



Contest vs. consensus

The latter should be the default approach for selecting a presidential candidate

Whether an enlightened public figure or an active politician, the next President should be one who enjoys the widest possible acceptability. For this to happen, there should be meaningful discussions towards building a consensus among the major political parties ahead of the presidential election. The BJP's overtures to key leaders in the opposition appear to be merely exploratory. Approaching opposition parties for their cooperation without putting forward a name will be unfruitful. It appears that the Union Ministers who met key opposition leaders requested that the latter should not field a candidate merely for the sake of a contest. Such an approach is more likely to succeed if the Centre draws up a list of possible names and seeks the cooperation of opposition parties in getting one of them elected. It would also help the opposition parties arrive at an agreement among themselves on whether to field a candidate or back the ruling party's choice. The BJP may want to elect a President who will share its political outlook and philosophy. After all, in the last two elections the Congress succeeded in getting its party leaders elected President. But it is worth recalling that the main opposition of the day did not oppose K.R. Narayanan and A.P.J. Abdul Kalam in 1997 and 2002, respectively. A consensus is still possible if the candidate chosen meets one of the most important qualifications for the presidency – a general acceptability.

Too often, contestations in the political realm make it imperative for the opposition to field a candidate in the interest of demonstrating its unity in the hope that its combined strength will pose some sort of a threat to the ruling dispensation. There is little doubt that the current political mood in the country is not entirely conducive to successful cooperation among diverse political forces to get an eminent citizen elected without a contest to head the republic. There is widespread unrest among farmers and there are credible fears among several sections that there may be an attempt at homogenising the country's cultural diversity. There will be little surprise if parties opposing the policies of the National Democratic Alliance regime would want to make use of this opportunity to join hands and make a determined attempt to challenge the electoral supremacy enjoyed by the BJP in the recent elections. On the other side, the BJP may believe it has an edge in the electoral college consisting of all members of Parliament and the State Assemblies, as it can count on the backing of some regional parties. In such circumstances, a contest is likely. However, it would be best if someone who inspires confidence that he or she would act in a non-partisan manner is elected with the support of both the ruling party and the major parties in the opposition. It would enable the next incumbent to be the honest broker and wise counsel the Constitution envisions him or her to be.

The unifier

Helmut Kohl was instrumental in shaping post-Cold War Europe

The architect of a reunified Germany and a staunch champion of European integration, Helmut Kohl, who died at 87, was the longest-serving German Chancellor since World War II. The steely politician, who lost his bid for a fifth consecutive term as head of his conservative Christian Democratic Union in 1998, went into political wilderness within months thereafter, following a controversy over anonymous donations to his party. Raised in an austere Roman Catholic family, Kohl first came into prominence when he was 39, becoming minister-president of Rhineland-Palatinate in 1969. He emerged as president of the CDU in the early 1970s, and held the position with a firm grip until the end of his political life. Over the decades he mentored the careers of several leaders, including two former presidents, and the incumbent Chancellor Angela Merkel in the 1990s. Kohl was catapulted to high office in 1982, when the liberal Free Democratic Party quit the ruling coalition with the Social Democrats to back the CDU. His early years as Chancellor were notable for the efforts to embed Germany in the Western alliance, improve relations with the Soviet Union and promote post-War reconciliation. His 1985 visit along with President Ronald Reagan to the site of the Bergen-Belsen SS concentration camp and the Bitburg military cemetery, marking the 40th anniversary of liberation from Nazi rule, stoked controversy both at home and in the U.S.

But it took until almost the close of the decade before Kohl would begin to play a pivotal part in the developments that culminated in the end of the Cold War. The prospect of a reunited Germany, following the momentous 1989 fall of the Berlin Wall, caused deep scepticism among both European leaders and the Soviet Union's Mikhail Gorbachev over the potential economic dominance by what would become Europe's largest nation. However, Kohl's broader vision of a Germany at the heart of a federal Europe and his instinct for compromise helped overcome such apprehensions in the years that followed. His embrace of Europe's move towards the adoption of a common currency was a French idea. François Mitterrand, his French counterpart, regarded the Deutschemark as Germany's nuclear bomb. The euro thus emerged as a concrete, if controversial, symbol of forging a collective European economic future, above all between the union's two locomotors, Paris and Berlin. When faced with a domestic audience reluctant to see the national currency replaced, Kohl declared that the adoption of monetary union would be a matter of war or peace in the 21st century. Indeed, the recent debt crisis in the Eurozone exposed the limits of introducing a common currency without concomitant political integration. Berlin's commitment to closer union within the EU, despite recent setbacks to the original project, is a lasting legacy from the Kohl era.

New playground for non-state actors

'Internet-enabled' terrorism has introduced greater complexity in an already difficult scenario



M.K. NARAYANAN

Hidden terror was, till now, believed to be confined mainly to the less developed regions of the world – the 9/11 attack in the U.S. was seen as an aberration, or exception, rather than the rule in this respect. Since 2015, however, with the attack in January of that year on the Charlie Hebdo offices in Paris, followed by a series of major terrorist incidents in Brussels, Paris, Nice, Berlin and Istanbul during the past two years, it is evident that the developed world is no longer immune from terror strikes.

The Islamic State (IS) has claimed responsibility for the vast majority of these attacks, though this may not be true in all cases. What is not disputed any longer is that the West now has a sizeable number of radicalised Islamist elements who are willing to perpetrate acts of terror – either on their own, or under instructions from elsewhere.

Timeline of the new phase

Terrorism can be said today to be the single most serious threat to peace across the world. Several aspects, political, security and developmental, are affected adversely by terrorism. Meanwhile, those indulging in acts of terror appear to have moved beyond the earlier non-traditional, non-state actors who were legatees of the Afghan Jihad (1979-1989). The new breed of radicalised terrorists is not overly dependent on external sponsors or state support. Their inspiration is different. While their origins may be traced to outfits such as al-Qaeda and its affiliates – and they still continue to adopt the techniques and belong to the same genre of terror – they are distinct.

The United Kingdom, which has a reputation of possessing the best counter-terrorist organisation in Europe, and displays a steely re-



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solve not to allow emotion to cloud its judgment unlike many other European nations, has lately been hit in rapid succession, by three significant terror attacks. This is indicative of the shifting trajectory of terror today, and the determination of 'new era' terrorists to attack not only 'soft states', but even those who pride themselves on being fully prepared to meet all contingencies.

The first of the attacks occurred in March. This came after a gap of several years following the 2005 terror attacks in London. The March attack took place on Westminster Bridge and in the shadow of the Big Ben, in which five persons were killed and around 50 injured.

A far more serious terrorist incident occurred subsequently in Manchester in May, in which at least 22 people were killed and more than a hundred injured. It featured a home-grown 'jihadist', whose victims were mostly teenagers attending a music concert, possibly the first instance of a large scale killing by the IS in the U.K. There had been prior warnings that the IS would focus on 'soft targets' and large crowds, rather than on protected areas with high security. The IS propaganda magazine 'Rumiyah' had specifically listed 'concert halls' as ideal target locations for attacks, while publishing a lengthy defence on the killing of women and children in 'crusader' countries.

The IS has claimed responsibility for the latest June 3 attack. This

resulted in the killing of eight persons, and injuries to more than 40. The attackers utilised a van driven at high speed across the London Bridge to mow down bystanders in its wake. The attackers proceeded, thereafter, to knife many more persons in the neighbouring Borough Market. Similarities between the March and June terror attacks in London are quite eerie. So, likewise, are the similarities between the May 22 Manchester attack in the U.K., and the November 13, 2015, Bataclan terror attack in Paris.

Copycat methods

Copycat methods have often featured in IS attacks. In both the London attacks, vans were used, and even the locale was much the same. Not to be lost sight of also is the fact that in quite a few other IS-sponsored attacks vans/trucks have been employed. Instances of this kind have been reported earlier in Stockholm, Antwerp, Berlin and Nice in the past two years.

All this needs to be viewed against the backdrop of the complicated pattern of relationships that exist between various radical Islamist terrorist organisations worldwide. These exist, notwithstanding the fact that the IS, for instance, preaches an exclusive brand of puritanical Islam alongside a vision of a new Caliphate, while some of the other terrorist organisations do not fully subscribe to this ideal. The reality is that many present-day terrorists have a common origin, and this includes the IS and al-Qaeda, though they

may be rivals today. A fair amount of cooperation at the operational level is hence inevitable, and does exist among terror outfits, alongside a commonality in tactics and techniques, including in the use of high grade explosives such as TATP (Triacetone Triperoxide).

What also cannot be ignored while comparing the banal with ground realities is that terrorism is becoming even more asymmetric by the day. This is becoming more evident by the day as new terrorist groups emerge. Collaboration agreements among terror outfits are, meantime, increasing, with signs of greater sophistication in the means and methods to perpetuate terror.

This last aspect is especially important. Both 'direct to homejihad' and the 'lone wolf' syndrome have gained new meanings of late. Radicalisation via the Internet has attained a whole new dimension. Propaganda via the Internet today involves far more than mere recruitment imperatives, even though elaborate recruitment videos continue to be distributed via the social media, which depict the IS fighters as 'knights'. All this still remains highly appealing to some Muslim youth. Nevertheless, a far more dangerous aspect today is the arrival of 'Internet-enabled' terrorism. This has introduced a far greater degree of indeterminate complexity into an already difficult scenario. The result is that the 'lone wolf' is no longer alone. Internet-enabled terror involves violence conceived and guided by "controllers" thousands of miles away. The attacks are masterminded from afar, guided via the Internet, and the actual perpetrators of violence act almost like robots.

'Enabled' or 'remote-controlled' terrorism is fundamentally different from anything seen previously. Remote controllers choose the target, the actual operative, the 'nature' of the attack, and even the weapon to be used. Operating behind a wall of anonymity, this helps obscure the role played by individual members of terrorist groups, who utilise various individuals to carry out attacks and leave no trace.

Specific instances already exist of the IS undertaking this kind of recruitment via the Internet. Thereafter, the individual is guided through every single step along the way for several months by anonymous "handlers" to carry out a terror attack. This marks a quantum jump as far as the terror matrix is concerned. We are possibly still at the beginning of the curve as far as the phenomena of 'enabled' or 'remote-controlled' terrorism is concerned; yet, the impact of this could be quite shattering.

Remote-plotting

The IS appears to be in the lead in this respect as of now. Other international terrorist organisations are also beginning to resort to 'remote-plotting'. Such situations will result in little or no dependence on the maintenance of safe havens for the plotters, since the plotters are anonymous. Visa restrictions and airport security, including perimeter security of the installations to be targeted, would again mean little to attackers, since they will strike where they live, and will no longer have to travel abroad or long distances for both training and action.

Welcome, hence, to the world of 'cyber-planners', who will be responsible for planning terror attacks, identifying recruits, assess possible opportunities, act as "virtual coaches", and provide guidance and encouragement throughout the process. These elements could be involved in every single planning stage of an operation, including where to obtain weapons that will be needed for use. All the while, the 'cyber planners' and 'cyber controllers' would be able to maintain almost total anonymity.

The Internet has thus become a dangerous 'plaything' in the hands of the many of the new-era terror outfits. Some like the IS are said to be also preparing to use the 'deep web' and the 'dark net'. The 'dark net', in particular, could become a vicious instrument in the hands of terrorist groups such as the IS.

M.K. Narayanan is a former National Security Adviser and a former Governor of West Bengal

A quantum step to a great wall for encryption

China's experiment also underlines the extent to which the West's domination of science has eroded



JACOB KOSHY

Quantum mechanics (QM) is the dark arts of physics. Though physics – in the Newtonian mould – tells us how every object will precisely behave when pushed and hurled, QM deals with the invisible world of subatomic particles, where counter-intuitive rules apply.

QM inhabitants such as electrons and photons live in zombie-like 'undead' states. The very act of observing them makes them beguiling tricksters. Though not always understandable, science knows, in bits and pieces, how they can be manipulated for purposes that benefit the visible world such as making integrated circuit chips and fibre-optic lines for global, instantaneous communication.

Transparency may be the shining ideal of modern society but countries and corporations are now infinitely more obsessed with secrecy than in the days of ancient Greece. On Friday, the world took a

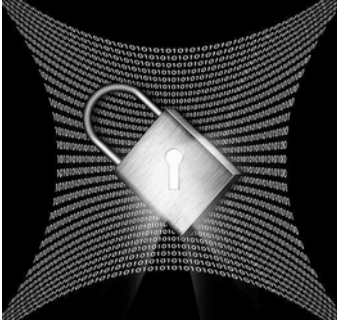
major leap in employing QM to the cause of secrecy.

How it works

China – as a study in the journal *Science* reports – has combined satellite technology and the elusiveness of quantum mechanics to demonstrate how secret information can be transmitted over a thousand kilometres – a tenfold increase over what has so far been achieved – with the guarantee that any unauthorised attempt to decipher it would be immediately discernible.

One of quantum mechanics' cardinal principles, of Heisenberg Uncertainty, follows that no physical object can be known entirely. Measuring, say, its momentum with increasing precision reduces the accuracy with which you can determine its position. For long this was seen as a barrier imposed by nature to us fully comprehending a physical system but for a few decades now, the field of quantum cryptography has evolved around designing 'keys' or alpha-numeric codes exploiting quantum mechanical tricks.

Pairs of photons share their quantum properties no matter how long they are separated or how far they have travelled. These can even be created in a laboratory and are



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called entangled photons. Modern, electronic secrecy works by two parties encrypting the messages they want to exchange and sending each other 'keys' (which are chains of numbers) that can be used to decrypt the information. The trouble is that a third eavesdropper can intercept these keys. An "un-crackable" system would be one where both parties know if an intruder is trying to pry out information from the keys.

Enter the entangled photons of QM. Connected just like the ends of a see-saw, in that one going up necessarily means the other is going down, and using such photons to forge a key would mean that any change in their state indicates that someone's been trying to manipulate them.

While this principle has been un-

derstood fairly well since the 1980s, it has been hard to transmit entangled photons through the atmosphere because they are extremely fragile and can disintegrate through contact with other particles in the air. Until last week the world record was a transmission of a few hundred kilometres.

Leading the way

The Chinese set-up transferred entangled photons through a satellite, called Micius, between two ground stations that were 1,200 km apart. According to a report in *Science News*, the researchers shot a laser beam into a light-altering crystal in the satellite. The crystal emitted pairs of photons entangled so that their polarisation states (or how they are oriented in space) would be opposite when one was measured. The pairs were split, with photons sent to separate receiving stations in Delingha and Lijiang, which are telescopes on mountains, 1,200 km apart. Both stations are in the high mountains of Tibet, reducing the amount of air the fragile photons had to traverse. This team then simultaneously measured more than 1,000 photon pairs. They found the photons had opposite polarisations far more often than would be expected by

chance.

Only one out of six million photons sent could be recovered, which experts told *Science News*, was better than previous ground studies of entanglement but still not good enough for the moon-shot goal of sending secure keys using quantum mechanics principles. Doughty China has publicised plans for international collaborations and transmitting entangled photons in a trans-continental project. Were that to be successful, organisations and people reliant on online financial transactions – that are increasingly dependent on satellite-based Internet – and paranoid about security would take a shine to quantum satellite encryption technology.

The endeavour also underlines the extent to which the West's domination of science has eroded. Today, the number of high-quality science publications out of China is second only to the U.S. Along with advances in the manipulation of stem cells, this latest step shows their command over the great symbols of the modern scientific age: the satellite, quantum and the Internet.

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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.

Aryan migration

It is marvellous what genetic science can do, enabling us 'to look at the history of time' without distorting the truth ('Ground Zero' page - "How genetics is settling the Aryan migration debate", June 17). Irrefutable genetic findings should discredit the long-held right-wing stance on Aryan migration. That birth-based social hierarchy was brought into being by the Aryans is of particular significance. It is time we recognise that we are all migrants. As we are all earthlings, and children of "Mitochondrial Eve", the time of migration need not matter much or divide us in any manner. Planet Earth is our common home.

G. DAVID MILTON,
Maruthanhode, Tamil Nadu

■ Indo-European linguists have long held the belief that "a band or bands of speakers of an Indo-

European language, later to be called Sanskrit, entered India over the northwest passes", some time in the second millennium BC and needed just the kind of new DNA evidence in settling this hotly contested topic. Indeed, all of the world's populations, regardless of their specific geographic location, are migrants. There is no such thing as a pure race. Each is distinct yet bound by the underlying principle of unity.

A.K. MERCHANT,
New Delhi

■ The article is nothing but yet another western attempt – through inconclusive genetic research – to fit India into its template of a 5,000-year-old Indian history. There have been numerous articles in scientific publications where the findings have raised great hope only to be rejected in

subsequent analysis. I am certain that this article too will end up this way.

L. JAYASREE,
Guntur, Andhra Pradesh

The next President

As a political tango takes place over choosing the next President, political parties must remember that the President is required and expected to be apolitical. What all political parties look for from a President is that he should act within the letter and spirit of the Indian Constitution. Therefore, if such a pivotal constitutional post is held by a retired Supreme Court judge, he will act as per the 'holy book' – the Constitution. By and large, retired Supreme Court judges are apolitical, and discharging their constitutional duties will be child's play for them.

K. PRADDEEP,
Chennai

Lessons from London

The deadly fire in a high-rise building in London must be seen in a larger context. At the turn of the 1930s, the British Tories dreamed of creating a "property-owning democracy". When they returned to power in 1951, the emphasis shifted towards slum clearance and rehousing people in purpose-built Council houses or high-rise blocks. In time, cronyism impacted design and architecture and the standard of construction. Safety soon became a casualty. The recent fire is an example of this. India too is embarking on massive, Janata-type housing plan. Fire department clearances and particularly external fire escapes must be sacrosanct. Lessons from faraway London must be learnt closer at home.

R. NARAYANAN,
Ghaziabad, Uttar Pradesh

Still unclear

Although the government says the new GST regime will take effect in July, there are still many discrepancies, ambiguity and confusion relating to customs duties and concessions, causing hardship especially to those engaged in import and export activities. Imported stocks of components, consumables and raw materials worth crores of rupees have been unsold on account of confusion over input credit availability against Counter Value Duty/ Special Additional Duty paid imported goods.

CORRECTIONS & CLARIFICATIONS: A Sports page report, "Srikanth stuns Ho, enters final" (June 18, 2017), said the 24-year-old player (Srikanth) fought ... to outclass the Korean player Son 21-15, 18-21, 24-22. The correct scoreline is 21-15 14-21, 24-22.

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