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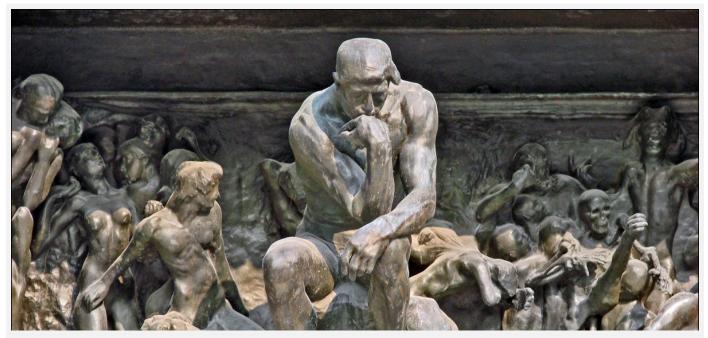
A Science Rooted in Plurality

As modernity is to be anchored in plurality, so should the modern science that laid the foundation for it.

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India is an ancient society that fathoms deep and wide, down to over 5,000 years on the time axis, while in the spatial expanse it is of continental proportions. It has a good part of its perimeter in peninsular shape with sprawling seas on both the west and the east, rounding up in the south. In the north are the Himalayas, while in the north-west there is a contiguous land connection to middle-west and central Asia.

All this facilitated a very strong and vibrant interaction with other parts of the globe through land routes extending up to Turkey, Greece and east Europe, and by the famous silk and spice routes on land and sea, covering Africa, Europe and central and southeast Asia, and China. By sea, it not only reached the whole of south and southeast Asia, but also the Middle East and Africa. It, therefore, had strong and engaging interaction with a good half of the globe through flourishing

trade and exchange of scholars and knowledge, as well as numerous military campaigns and invasions.

A society with this kind of varied interactions and exchanges over a very long period of time, and one that has survived very well in its cultural, social and intellectual states, could not help being anything else but plural. Besides this physical diversity, another very important factor in shaping the Indian society is the monsoon, which determines and regulates people's life cycles in the entire region of the Indian Ocean.

I would, however, like to suggest that all these physical and ecological factors, particularly the monsoon, play a very important facilitative role not necessarily deterministic. Thus, plurality is a natural innate trait of the Indian mind, else it would not have survived this long. If one has not been isolated, being old necessarily means being plural and heterogeneous. Plurality is, therefore, required for a society to live well and long.

In this essay, I will attempt to work out the proposition that this richness of plurality shapes the Indian mind as well in a plural way, that it is attuned to perceive and imagine things in various shades and dimensions. There is no single definitive conception. Instead, there is enough room and space for multiple conceptions and formations in coexistence, though not always in consonance and harmony. Yet, this is the whole that together manifests as true and valid.

I will begin with what I mean by plurality and inclusivity and then proceed to see its manifestations in shaping the Indian mind. Next, we consider the response of this plural mind to modern science and its actual working in practice. It is, of course, a matter of the mind as to how thought processes, and cognitive and creative intuitions, are formed and shaped. Any creative and organisational activity would

bear the indelible stamp of one's intellectual framework, which is provided by the "mind".

Finally, we would also like to indicate the positive role plurality can play for peace and harmony in the world, and would therefore strongly advocate for a paradigm shift, from modernity to enlightened plurality. It is important that modernity and its grand narrative of freedom, liberty, equality and fraternity should conform to the plural framework.

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Plurality

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The necessary condition for plurality is the existence of a multitude of communities that differ in their beliefs, language and cultural and

social norms, as well as in their geographical locations, covering hills, mountains and river valleys on the one hand, and sandy deserts to seas on the other. The comprehension and conceptualisation of this rich diversity and heterogeneity in an engaging manner is what constitutes the plural mind as I conceive and mean here.

That is, it is not simply a juxtaposition of heterogeneity but an interactive coexistence with mutual respect, and a celebration of difference and dissent. Ideally, all the different autonomous units should be woven together to form a cultural and social fabric. It is this engaging and interactive interlocking that characterises and defines plurality.

India is, of course, abundantly diverse in all senses. It has several faiths and religions, many languages and racial groups, different geographical and climatic regions, etc. It, therefore, satisfies the necessary condition of multifarious heterogeneity for plurality.

This heterogeneity has arisen on several counts. One, it has a vast land expanse of continental proportions, which makes it impossible to be singular and uniform. Two, as a society, it is very ancient and that equips it with an adaptability that can accommodate and absorb the difference and heterogeneity in its fold.

In the process, it enlarges its cultural and social canvas. Three, it had very strong interaction with the rest of the world through flourishing trade and business on the one hand, and invasions and campaigns on the other. The former facilitated absorption of heterogeneity through a process of osmosis and tolerance dictated by economic interests, while in the case of the latter it was rather forced. Either way, there was propagation of heterogeneity and adaptation of difference. Over a long period of time, it all gets assimilated and becomes a part of the mainstream norm and behaviour.

Despite the differences, there assimilated a common and equally shared world view over centuries that presents itself as one cultural and social identity, at the same time plural in character. India, in all its magnificence, beautifully celebrates this plurality with its "unity in diversity".

Plurality is by no means superficial, euphoric or surrealistic; it is sublime, yet solid and concrete. It is one wholesome cultural and social entity with definitive content. This is the identity of inclusivity and plurality, and that is what forms the kernel of India as a cultural, social and intellectual being. This is because any one or even a group of the different constructs cannot truthfully represent India's core in its entirety. India is, therefore, quintessence plural and inclusive.

The plural mind

Credit: Matúš Kovačovský/Unsplash

Since at its very conception it has to accommodate various different conceptions and formulations of belief, language and behaviour, it has to have sufficient flexibility and elasticity in its thought structure for accepting and appreciating this profound heterogeneity. Take, for example, the various sects/*sampradayas* of Hinduism, which themselves are so varied and diverse that each one could almost qualify as a separate faith. That is why Hinduism's true perception calls for a plural mind. There is no one single perception of god and no prescribed unique way to reach god.

Above all, there is also room for the non-believer, which is a great strength as it co-opts its own opposite. It is, therefore, almost impossible to defy it. If one is born a Hindu, one is condemned to die as one because there is no well-defined code the defiance of which could lead to exclusion. It is loosely accommodative of almost anything.

By a plural mind, I shall mean one that has a thought conception that is not rigid and definitive, but a continuum – fluid and flexible – and its natural state is necessarily greyish, neither black nor white. It cannot have binary truth values but rather something in between (½ instead of 1 or 0), something similar to the quantum perception of physical reality. This is what brings out more in it the affinity to accepting new ideas, and different thought formulations and perspectives.

Plurality is anchored on the profound philosophical belief that there cannot be a definitive statement of truth in absolute terms: this alone is right and the rest is wrong. For one to be right, it is not necessary for all else to be wrong. The truth canvas is wide and deep enough to happily accommodate various conceptions simultaneously. And they need all be neither in conflict nor in resonance. Plurality, therefore, defies uniqueness and exclusivity of truth realisation.

This is the fundamental principle – that there could be more than one equally true and valid realisations of what is true and right. Thus, plurality recognises equality of all different realisations on the same footing. This is what is required even for an honest conception of Hinduism, not to mention of all other religions and all other diversities of language and culture that exist in India.

The plural mind is by instinct and intent a liberal mind that is open to new thought and diverse conceptions. It would, therefore, resonate with thoughts and beliefs that have equal respect for other formulations and conceptions. It is inherently of secular disposition. On the other hand, it would naturally resist definitive conceptions.

Ashoka, the emperor, was perhaps the first to recognise the strength and power of plurality in extending his empire from the north-west frontier, to Karnataka deep down in the south, and Odisha in the east. In his governance and conception, he knit India into a whole with different ethnicities, religions, languages, and diverse cultural and social norms of behaviour and functions.

In modern times, Nehru, who was strongly influenced by Ashoka, appreciated and grasped the spirit of the plural mind of India. To him, the Indian mind was by nature liberal and secular in an enlightened sense, that it had respect for diversity and heterogeneity. He tried to imbibe its spirit in framing the Constitution of free India by bringing in a secular spirit and ethos to the centre-stage.

It is not to say that it is all very rosy and sweet between different communities and religious groups. There are certainly tensions on account of the economic, political, social, educational and developmental aspirations of different communities. As we see them presently in good measure and quite open, yet there can be no alternative prescription but a plural and inclusive one. Indians have to

brave these tensions with patience and some degree of sagacity that we have inherited over 5,000 years. And we have done so all along.

Plurality offers a fertile and conducive ground for free thought and innovation.

What plurality ensures is perhaps the non-occurrence of a singular phenomenon of absoluteness, like Hitler, grotesque and the most evil realisation of inhumanity. This does not mean that there had never been aberrations in India, but certainly not on the Hitlerian scale and proportion. Of course, in recent history, we did experience the Emergency, when all freedom and civil rights of citizens were suspended and all dissent was thwarted under the onerous rule. But, it lasted only two and a half years. Aberrations could and do occur, but they are quite confined in scale as well as in space and time.

How could Hitler happen in Europe? Was it perhaps because the European mind was not plural enough? It has a definitive character with a very clear-cut conception of right and wrong in the binary mode. The religion has one god, one messenger and one book spelling out a very rigid code of belief and conduct. There is also the strong desire and religious fervour to spread it far and wide all over the globe. So is also the case with Islam and Judaism.

It is understandably so because all these religions are relatively very young and, therefore, are very rigid and firm in their norms and mindset. They are not yet old enough to accommodate diversity of thought and conception. It is the age that makes a religion more tolerant and accommodative of other religions and beliefs. On the other hand, Hinduism is old enough to be inherently diverse and plural.

The Indian mind is plural but at the same time it is very

individualistic. Plurality in accommodation of diverse conceptions and viewpoints makes the thought process in a sense flexible and imaginative. It facilitates thinking of new ideas and constructions with different anchoring and bearing. It offers greater freedom for one to be different without fear of being a deviant.

Thus, plurality offers a fertile and conducive ground for free thought and individual freedom, as well as for creativity and innovation. This sense and realisation of freedom is quite a personal matter of the individual. Gandhi turns this personal realisation of freedom – free from all fears and inhibitions – into the supreme value. To him, freedom is for one to realise from within and not to be sought from outside.

However, the plural mind may also promote an individualistic tendency and perspective. This is perhaps because at the conception level each one could have one's own independence and freedom. This may tend to encourage an individualistic mode of function and behaviour. It is generally said that Indians work individually pretty well, but not so much as a team. This individualism perhaps arises more from a sense of independence as an autonomous entity, and not so much in the western spirit of competition.

This is why the individualistic tendency does not diminish social empathy and concern. This is how it differs from western individualism, which is anchored more on competition and fares low on social interaction and care. While the former is essentially a matter of the mind, in the case of the latter, technology also plays an important role in reducing social interaction – machines as a substitute for human interaction.
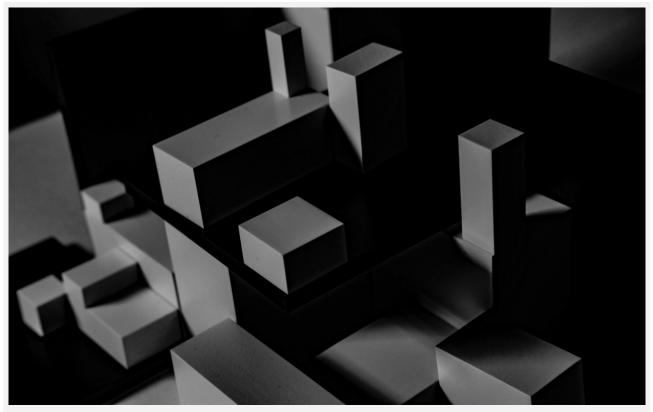
The realisation of freedom at the individual level also means that everyone else has an equal right to his/her freedom. One's freedom

should not encroach upon another's freedom. This is the cardinal principle of mutual respect and tolerance for each other's freedom that the plural mind promotes and fosters.

It should however be stressed that plurality does not mean a collection and sum of various diversities, but it is rather a synthetic whole that is born out of mutual engaging interactions. For that, it is imperative that one is not only respectful of the other's faith and belief, but also that this respect is rooted in knowledge and an informed appreciation of it. This is what determines the measure and strength of the plural mind.

Apart from the visible reasons of conflict between various groups, one of the reasons could very well be that plurality is not strong enough. That people of one faith or community have not assimilated and appreciated well in an informed way the other's faith and beliefs. It is, therefore, necessary to always keep on charging continually the plural mind's batteries. This is the basic and primary requirement for the health of the plural mind.

We should all be very conscious of it and should invest due care and effort in strengthening deeper and truer understanding between various groups and their faiths and beliefs. This will give rise to a meaningful and engaging synthesis which is so essential for a healthy plural mind. Plurality in this engaging and interactive mode could, in fact, provide a true and faithful barometer of society's peacefulness.

Modern science and its method

Credit: Esther Jiao/Unsplash

In the intellectual history of mankind, the advent of modern science, marked by René Descartes, Nicolaus Copernicus, Galileo Galilei, Isaac Newton and others, was the most profound development and had a far-reaching influence. It created a new scientific mind. Science is a method of analysis in which inferences are drawn following a logically consistent framework in an objective manner, which is neutral to the observer or investigator, as well as of the location of the phenomenon under study in space and time. It asked for observational and experimental proof for truth, and that was the ultimate litmus test.

This was a new paradigm of acquiring knowledge and testing hypotheses and beliefs. Nothing is to be accepted on trust and nothing is beyond question and inquiry. This is the driving force and strength of science. By sheer power of its actual observational and experimental demonstration of phenomena, it makes definitive statements about what is true or false, which cannot be questioned within the given premise. There is, therefore, solidity and truthfulness

about the scientific method and the knowledge acquired by it.

On a conceptual level, it is understandable that there is some uneasiness between plurality and modern science. It should, however, be realised that science never makes absolute statements about truth. All statements are always in a given context. As the premise is enlarged, so do the statements also change.

Scientific truths are established within a given framework and they remain true so long as the framework remains true.

For example, for Newton, space and time were absolute and independent of each other, which is a fundamentally different conception from that of Einstein's. For Albert Einstein, space and time are not independent but are bound together by light, which has a universally constant velocity. It is common knowledge that velocity is always observer-dependent. If a train is moving with a velocity of 100 km/hr relative to the stationary observer, its velocity relative to a passenger travelling in a train approaching it with the same speed on a parallel track will naturally be different: 200 km/hr.

What Einstein realised was that this was not so in the case of light, which always has the same velocity irrespective of relative motion between observers. Whether you are running towards or running away from light, you will measure its velocity the same. This is because propagation of light is the property of space-time itself. It should be realised that light's motion is not like any other motion. Instead, it is different as it is a part of the space-time structure.

Does this mean Newton was wrong? Were his predictions not verified experimentally? True, Newtonian mechanics had the strongest

experimental support for over 300 years until James Maxwell's electromagnetic theory came on the scene, which required the velocity of light to be constant for all observers.

Further, technology was advanced enough to measure the velocity of light accurately and thereby establishing its constancy for all observers. So Newton was right within his premise of absolute space and time, but now that premise is no longer valid and, hence, we have a new mechanics in terms of Einstein's relativity, which is based on the synthesis of space and time into space-time through the universally constant velocity of light.

Scientific truths are established within a given framework and they remain true so long as the framework remains true. When the framework is enlarged, new truths emerge that would, however, always encompass the old truths. That is, Einstein always contains Newton. So long as the velocities involved in an observation or experiment are small compared to the velocity of light, Newton remains true. And Einstein approximates to Newton in the limit of small velocities.
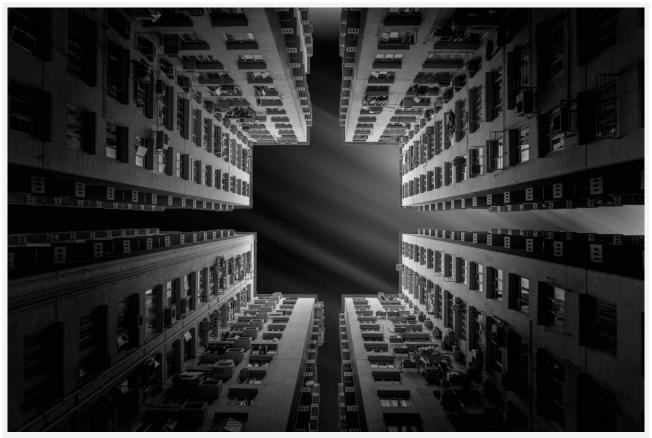
Whatever was said in the Newtonian framework was true in the framework of absolute space and time, but that is no longer true in the enlarged Einsteinian framework, which synthesises the two into one space-time continuum. Further, when we try to analyse and measure things at a microscopic level, there is inherent uncertainty and ambiguity that could not be eliminated even in principle.

This is because, to observe an object, one has to employ a probe. If the object to be "seen" is so small that it gets disturbed by the probe employed to see it, this then introduces uncertainty that is governed by the uncertainty principle. The process of observation disturbs the object of observation. It is, therefore, impossible even in principle to

know the whole truth without ambiguity and uncertainty.

Then, measurements can only be given in probability and not in definitive digits. Deep down, truth can only be ascertained in probability. This is the fundamental universal constraint that all scientific investigations have to abide by.

That is why it is of critical importance that all scientific statements are considered with due attention and care to the underlying context of the framework as well as to the limiting constraints in measurement. Science is thus definitive but not absolute. Most often, this non-absolute character of science is not properly comprehended and appreciated.

Science and the plural mind

Credit: Steven Wei/Unsplash

It is true that we had a very rich tradition in highly sophisticated mathematics dating back to the fourth and fifth centuries AD, as well as very advanced studies in logic, grammar and philosophy for over 2,000 years. Also, there were exceptional feats of excellence in some aspects of technology, like the rust-free iron pillar in Delhi. But this technology was not empowered by science, or else we would have had a highly developed technology of metallurgy, and the iron pillar would not have remained an isolated piece.

The reasons for this are many, but the most constraining one is that access to learning and scholarship was not universal. Knowledge does not grow and flourish without open access and a free environment for questioning and experimenting. There was a high level of abstraction practised in mathematics, but this mathematical knowledge was not applied to science and technology.

This did not happen simply because the practitioners of mathematics and technology did not talk to each other. They never worked together to learn from each other and undertake the relevant research. That is why it did not give rise to science, which generalises and universalises what is learnt from a particular phenomenon by formulating a hypothesis or law which is then applicable universally.

For example, calculus is one of the greatest mathematical inventions, and it was in fact discovered by mathematicians in Kerala about 150 years before Newton. But it lacked application to give rise to its corresponding science. On the other hand, Newton invented it for discovering his celebrated law of gravitation, for explaining the motion of planets around the Sun. Calculus is the most powerful tool of modern science and is so critical that the latter could not have come about without the former.
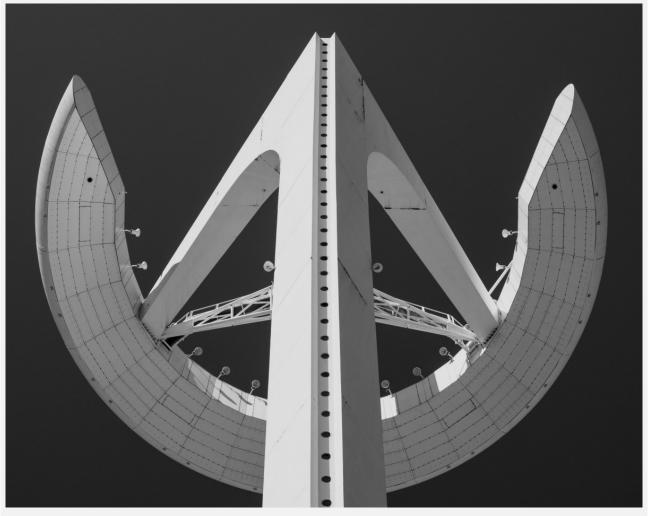
Indian analytical studies, besides mathematics, were quite advanced

in philosophy and grammar, which did not require experimentation that was essential for the development of science. All scholarship was confined to a particular caste, which over a period had developed a disdain for any work done by hand. The measure of one's scholarship and intellect was pure thought and, hence, it completely lacked experimentation, the basic spirit of science.

Science cannot progress without experiment and observation. There were, of course, some naked-eye astronomical observations done, which again did not require anything to be done by hand but by simply watching the sky. It is, therefore, ironic that despite the requisite intellectual capability, modern science did not happen here.

It would have perhaps happened if scholarship had been universally accessible. Then, it would have grown from the plural mind and it would have been interesting to see how it would have been different at the concept and paradigm levels from modern science. It would have perhaps accommodated some element of indefinitiveness in its perception and practice.

Two ways to interact with science

Credit: Biel Morro/Unsplash

When it came to India from the West, it took time for the Indian mind to adapt to this new paradigm. At the conception level, there is somewhat discordance in terms of definitiveness of modern science and the inherent spirit of indefiniteness of the plural mind. First of all, the Indian mind had to appreciate the establishment of truth by experiment and not by pure thought alone. This was a big step to be taken.

At some level, even today after 150 years of exposure to modern science, an average Indian scientist is not fully at home with the scientific method. There remains a lingering feeling of suspicion. At a deeper level, this is in fact a very healthy state of mind, to always entertain a certain degree of scepticism, something that science fully

endorses. What we have is not at that deeper level but rather a practical day-today working of science. One of the distinguishing features of the scientific method is quantitative analysis. This is a new framework to be imbibed.

The main point is that we have not yet been able to adopt the scientific method in our daily lives. This is the big challenge that Jawaharlal Nehru realised and had, therefore, called for the development of a scientific temper. We seem to live in two separate compartments, one of science in the laboratories and the other of tradition and unquestioned beliefs everywhere else. We have made peace with these opposing trends. This dichotomy can only be sorted out as we internalise and adapt the objective method of science in our day-to-day life.

Our traditional method of analysis relied on construction through examples, rather than the modern method of proof. This is why the great mathematical genius, Srinivasa Ramanujan, simply stated theorems without proof, and one always wondered how he arrived at such deep and complex results. Perhaps he saw some symmetry in the "numbers" at an abstract level and some deep thought played the magical role. It is said that he believed that it was his family goddess that showed him the relations between numbers in his sleep.

An average Indian scientist is not fully at home with the scientific method.

Be what it may, it took a great deal of effort over several years for mathematicians to work out the proofs of the theorems written in his notebooks, and the work is still ongoing. He came from a poor background and was not well-trained in modern mathematics, but was exceptionally gifted. He was not taken by the new method and sophistication, and stuck to his own intuitive

method. It was by the sheer force and profundity of his work that he gained recognition and acceptability in the mathematical world. It was a completely uninhibited and unusual mind at work at its best.

On the other hand, Jagadish Chandra Bose came from an aristocratic family with a good intellectual upbringing, and good education with a strong anchoring in Indian cultural and scholarship traditions. He invented the radio and did pioneering work on plant physiology. In seeking new knowledge, scientific or otherwise, it is paramount as to what and how a question is asked or formulated for investigation. How did it occur to him that plants may as well be breathing like anyone of us? This is certainly a case of the Indian mind at work.

In our philosophical worldview, it is envisioned that there is a universal existential unity among all things living as well as nonliving. This universality encompasses rivers and mountains with the plants and animals on them, as well as stones and sands. All this is supposed to be a part of the *srushti* – the all-encompassing physical existence. It was therefore natural for Bose to ask the question: do plants breathe? He did his experiments on plants non-invasively so that they would not be disturbed and violated, signifying the ingrained non-violence in his mindset. Unlike Ramanujan, he adapted the modern scientific method for his research and also sought recognition as an equal by his colleagues in the West.

Ramanujan and Bose signify the two ways of interaction of modern science with the Indian mind. The former is a case of innate talent, one who did not adapt to the modern scientific method and sophistication, and yet was acknowledged as a mathematical genius courtesy of G.H. Hardy. Had it not been for Hardy, he would have perhaps remained undiscovered. Bose, on the other hand, was doing science on established common ground and received due recognition for his work. The novel feature of his inquiry was to ask the unusual

question of plants, which might not have occurred to a Western mind. These two trends define the boundaries of response to modern science, and Indian scientists by and large work within this space with varying degrees of inclination towards one or the other end.

An excellent example of how a certain theory finds resonance and easy acceptance by a particular kind of mind is provided by cosmology: the study of the beginning of the universe. The Big Bang theory, with a definitive beginning at some point in time, finds resonance with the Christian mind, while the steady state theory, with no beginning and no end, is more attuned to the Indian mind.

It is these kinds of the mind's traits that build one's intuitiveness and creativity, and it is these that play the crucial role when one is asking a new question or imaging the unknown in a certain fashion and shape to probe. This is why what was natural for Bose to ask might not have been as natural for a Westerner. It is here that the plurality and philosophical make-up of the mind come into play and guide one as to what and where to probe for new knowledge.

True to our traditional brahminical hangover, we still excel in theoretical studies in science rather than in experiments.

Modern science is accused of breaking the whole into parts and then studying the parts in isolation. It is true that the sum of the parts is not equal to the whole. It is not that scientists do not recognise this fundamental feature. It is done simply as part of strategy because the analytical tools one has are adequate for the study only of isolated parts and not of the whole.

Science follows this strategy – to keep on doing things, whatever the present tools permit and at the same time to keep

developing refined tools for deeper and holistic studies. Here, again, I believe the Indian mind is more in tune with the study of the whole rather than the parts, which may not be prudent and practical. Following the discovery of calculus by the Kerala mathematicians, had modern science developed in India, it might have faced the dilemma of whole versus parts. In trying to resolve this, if they had stuck to the whole, I am afraid, they would have hit a roadblock because the tools would not have been adequate for the study of the whole. It could have then been a non-starter, an aborted attempt. Well, this is just speculation for a hypothetical possibility.

True to our traditional brahminical hangover, we still excel in theoretical studies in science rather than in experiments. There is, in fact, serious worry among scientists that we have not been able to build a strong experimental culture in the country. It is time for us to realise that we have to break from tradition in attuning to the scientific method and the spirit of inquiry.

This is indeed a big challenge that cannot easily be overcome. Remember, it requires a change of mindset, and adaption of a new thought process and a new intellectual paradigm. From this perspective, it would perhaps be understandable why Indians have not been able to do science consummate to their intellectual prowess and ability. This is not to offer a justification, but rather simply an indicative poser for further study and investigation.

The new paradigm of science could flourish in Europe perhaps because the European mind was quite in tune with the oneness and definitiveness of things. Science further strengthened it. That is, mind and science were in harmony. Science gave rise to empowered technology, leading to the industrial revolution and colonisation. It is modern science and technology that divided the world into coloniser and colonised. Added to industrial power and the need for markets

was the equally strong mind weapon. The moral rationale that was propounded was the belief that only what we thought and did was right, and it was our bounden duty to bring the rest of the world in conformity with it.

Enlightened plurality

Credit: Jeff Nissen/Unsplash

Plurality is often mistaken for tolerance for the other, that different communities as well as different thought formulations could live side by side without much interaction between them. It is simply the recognition of the fact that, like me, you also have an equal right to live and use the common resources. This is the necessary condition for plurality, but by no means sufficient for plurality enlightened.

By enlightened plurality I mean not merely coexistence and tolerance of each other, but an engaging and respectful interaction between the

different constituents of a plural society. We should be well informed of different communities' social and cultural norms, including language, religion, faith and belief. There should always be healthy debates and discourses between different communities adhering to different norms and beliefs.

It is the degree of this openness and enlightened interaction that determines the intellectual strength of a society, i e, an entire society that is an interacting and engaging whole of various kinds of people. They are all interwoven in a resonating web through mutual respect and understanding.

Plurality is, therefore, not simply a collection of various communities, but it is organically knit together like a patchwork design. The greater the interaction and resonance between its constituents, the richer and stronger would be a plural society. I would term the necessary condition of tolerance as the passive, and the engaging interactive aspect as the active form of plurality. It is this active aspect that makes plurality enlightened and enriched.

Rahi Masoom Raza, a Muslim by birth and culture, writing the script of the television serial of the Hindu epic *Mahabharata*; renowned painter M.F. Husain's *Ramayana* series; and to top it, the Kabir – these are some of the brilliant examples of enlightened plurality. In this context, how can one forget Akbar the Great, who envisaged a kind of pluralistic universal religion called *Din-i-Ilahi*.

Modernity brought in fresh air with its rational and objective viewpoint. It heralded the trinity of secular values – liberty, equality and fraternity. It was for the first time that new social values were formulated without reference to religion and any seat of faith. These were the values that arose out of modern rational views of things in which modern science played an inspiring catalytic role.

The question that arises is: could modernity fully accommodate the enlightened plurality in its conception? In fact, there is no reference to plurality in the modern perception. It encompasses plurality only in the passive form of tolerance and peaceful coexistence. It is fraternity that can be empathetic to plurality, and which has unfortunately never been addressed in an engaging manner. It has all along remained a solemn proclamation on ceremonial and celebratory occasions. I would, therefore, strongly argue that modernity should be enlightened and enriched by inclusion of active plurality. This is what should be the focus where plurality in its active form is at the centre stage of the new world view.

The assimilative plural mind

Credit: Devin Rajaram

I would like to draw attention to two events. History stands witness to the fact that India, even at the pinnacle of its military power and

wealth, had not invaded and colonised any other country, even though it had very vibrant trade with all the countries around it as well as those far away. It did not try to secure the market by colonisation. The other is the fact that India had all through its history absorbed all those who came in as invaders or otherwise, with the sole exception of the Europeans, whether British, French or Portuguese. How do we understand this?

It is again perhaps because of the plural mind. Unlike the definitive European mind, the Indian mind is not driven by the force of civilising and bringing them all to one right order. There is no overriding belief that Hinduism should spread far and wide. As a matter of fact it never left Indian shores but for the people who migrated to southeast Asia, Africa and the Caribbean islands. This is simply because the plural mind does not offer one path; it instead offers multiple and different paths, each being equally valid and acceptable. Hence, the addition of one or few more is quite easily accommodated.
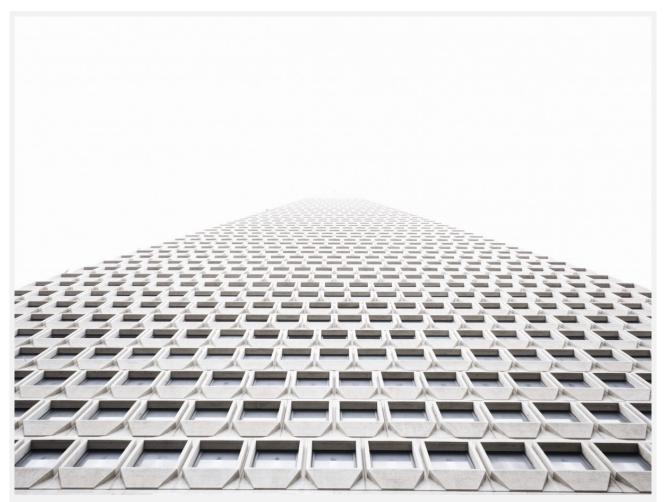
For sustainable peace and harmony in society, the foremost requirement is stability, for which society should be plural.

This facility the definitive one-path holder does not have. Before the advent of colonisers, all invaders, including Greeks, Persians, Kushans, Mughals and so on, also shared to some extent the plural mind at varying degrees, and hence could be accepted and absorbed into Indian society. I would like to conjecture here that modern science further reinforced the definitive character, and so it attained a new degree of exclusivity and superiority complex among the post-industrial revolution Europeans. It was a new science-empowered mind.

Now, when they came to India, they encountered people who had highly developed minds of their own. So, there was a serious conflict between the two minds, which were irreconcilable. That is why they could not live as equals with Indians in an open democratic society once the colonial rule was over. They all went back home.

This is, however, in stark contrast with what happened in Africa where colonisers made colonies their home. Firstly, there is no African colony of India's proportions, in size, numbers or in diversity. I think it is perhaps ultimately the plural mind which the Europeans found difficult to cope with. It was so intense and all-encompassing that they could neither completely isolate themselves, nor could they live with it. In Africa, they could presumably isolate themselves from the natives both physically and mentally. This is why they could live in Africa, but not in India after the colonial rule was over. It is therefore very much a matter of the mind as to who could or could not live together and get assimilated in the overall plurality.

From modernity to plurality

Credit: Vitaly Taranov/Unsplash

Finally, we come to the profound questions about peace, harmony and democracy. As argued earlier, it is clear that heterogeneity and diversity are essential for the stability of a society. Any monolithic structure is fundamentally unstable, because one little disturbance could destroy it all completely or cause fundamental changes. It is heterogeneity that provides the restoring force that builds up resistance to intruding perturbation. An excellent analogy is the volleyball net which has many autonomous units knit together. This provides great flexibility to the structure as against one homogeneous piece, and that is why it is able to withstand the disturbance caused when a ball hits it. It simply curves out and bounces back the ball without breaking.

Similarly, a net knit together with various different autonomous

communities having different beliefs, languages and cultures would be the most stable and resilient against any disturbance. It would be flexible enough to momentarily deform and bounce off an intruding force. Here, each unit is independent and autonomous, and at the same time harmoniously knit together with the rest. This is the most exciting and elegant envisioning of plurality. This is, of course, an ideal that should be a beckoning light in actual life. Heterogeneity and diversity are, therefore, necessary for stability, and a mind that could accommodate and resonate with it is indeed a plural mind.

For sustainable peace and harmony in society, the foremost requirement is stability, for which society should be plural. Stability is, however, a necessary condition but by no means sufficient. For sufficiency, what is required is a harmonious knitting together of the individual constituents of diversity. For them to resonate in harmony, it is imperative that the different constituents should first have shared joys and sorrows, which means that they interact and understand their differences with empathy and respect.

As a result, difference is not frowned upon but is instead celebrated as an essential enriching ingredient – a way of life. For different constituents of this social fibre to interact most naturally and on an equal footing, what is required is democracy as a desired form of functioning and governance. The key characteristics of democracy are the realisation and acceptance of a plurality of viewpoints with equal validity and import, and above all to accept and work on a decision taken on a majority view, even though it may not be in consonance with one's own.

The latter feature is the cornerstone of both enlightened plurality and democracy. It is indeed as profound a value as Gandhi's non-violence, and forms the soul and kernel of a democratic and plural way of life. The two are intimately bound together in concept and principle.

All societal truths are always negotiated truths.

Thus, democracy arises as a new social value that is by nature plural. Democracy attains a new and richer dimension for a plural society. It is true that democracy is a desirable value for a society, whether homogeneous or heterogeneous. For the latter, it comes of its own and attains real value and meaning in the true sense because acceptance of equality in a heterogeneous society is truly enlightening and liberating. Here, democracy is not only driven by a moral and philosophical principle, but also by practical wisdom – people of various beliefs and adherences could only be happy with democratic functioning and governance.

It is, thus, abundantly clear that for a heterogeneous society that has of necessity a plural mind, democracy is not only natural but the only option for a harmonious and peaceful way of life. The plural mind, therefore, promotes peace, harmony and democracy. It is therefore pertinent that plurality should be adapted, like democracy, as a new social value, and be sought for and celebrated. It should not be thwarted and limited by visa regulations, which are mostly governed by economic and exclusivity considerations.

Plurality essentially rests on two human instincts and tendencies, seeking out variety and sharing. On the other hand, greed is also a human instinct and perhaps a stronger one. The real question is, which of the two traits, sublime or bestial, has the better of us? That is what would measure all our sagacity and wisdom which we have inherited over the 5,000 years of history of civilised human society.

Modernity brought forward liberty, freedom, equality, justice and fraternity as the new values. They were rooted in the broader modern science framework of reason and rationality. They were in a somewhat mechanistic form taken as absolute without reference to

any broad social framework. Now, since plurality is the primary requirement for stability and sustainable peace and harmony, these modern values have to be properly anchored and located in the broader plural framework. Modernity cannot fully accommodate plurality because of its definitive dispositions tending to uniqueness and absoluteness. Plural anchoring of modernity is simply to keep room open for multiplicity of viewpoints and realisations of things non-trivial. With this, plurality can well encompass and accommodate modernity.

The most fundamental key plural concept or principle is that all societal truths are always negotiated truths. They neither can be absolute nor should be sought to be so. Modern values have, therefore, to be properly negotiated keeping in conformity with their different formulations in different constituents. For instance, mechanistic secularism of the west cannot straightway be adopted for the plural Indian society. It has to be properly reconfigured for a plural society. It has, therefore, to be negotiated. This negotiating process is what amounts to anchoring of modernity in plurality. We have thus to move from modernity to enlightened plurality. This indeed marks a profound paradigm shift.

Plurality opens new vistas of creative experience and provides new insights into any intellectual inquiry.

As modernity is to be anchored in plurality, so should also modern science that laid the foundation for it. This paradigm shift, thus, poses an interesting challenge to the scientific paradigm. It is presumed to be seeking definitive and unambiguous answers. What plurality would ask for is that deep down any concept or scientific measurement of reality/truth, there should remain some room open for ambiguity and uncertainty. Truth, in its profoundest

manifestation, cannot be black and white but instead it can only be grey.

This to some extent has already been recognised and accommodated in the quantum view and understanding of things. The uncertainty principle is perfectly in the plural spirit of things. This trend would get further reinforced as we move to study from isolated parts to the whole. The advanced tools of analysis have now made holistic views and inquiry of things scientifically accessible. Science is, thus, moving on the right track to be in consonance with plurality.

The overall public view of science and its method is that of being definitive and authoritative, which cannot be questioned. This is, of course, true within a given premise. As we have seen earlier in the discussion on the scientific method, there is no guarantee that the premise would not change. Even for the most conservative adherence to the scientific method, one has always to keep room open for change in the assumed truths.

Further, plurality is not only required for peaceful and harmonious living together, but it is also required for enriching the creative and emotional canvas of a society. It opens up new vistas of creative experience and provides depth, substance and new insight into any intellectual inquiry and engagement. It is therefore an excellent practical philosophy as well as intellectually and emotionally satisfying. So I would argue that plurality in the active and enlightened form should be taken as a new social value that should be sought out. That is, a truly civilised society is not complete without a good degree of active plurality in it.

It would rather be a soothing thought in the days of stricter visa norms being adhered to by the developed world. Plurality-empowered modernity should be the order of the day. Richer countries should

realise their poverty in terms of lack of adequate plurality and, hence, should invite and seek it actively. If this is taken seriously, it could give rise to a new movement of plurality enhancement, which would be of profound value and consequence to world peace. We should go out with a bold declaration and a new slogan: it is civil to be plural and that is the road to sustainable peace and happiness.

In conclusion

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Let me conclude by saying that the mind plays an important determining role in the development and evolution of people and societies. It is a matter of mind that Gandhi could not only envision non-violence as a supreme value but also marshal it as an effective political and social tool to fight the British colonial power. Nelson Mandela and Desmond Tutu, on the other hand, could conceive of a Truth and Reconciliation Commission as the most effective healing and soothing process for a gravely violated and hurt society.

These are supreme examples of the plural mind, where a new and novel method has been sought out to fight injustice by appealing to the innate goodness and humanness of people, rather than shedding the blood of the adversary. It is the non-absolute realisation of societal truths that perhaps equips one not only with such imaginative and creative conceptions, but also with the courage and determination to stand against the storm and swim against the tide. The mind is indeed very serious business and, hence, it should be taken with the utmost seriousness.

I have made an amateurish attempt to raise certain questions and hunches. I would consider the effort worthwhile if it is able to generate some discussion and discourse among more serious scholars and professional researchers, as well as among thinking people in general.

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