sound than what it is already?

There are inflection points in history when one event triggers off a cascade of events. These points aren't necessarily unique. When the whole country erupted in protest over Nirbhaya, it wasn't as if horrific rapes hadn't happened before or didn't happen after, but Nirbhaya spoke to our core in a way that made us cry out loud, louder than we had before. It isn't as if Dalits hadn't been driven to suicide before Rohith Vemula, but he spoke to us in death in a way that smote our conscience. And we responded.

**The violence has edged closer**

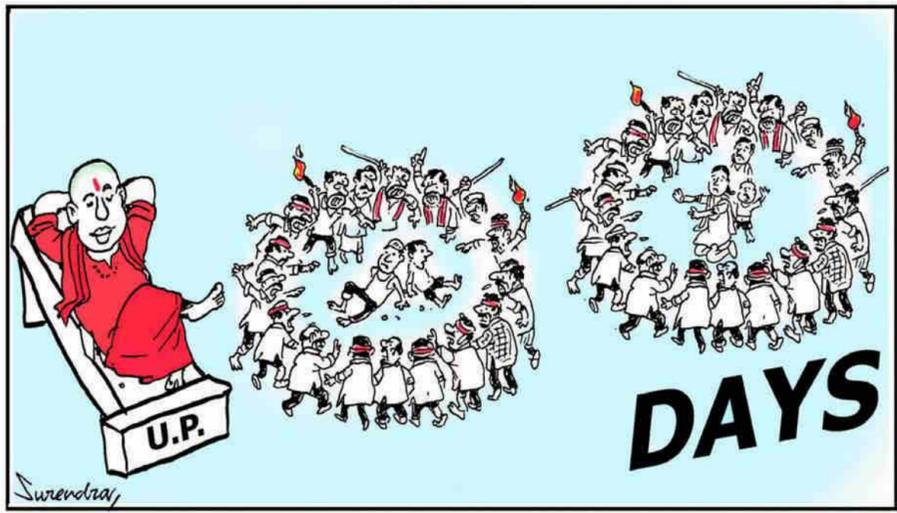
Commentators who point out anomalies in the media's or the chatterati's responses are not wrong. They hold up a mirror and if what we see in it makes us flinch, then so be it. If we failed to be angry enough earlier, we live today with mobs that have edged closer to our doors.

Every Dalit village we saw being burnt down and every upper caste family we allowed to escape with impunity, every one of those incidents was the ink with which Vemula wrote his final note.

Showing up the chattering class's hypocrisy or calling the media to account is an important task and must continue. It must be encouraged. But let us recognise that it is a process, not a response. Bookkeeping cannot be the response to the events unfolding around us today and certainly not a response to gratuitous mob violence.

When a boy is lynched, being human doesn't allow us to patiently draw out a pipette and measure out outrage in millilitres to be jotted down in registers against incidents that came before. That is not who we are. This 'nationalism' we tout so often now, if it means anything it possibly means recognising that we are not ledger-toting clerks but a people who can be moved to tears by a boy's murder.

When Mahatma Gandhi went on a five-day fast and called off the Non-Cooperation Movement in 1922, it was to protest the outbreak of violence in Chauri Chaura that saw 23 policemen burnt to death. He had the courage to call off a movement that epitomised the revolt against colonialism to express outrage at mob violence against policemen who represented the same regime. He would do this over and over again in the course of his career. That is the legacy of protest we have inherited. Let's not substitute it with mere accountancy.



**CONCEPTUAL**

**Beta FINANCE**

A measure of volatility of a stock, or any other financial security, based on the magnitude of change in its price compared to the market as a whole. In mainstream finance, stocks with high beta are generally considered to be riskier than stocks with low beta. Stocks with high beta, since they are riskier, are also considered to be better investments for investors seeking higher returns. Others, primarily value investors, have disputed this claim saying that risk has nothing to do with the degree of volatility in the price of a stock, but instead linked to the fundamental strength of the underlying business.

**MORE ON THE WEB**

How to link your Aadhaar with PAN <http://bit.ly/AadhaarPan>

**FAQ**

**Held to ransomware**

Another attack adds to global cybersecurity woes

**What is NotPetya/Petya?**

It is the latest cyberattack to have hit organisations worldwide on Tuesday. While Ukraine and Russia are believed to be the worst hit by the attacks, companies across U.S., U.K. and India have been impacted. Most security organisations believe this to be a variant of Petya ransomware that has been in existence since 2016. But preliminary findings by Russian cybersecurity firm Kaspersky suggest that this is ransomware not seen before.

**Where did the attack originate?**

While the origin is still unclear, it is believed to have started from an update by a third-party Ukrainian software called MeDoc, which is used by many government organisations in the country. Kaspersky says over 60% of attacks took place in Ukraine, and Russia is second on the list with 30%.

**What is a ransomware attack?**

It is a malicious software that blocks access to computers and data until a sum of money is paid. NotPetya is the second major global ransomware since WannaCry, which had infected about 3,00,000 computers across 200 countries in May. Similar to WannaCry, one of the means by which Petya spread was by exploiting the MS12-010 vulnerability, also known as EternalBlue. Microsoft had issued a security patch to fix it in March.

The Petya ransomware not only encrypts files, but also overwrites and encrypts the master boot record. It shuts down the system about an hour after the infection and asks for ransom on rebooting. Users will not be able to access the system till the infection is removed. The PC might be protected from the malware in case the user is able to disrupt the system reboot.

**What can be done to contain NotPetya/Petya?**

Cyber-criminals behind the attack are demanding \$300 in bitcoins be paid to recover encrypted files. The message flashed across the screen reads: "If you see this text, then your files are no longer accessible, because they are encrypted. Perhaps you are busy looking for a way to recover your files, but don't waste your time. Nobody can recover your files without our decryption service."

As of Wednesday afternoon, more than \$9,262 from 40 payments had been collected in the Bitcoin wallet tied to the Petya ransomware attack, according to @petya\_payments Twitter account which is tracking these payments. However, the Indian government's cybersecurity arm CERT-In (Indian Computer Emergency Response Team) in its advisory has urged against paying ransom as it does not guarantee files being released.

**FROM THE HINDU ARCHIVES**

FIFTY YEARS AGO JUNE 29, 1967

**New canal for K.R. Sagar**

The Public Works Minister, Mr. Veerendra Patil, informed the Mysore Assembly to-day [June 28] that the Government proposed to open a right bank high level canal for Krishnarajasagar at a cost of about Rs. 136 lakhs to irrigate about 24,000 acres. The scheme contemplated utilisation of the waters of the Kabini river for the command area under the Kabini project and the surplus through the K.R. Sagar, he said. Mr. Patil, who was replying to Mr. G. Made Gowda (Cong.) stated that the proposed scheme would not adversely affect the already developed atchkat under Krishnarajasagar. When the member insisted that an expert committee be constituted to go into the feasibility of the scheme, the Public Works Minister said it was a suggestion for action. To supplementaries the Minister said that the Kabini project was a set-off against the Bhavanisagar and Amravathi projects of Madras State.

A HUNDRED YEARS AGO JUNE 29, 1917

**Soldier stabbing case.**

Mr. P.T. Bowring, District Magistrate and Justice of the Peace, was engaged to-day in hearing a case in which Private I. Scott of Motor Transport section, Army Service Corps, is charged under Section 304 I.P.C., with alleged causing death of an Indian domestic servant, with a knife. It was alleged that on the 21st of last month at about 2 P.M. Private Scott was seen talking to the deceased on Whitefield road and subsequently stabbed him and as a result of the injuries the man died. Superintendent Hayes of the Mysore Police made enquiries and as the military authorities handed over Private Scott to the civil authorities for trial the police charged him under Section 304 I.P.C. Mr. Hayes was the first witness examined. He deposed regarding the investigation in the case. He stated that on information he proceeded to the scene of occurrence where he saw the corpse of the deceased and near that the soldier was standing and behaving in a strange and demented manner.

**DATA POINT**

**Major antitrust fines**

The EU's €2.4 billion antitrust fine on Google on Tuesday is a record, beating the €1.06 billion fine imposed on Intel in 2009. A look at the highest fines imposed on companies

