

THIRTYSECOND CONVOCATION ADDRESS

by

Hon'ble Justice Shri M.N.Venkatachaliah
*Chairperson, National Human Rights
Commission*

June 29, 1998



**INDIAN STATISTICAL INSTITUTE
CALCUTTA**

**THIRTY SECOND CONVOCATION
ADDRESS
OF
INDIAN STATISTICAL INSTITUTE,
CALCUTTA**

DELIVERED BY

**HON'BLE JUSTICE SHRI M.N.
VENKATACHALIAH,
CHAIRPERSON, NATIONAL HUMAN RIGHTS
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Chairman, Indian Statistical Institute, Shri P.N. Haksar , Professor M.G.K. Menon, Dr. S.B. Rao, Graduating Students, Distinguished Invitees, ladies and gentlemen.

I am deeply sensible of the honour of this invitation. Indian Statistical Institute is one of the prestigious institutions of the country known for the excellence of its high professional standards. The Institute has a great tradition. Surely, its influence will grow enormously in keeping with the explosive pace of scientific and technological development. The institute has had its inspiration from the great Shri Prasanta Chandra Mahalanobis. This tradition of excellence has been nurtured by a successive line of distinguished scholars.

Statistical studies have both their philosophical and pragmatic role. Role of Statistics is increasingly becoming inter-disciplinary. Indeed, an eminent jurist called law as a minor branch of economics. The utilitarian assumption of statistics is that in the absence of absolute certitude of the sources and methods of knowledge, the genius of science has to draw its conclusions on the calculus of probability. Statistics

postulates that if the solution to a problem is not in the problem itself, it is nowhere else. Interestingly in the Law of Evidence “A fact is said to be proved when the Court believes it exists, or considers its existence so probable that a prudent man ought to act upon the supposition that it exists.” Probability has evolved from this area of mental subjectivity in law to the state of scientific objectivity in statistics.

Statistics has braved and survived many a cynical remark, such as that “Statistics reveals the obvious but conceals the vital”, “You can prove anything by statistics”, “I know the answer, give me statistics to prove it”, etc. Indeed, science itself is the art of drawing fairly durable conclusions from apparently non-durable data. To the extent a principle of science explains phenomena, it is truth – but only for the time being till a higher truth explains both phenomena and the earlier principle. Max Plank said, “How can we say that scientific concept, to which we now ascribe an absolute character, may not at some future date show itself to have only a certain relative significance and to point to a further absolute?”. “.....We must admit” he said “that in no case can we rest assured that what is absolute in science today will remain absolute for all time”.

In the sixth century before Christ, Pythagoras propounded the Helio-Centric view of astronomy: that the world moved around a “Central-Fire”. But in the medieval times it became, under the influence of religion, a Geo-Centric view. The scientific temper of the 17th Century which was exposed to the thoughts of Kepler, Galileo and Newton, generated a scientific culture which would, in retrospect, be reckoned as revolutionary. A polish priest, Copernicus, shattered Ptolemy’s assumptions of astronomy. He explained the loop-like motions of the orbit on the theory that in its orbit the earth revolved on its own axis as well. It required a later Newton to prove Copernicus. Kepler suggested an elliptical course of the orbit and denied the superstition of a perfect circle.

Over the centuries, several theories of creation and cosmology were put forward by science. There has been the expected and inevitable confrontation between the teleological and mechanical theories of evolution : whether there is ‘purpose’ or ‘consciousness’ in evolution or whether it is merely a group of causative factors. Science is generally associated with mechanism and religion with Teleology. The discerning of

a purpose in evolution is considered unscientific. But this scientific temper militated against the religious concept of the world as a moral order and the declaration implicit in it that moral values were objective. Modern science postulates propositions which are inconsistent with moral values being objective. Though there is nothing in science which denied the existence of God yet, the scientific revolution did, actually and historically, profoundly undermine faith in God. Rise of science was immediately followed by a great wave of religious skepticism. On the heels of the seventeenth century came the most skeptical age of the modern world, the eighteenth century and later the Twentieth century which is, indeed, bloodiest century.

Scientific temper sowed the seeds of an ethic neutrality which enabled scientific research to consider itself free from moral limitations. Nuclear weaponry, genetic research, instruments of chemical and biological war-fare emerged without regard to the recognition of any ethical limitations on science and to the possibility that something might go out of hand leading to a total destruction of this planet and with it the entire human race and all that civilisation stood for.

The goal of all knowledge is to seek and find unity in diversity. But philosophy seeks the ultimate unity of all unities. While the aim of philosophy is to seek this unity, the aim and end of Religion is how to realise this ultimate 'oneness'. This is the quest of science as well. The purpose and destiny of true knowledge, scientific or philosophical, is to discover that great principle of unity which integrates and explains all phenomenon and demonstrate that – of which we already have a partial and shadowy glimpse – all things in creation and cosmos, the animate and the inanimate are wholly integrated and we can not tamper with one without tampering with all others. The whole of carbon-di-oxide on earth gets into plant metabolism and gets renewed in 300 years. The whole oxygen gets into cellular respiration and completes the cycle. All things both animate and inanimate are integrated. What is that principle of that great ultimate unity?

In the words of a scholar speaking of the role of science, philosophy and religion in this quest are worth recalling:

“Man has a clearer vision of unity in diversity with the deepening of his insight. To common human experience various things and beings appear as distinct entities. With the growth of knowledge man discovers general laws and principles underlying and unifying them. As he reaches higher and higher generalisations, all created things, divergent as they are, are found to be interrelated; the universe proves to be a system in which the living and the non-living, the physical and the psychical, form an organic whole. With the furtherance of knowledge the manifold turns out to be a continuous existence without the least break anywhere, and is conceived as the varied forms of one all-pervasive reality.”

“It is the more or less hazy vision of unity in diversity, of the absolute in the relative, that serves as the impelling force in philosophy, science and religion. While philosophy may remain satisfied with the conceptual comprehension of the absolute and science with the never-ending search for it, religion points out the way to its immediate apprehension.”

We live in an age of irreverence and confusion. The crude political realities, social inequalities, inequities in distribution of good things of life, the frustrations of grinding poverty and injustice, and collapse of good governance in the nascent democracies of developing countries call for a re-assessment of the techniques and strategies of survival. They call for a re-assessment of the inter-action between the civil society and political society in the political organisation of self-governing peoples.

These raise difficult questions as to the moral limits of a State's authority and its sanctions on its citizens. Why should a citizen at all obey its laws if the State does not ensure the minimal needs of an orderly and civilised existence? The global economic order is no better. Its inequities are gross. It is said that just 10 dollar billionaires own as much as the

combined income of 1700 million people in the developing countries. Just 5% of the world's population in USA are said to consume nearly 40% of the world's natural resources.

The crucial issue today is good-governance and the faith of the people in its governors. The denudation of people's faith in their governments generates hostility, belligerence, bitterness, alienation, disrespect for law and cynical distrust of Government.

The Lord Nolan Committee report on "Standards in Public Life" gives an interesting tabulation of Public Standing of Occupational Groups in UK. It gives percentage of those generally trusting them:

% 'generally trusting them to tell the truth'

	1983	1993	Change
Clergymen / Priests	85	80	-5
Doctors	82	84	+2
Teachers	79	84	+5
Judges	77	68	-9
Professors	n.a.	70	-
Television News readers	63	72	+9
The Police	61	63	+2
Ordinary person in the street	57	64	+7
Pollsters	n.a.	52	-
Civil servants	25	37	+12
Business leaders	25	32	+7
Journalists	19	10	-9
Trade Union officials	18	32	+14
Politicians generally	18	14	-4
Government Ministers	16	11	-5

One wonders what a similar exercise in our country would show-up!

The Committee said:

“In recent years the confidence of the public in politicians has declined sharply. Our first witness, Professor Ivor Crewe, told us that:

“Whenever surveys have asked people to compare various occupations for honesty or trustworthiness or a moral example, Members of Parliament have been at or near the bottom of the league, competing with estate agents and journalists to avoid the wooden spoon.”

The achievements of the Indian people in the past in the fields of Art, Music, Sculpture, Architecture and Literature have been spectacular. Outside world looked with wide-eyed wonder at its great achievements. India's contribution to the speculations on the deep and seemingly irresolvable issues of man's spiritual quest have been most inspiring. The uniqueness of the quality of its speculations on the concept of mind, of consciousness, of linear time have been spell binding. The Western science realises today what Indian psychology had long held that "consciousness is an elaborate rite of passage into everything that makes us human" and the "most remarkable issue is as to how the human brain builds a sense of self". It was only fairly recently that Robert Ader discovered that the human immune system, like the human brain, could be educated. Ader's discovery has "forced a new look at the links between the immune system and the central nervous system. The field that studies this, psychoneuroimmunology, or PNI, is now a leading-edge medical science". These thoughts of a Neuro-hormonal, the Neuro-humoral and the neuro-endocrinal homeostasis as a physical foundation of spirituality is, indeed, the emphasis of the system of "Yoga".

Why then inspite of this great heritage and achievements of the past we have found ourselves in this moral, social and economic morass? The present state of ignorance, illiteracy, poverty, unemployment and ill-health is a great embarrassment to our glorious traditions. By some estimates, India has 40% of all the world's infant mortalities, 40% of all those suffering from Tuberculosis in the world, 50% of all those afflicted with leprosy, 30% of the world's blind and 40% of the world's illiterate. It

is said that for almost 2000 years, from 300 BC to 1600 AD, India's population was stable between 110-120 million. Now it is a billion. We have nearly 3% of the Earth's surface, 17% of its population and only ½% share of the world's trade. Nearly 40% of our population consists of children below the age of 14. Their education and nutrition, moral, physical and intellectual development is our only hope for the future. Literacy is one cure for many ills.

The answer to this question of our persistent backwardness of our social infrastructure apart from political insincerity, administrative indifference and corruption of a phenomenal order, is that essentially we have not been able to handle and manage change, unable to build a caring human society and unable to realise that large masses of humanity cannot be left back-ward except with the gravest peril to the stability, progress and tranquility of society. All human institutions are susceptible to human imperfections. The institution of democracy is no exception. Democracy is, perhaps, not the ideal condition of human organisation; but then it is acceptable not because it is the perfect or the ideal or even good enough; but only because it is the least – hostile amongst all other systems attempted so far. But the reality is that any nation which does not cherish great values and noble visions, which does not develop proper political traditions cannot make a success of democratic institutions. No political document, however lofty its ideology and, however high sounding its contents be, cannot supply character to a people. That is to be found in their own traditions and shared – beliefs and morality.

The ability to handle change includes proper choice of the remedial strategies and more than all, institutions of rule of law and good governance. Respect for Human Rights is the key factor. Human Rights regime in just a matter of three decades has brought about vast changes in the structure of international institutions and international relations. It has, though silently and imperceptibly, subverted the traditional philosophy of national sovereignty. Who would have thought, fifty years ago, the doctrine of supremacy of British parliament would be invaded as it is now done by the European Convention on Human Rights and the European Courts at Strasbourg.

The ability to handle change must also be reflected in the economic and non-economic implications of the expansion of the role of the state; in the use of technology; the systems of management and proper policy-options for packages of programmes for development. Developmental packages have many components. But internally within the package itself, many elements seem to affect each other and alter each other's efficacy. There is also the operation of the law of unintended results. Then again, there are the dilemmas of development – cultural and human price of development, the dehumanising effect of technology and the inherent limitations to state welfarism.

Modern State is no longer the leviathan wielding only two swords; one of war and the other of justice. State has become a provider of education, health-services, recreation, housing, unemployment, old age pension, care for the old, the sick, women and children. State also became the industrial arbitrator and economic regulator. But the economic as well as non-economic implications of this expansion of the role of the State are crucial. The State becomes a gigantic monolith with enormous influence on the day-to-day life of the citizen and the latter's increasing dependence on the former. The influence and efficiency of the administrative machinery becomes all too pervasive and powerful. Notwithstanding the major achievements of the modern welfare state, the marginal contributions of welfare-state spending gradually fell as the level of spending increased. At the same time, the marginal costs of welfare-state policies tended to rise as the size of the programmes increased. This was due to various types of distortions in relative prices and, therefore, in economic information and economic incentives. This called for a limit for welfare-state policies when the marginal costs started to exceed the marginal benefits. These costs included not only (i) various 'economic consequences', as conventionally defined, but also various types of non-economic effects, such as (ii) the consequences for the role of the family in society, (iii) negative effects on the freedom of choice of individuals and (iv) regrettable implications for the relations between the individual and the state etc. [See: Consequences of the Advanced Welfare State by Assar Lindbeck]

It is in the background of this vast canvas that the science of Statistics functions and operates. Its role has tremendous importance. It is rightly said, "to guess is cheap, to guess wrong is expensive".

Then, there is vast emerging area of breaks-through in genetic sciences. Statistics faces great challenges in this area. It is the start of an altogether new frontier. You of your generation will actually witness things which the earlier generations could not even dream of. Changes promise to be as shocking as they are spectacular. The human reproductory technology will witness the bizarre scene of fertilisation of the ova and development of the foetus (or as many foetuses as one may demand) in extra uterine instruments and incubators. A hundred and one 'Kauravas' all similar and sinister, all powerful, will emerge from one machine at one go! Computers have left and their table-tops and are entering our daily lives, inside tables and chairs; everything around us including the walls will become intelligent. Sensors built into them will see, hear and feel many things. In short, in just less than ten years from now, human life on the planet will change at a pace which will quite surpass the changes over several centuries in the past. You, young men and women, will witness this most exciting, challenging and perhaps the most important bend in human history. Each one of you has to prepare for this yet uncharted journey and share the great excitement and fulfillment, unless you collaborate in your own defeat. Do not exchange this great opportunity for a mere mess of pottage.

Ultimately, after all is said and done, true happiness lies in the finding of a natural harmony of spirit, mind and body. A culture is to be valued to the extent to which it has discovered the right key of this harmony. Any civilisation must be judged by the manner in which all its principles, ideas, forms, ways of living, work to bring that harmony out, manage its rhythmic play and secure its continuance. Our own lives are enriched and fulfilled to the extent we share this experience. All worldly goods like wealth, status, power etc. are ephemeral. Do not mistake pleasure for true happiness, mere change for progress and standards of living for the quality of life.

But this is not all. There remains the great excitement of the journey into the exploration of the moral and spiritual dimensions of

human personality. The quest for truth is unending. The Universe as we experience it is not self explanatory. Within the confines of this life we may not perhaps exhaust the limits of this experience. Then one is bound to share what Lord Hailsham said:

“For ever, truth is better than falsehood, kindness than brutality, virtue than vice, beauty than ugliness. But what exactly is truth, what falsehood, what exactly in a given context is true kindness, what virtue and what vice are questions to which our hypotheses are never more than provisional, and always subject to revision as we plod our way through the wilderness of experience.”

At last one would say with Wittgenstien:

“That of which we cannot speak intelligibly is something about which one is bound to keep silence. But it is the silence of worship, not of ignorance.”

I wish the Graduating Students of success in life, a bright future and all prosperity and happiness. Thank you for your patience and courtesy.
