studies and knowledge. The latter type significantly exceeded the former. It also needs to be noted that not many inquiries - the number has not exceeded twenty in ten years - arose from complaints by consumers, and only one case arose on the basis of a governmental reference. In this context also, with the very large participation by Government organisations both at the Centre and in the States in the economic processes, especially by way of buying various commodities on a large scale for their use, it would be surprising if the existence of restrictive or monopolistic trade practices did not come to their attention. The Commission apparently specially invited the attention of governmental authorities to such possibilities and the importance of Government organisations making references to the Commission under the relevant provisions of the Act. This however has had no impact; and this part of the Act remains unused.

As a result of the initiative taken by the Commission itself and the Registrar, it has however been possible for the Commission to enquire into practices such as price fixing in concert, tie-up in sales, exclusive dealing, territorial restrictions, collusive dealings, etc., in respect of a number of units and issue orders that the practices be either abandoned or modified. Some of the important products in respect of which such inquiries have been made are:

paper, sugar, tyres, tooth-paste, cigarettes, razo blades, vanaspati, confectionery, electric fans, electric lamps, sewing machines, pressure cookers, refrigerators, caustic soda, storage batteries, and musical records. The inquiries have related to important companies such as Telco, Ashok Leyland, Hindustan, Motors, Century Spinning, Orient Paper, Dunlop and other tyre manufacturers, Hindustan Lever, ITC (India Tobacco), Siemens, Cerborundum, Phillips, Rallis, Delhi Cloth, Tomco, Chloride and Malhotra.

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A number of these inquiries have resulted in the agreements which contained RTPs being modified and the practices abandoned or changed. The Commission's pursuit of these inquiries has also had the effect of creating an atmosphere where producers and to a smaller extent the public have become aware about the untenable nature of some of these practices. As the trend of thinking in the Commission on some of these practices came to be known, a number of concerns undertook to abandon or to modify such practices. But there is reason to suspect that though few orders of the Commission in this respect have been challenged in the Supreme Court, and many undertakings have at least formally complied with these orders, there has been a tendency for some of the practices to go underground, (To be Continued) so to say.

DISCUSSION

Counter-Statement on Humanistic Temper

ASHIS NANDY

A Statement on Scientific Temper, a thought-provoking document signed by outstanding scientists and public figures and released by the Nehru Centre in Bombay (Mainstream, July 25, 1981) has touched off rethinking among intellectuals in the country. Two comments on the Statement were published in these columns (Mainstream, August 29, 1981). We publish here a vigorous critique of the Statement, and invite readers to participate in this discussion.—Editor

A Statement on Scientific Temper, signed by a group which includes a number of my terribly respectable and highly successful friends, may read like a paean to conventionality, propriety and middle-class wisdom. On closer scrutiny, it turns out to be a mix of superstitions, half-truths and cliches. In the preface,

The statement begins with a sleight of hand. In the preface, P.N. Haksar quotes Jawaharlal Nehru as follows: "This method (the method of science) may not always be applicable in our quest of truth;...Let us, therefore, not rule out intuition and other methods of sensing truth and reality. They are necessary even for the purposes of science." The statement then goes on to mock this insight of Nehru and his implicit faith that modern science may also have to learn something from this civilisation. It claims that "the fullest use of the

methods of science in everyday life and in every aspect of human endeavour from ethics to politics and economics—is essential for ensuring human survival and progress, and...that one should accept knowledge gained through the application of the method of science us the closest approximation to truth." What was a plurality of visions becomes, thus, a hierarchy of methods, with one method having not only permanently higher truth-value but also unrestricted applicability. In the process, Nehru is reduced to a fourth-rate pamphleteer for modern science and to a maudlin ultra-positivist.

The signatories aim to "provide our people, once again, with a vision and a method for translating that vision into reality." If they were less pompous they would have seen that the only concrete vision they offer is a new stratarchy based on the possession of scientific temper. The stratarchy hierarchises the scientists and the laymen, with the naive non-scientists who sign obsequious statements on scientific temper placed somewhere in between. If one looks closer at the hierarchy, one discovers its real meaning: its lowest rung is mostly people, not by those whom their statement overtly attacks (the obscurantists and the Right reactionaries), but by the ordinary citizens uneasy with the Western and modern categories of thought. In other words, the target of the statement turns out to be those at the receiving end of the present global system and the statement turns out to be a new attempt to hold the sufferers in imperfect societies responsible for their suffering.

The ultimate logic of the statement is the vulgar contempt for the common man it exudes. That is why it has to ignore the fact that science today is the main instrument of oppression in the world, that 60 per cent of the world's scientists and most of their funds are spent on destructive technology, which in turn is used not so much in inter-state warfare as in within-

state oppression.

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ery aspect of nomics - is , and...that e application oximation to mes, thus, a only permaapplicability. pamphleteer rist. e again, with into reality." that the only based on the jerarchises the scientists who placed somehierarchy, one mostly people, cs (the obscurthe ordinary n categories of ment turns out t global system pt to hold the eir suffering. rulgar contempt it has to ignore ment of oppress scientists and hnology, which

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Concurrently, the statement has to whitewash the fact that modern science today is big business and the modern Indian scientists are mostly a new class of compradors, that to be the subjects of such a science and to be subject to such scientists is to be doubly subject to the national and international structures of oppression. The resistance to science in the 'laity' is based on an unconscious awareness of this fact. The common man is not that common after all.

The scientists among the signatories will of course try desperately to deny the true nature of modern science and technology and to become what Georg Lukacs used to call a "silent species." It is astounding that the non-scientist signatories sheepishly accept this pretended amnesia. Recent experience has repeatedly confirmed that the so-called kindly sciences like medicine and agronomy are not merely cut-throat enterprises but are also fast becoming counter-productive mega-organisations, dealing out mega-suffering and mega-death. In some countries, more illness is now caused by the modern medical system than by natural causes; in some, if you hold constant the energy inputs, the net contribution of modern agronomy to productivity becomes negative; and in some others, more suffering is produced by modern economics than removed by it.

It is often claimed that modern science has eliminated major epidemics, shortages and backwardnesses. Recent works have challenged even that. Epidemics, they show, have been mostly eliminated by social welfare measures, in turn brought about by alterations in political and social structures; productivity gains in agriculture often are a function of heavy energy inputs made possible by cheap energy obtained, we know how; and economic development is frequently the other name of an oppressive political economy and 'developmental authoritarianism,' vended as transient stages of social progress.

The statement is packaged in pseudo-empiricism. It begins with bogus history. Galileo, evidence now seems to show was not unilaterally persecuted by the Church (see de Santillana, Barfield, Koestler). In his case at least, it was the Church which proved itself more open and sought to have plural images of the cosmos. Galileo, like the signatories to the statement, thought he knew the truth and he wanted to oust all other concepts of truth. The Church, though it might have gone about it foolishly and hamhandedly, objected to

that part of the story.

If the knowledge of European history of science in the signatories is poor, their knowledge of Indian history of science is no better. They rightly say that creative Indians questioned tradititional beliefs during the Colonial period, but ignore the fact that these questions were mostly raised within the framework of Indian traditions. Contrary to what the statement implies, none of the great Indians used modern science as his or her vantage ground, not even the highly Westernised ones like Madhusudan Dutt. Often, even when they themselves were not believers, they worked from within a religious faith. Ishwarchandra Vidyasagar is one example; B.R. Ambedkar could be another. The reason for this is obvious; these men wanted to avoid the model of official dissent the colonial power offered. Gandhi, for instance, used traditional West as an ally, not modern West and certainly not modern science. The present statement shows no such cultural sensitivity; it shows total ignorance of Indian creative efforts to understand the social context of science.

Particularly, the attempt to set up science and religion as antagonistic forces in India is entirely derived from Western experience and is further proof that the statement is a posthumous child of colonialism. The first attempt to use modern science as a critical force within Indian society came from within religious reformers and it remained that way throughout the entire colonial period. Rammohun Roy, Bankim Chandra Chatterji, Vivekananda, Rabindranath Tagore, M.G. Ranade, J.C. Bose, P.C. Ray, Lokhitavadi, Srinivasa Ramanujan, Mahendralal Sircar and C.V. Raman were all believers and they never found any contradiction between faith and science. Nor for that matter did Jawaharlal Nehru. Even the foreigners who took serious interest in science in India were mostly men of faith like Father Lafont and Patrick Geddes.

The argument against astrology used by the statement is so ancient and it has been so badly mauled by Paul Feyderabend on scientific, normative and methodological grounds that I am ashamed to restate it for a group which includes a number of literates. I shall, however, add two other arguments to Feyerabend's, because of their relevance to India. First, in a

world where arbitrary authorities constantly deny one control over one's fate, a situation created partly by modern science and technology, astrology is for the poor a psychological defence; it is an attempt to find meaning for an oppressive present in a controllable future. Whatever be its original meaning and however vulgar its practice, present-day astrology is a corollary of the scientific-modern worldview. Let us not be taken in by the antics of a few astrologically-inclined politicians. Everything said, astrology is a myth of the weak; modern science that of the strong. If you have the latter you have to have the former.

Secondly, science itself is the major source of superstitions today. It recommends social eugenics, it eliminates millions of under-privileged students from schools through IQ tests, it institutionalises millions in the name of 'mental illnesses' which are within the span of normality in the older societies, it uses unnecessary drugs and surgeries for sometimes as long as decades, it wastes more than one thousand crores of rupees a day on the military for the sake of a mythical security, it promotes mechanomorphism, part-object relations and objecti-Because such superstitions endorse the sense of fication. omnipotence and omniscience of the privileged, they are seen as cognitive faults which could be corrected from within science. This, I believe, is the beginning of a new form of

THERE is a need for a change in public consiousness, not from non-scientific to scientific temper, but from a consciousness which accepts the hegemony of science towards a consciousness which accepts science as only one of the many imperfect traditions of humankind and which allows the peripheries the world to reclaim their human dignity and reaffirm those aspects of their life on which the dignity is based.

The base includes various forms of traditions, religions and myths. The Establishment consciousness blames the religions for the oppression of the caste system in India, for the intolerance of dissent in medieval Europe, and for communal riots everywhere, but when it comes to science, it ignores that science has collaborated with the major massacres of this century — from Nazi concentration camps and Hiroshima to Siberia, Vietnam and Cambodia. It ignores that Nazi racism, American modernism and Stalinist Marxism are all scientific They may be defensively called pseudo-sciences, but the fact remains that they are corrupt sciences, not corrupt religions. (In our times, religion and culture are held responsible for whatever is done in their name, science is not. For the ills of science responsibility is placed on those who control and use science. As if no one controlled or used religions and cultures.)

Such obscene logic is best expressed where the statement says, "There is, in fact, essential incompatibility of all dogmas with science." This not merely goes against most traditional, neopositivist, anarchist, and radical understanding of science, it is a total sanction for the amoral cognition promoted by science and an open encouragement to us to demolish the traditional faiths by which the majority of this and other similarly-placed societies protect themselves against the oppression of the modern world. This encouragement becomes a sick joke when combined with the attempts in the statement to discredit idea systems which maintain some harmony between ideas and feelings, what, according to Haksar, Nehru called "a harmonious living consisting of a proper balancing of an

individual's inner and outer life.

It is in this context that the plea for "the fuller use of the method of science in everyday life and every aspect of human endeavour from ethics to politics and economics" is a plea for totalisation and a prescription for cultural and intellectual aridity. It is a plea for the destruction of all norms, all spontaneity, all rebelliousness, all under-socialised thinking. It comes at a time when science has already reached our relationship with our children and our co-workers, our playgrounds and our bedrooms. In the name of increasing scientific temper, it is a plea for a total take-over of the consciousness of the rest of this society who are, unwittingly and as a part of their own struggle for survival, resisting the imperial presence of modern science.

NO discussion of science and technology is possible in the last quarter of the twentieth century without taking into account

the role science has played in the institutionalisation of suffering. Science has helped millions to escape suffering and death; it has sent many more millions to death. A critical consciousness can never downplay the second role of science. Even more important in future might be the kind of legitimating role science has already begun to play by objectification and reifica-tion of the human situation. For instance, in the black art called economics, the quantification of poverty is today a more weighty problem than poverty itself; thus, the larger the number of people one puts under the poverty line, the more radical one becomes. Military weapons today are not instruments of national security; they are irrational substitutes for security so much so that if you point this out, you are accused of being a woolly visionary or a traitor. Similarly, one now measures suffering to objectify it, so that one can discuss, in cabinet meetings or at party headquarters, how many should be killed for the liberation of how many, or how much suffering could be imposed for the sake of development, national security, progress, or law and order.

Secondly, modern science has everywhere shown the tendency, after destroying the hegemony of religions and cultures, to become not merely the Establishment but also to promote internal and external authoritarianism. By internal authoritarianism I mean the way modern science has cornered all other classical, traditional or ethnosciences and monopolised power, patronage and money. By external authoritarianism I mean the way modern science has pre-empted all criticism from outside and has become the ultimate standard for establishing truth in every sphere of life. (So that, today, you have to be "scientific" to criticise science but you do not have to

be a Muslim to criticise Islam)

NOTHING is as tiring as the slogans of yester-years. At one time the science lobby might have been in a minority. Today, it monopolises the show in crucial sectors of our life. Even when you grow a sacred tuft of hair or arrange your daughter's marriage, you now either invoke sentiment and apologetically say your ailing mother wants it or you try to find a quasiscientific justification for it In such a world to plead for scientific temper is to plead for the Establishment. No one is more pathetic than the middle-aged, successful academics, politicians, journalists and bureaucrats pretending to be young rebels.

Let me therefore appeal, over the heads of these worthies, to the younger scientists, scholars and social activists to consider the following propositions as a baseline for a more serious

debate on science and society in india:

(1) It is possible to jettison the idea of an imperial science which would one day liberate the less scientific from all the ills of the world through science. In a world where science and technology are crucial planks in the global structure of exploitation, where science constantly threatens ethnocide and annihilation, the first need is to humanise and educate the scientist and the technocrat and wean him away from ruling powers and ideologies. More humanistic temper in the scientists is one of the basic needs of this society. In any case, the false consciousness of the elite is more dangerous than the false consciousness of the citizen.

(2) We must learn to reject the claim to universality of science. Science is no less determined by culture and society than any other human effort. The problems of science spring not merely from with its context but also from its text or content. There is a direct correlation between the claims to absolute objectivity, inter-subjectivity, internal consistency, dispassion and value-neutrality, on the one hand, and violence, oppression, authoritarianism, killing uniformity and death of cultures, on the other. Science must recognise that there are limits to human certitude and it must learn to live with an

attenuated social status

(3) It follows from the above that one cannot place science outside history and everything else in history. After seventy-five years of work on the history, sociology and psychology of science and on the creative processes involved in science, it should be obvious by now that one part of science itself has now shown the limits of science. The next generation of Indians should be able to strengthen this awareness and find out the specific limits and scope of science in this society.

out the specific limits and scope of sachdeding, freedom, non-(4) Certain basic values — human dignity, freedom, non-violence (both institutional and non-institutional) and equality violence (both institutional and non-institutional). The ideas of for instance - are outside culture and history. cultural relativism and the dogmas of progress are less universal

principles than the shared values of humankind. Science in its principles than the shared values by being a reliable present form constantly flouts these values by being a reliable ally of authoritarianism, violence and Machiavellianism. These values must be reaffirmed and science must be subjected to criticism as a new faith with its own built-in dishonesty and moral blindness.

The stress on values leads to a strong society; the stress on science, in its present form, leads to a strong nation. The latter without the former is a prescription for fascism and

imperialism.

(5) Religions and ideologies must be similarly criticised from the point of view of these values. However, there is need to be more protective and respectful towards the faiths held by those defeated and marginalised by the dominant global consciousness.

Also, there ought to be equal rights to interpretation. modern idea systems like Marxism are given the right to distinguish between their vulgar and non-vulgar versions, and thus escape a part of the responsibility for what is done in their names, the same right must be given to traditional idea systems. It is safer, however, to believe that every idea system must taken full responsibility for whatever is done in its name.

(6) Oppression diminishes but nev r ends. When one form of oppression ends, new forms emerge. (For instance, the kind of surplus the scientists and technologists extract these days is no less than the surplus once extracted by other kinds of rulers) Eternal vigilance is the price of freedom from oppression and from one's inner disposition to collaborate with new and more hidden forms of oppression. What was once a major ideological prop for oppression can in a changed circumstance become the baseline for a new vision of a less oppressive society. Similarly, what was once a dissenting consciousness can become a collaborationist strain. The contents of oppression change; the baseline of criticism also should change. No successful movement, no change of regime, no revolution can change this fact. This may lead to greater congnitive and moral uncertainty, but in a shrinking world one must learn to live with such uncertainty.

(7) The common man has not only his traditional or folk science, he has his own philosophy of science It might be vague, implicit and non-professional but it is informed with the experience of suffering. Such folk sciences and folk philosophies must be taken seriously. In fact, we can hope to build an indigenous science only when such lost sciences and implicit philosophies are respectfully articulated by contem-

porary Indian scholars.

No theory of progress negates this principle of basic respect

for non-modern idea systems.

(8) Modern science is one of the many traditions available to humankind. It is also one of the many traditions of science. Unfortunately, like some of the semitic creeds, it claims to be the only truth outside all traditions. It is time for us to affirm that modern science has the right to praselytise but not to forcibly convert. Least of all has it any right to totalise our consciousness or to vend itself as a cure-all of the ills of this society

(9) Modern science is an over organised monster, sold to 'normality,' hypermasculinity and conformity. It should be partly deorganised, so as to facilitate cross criticisms among

competing idea systems.

This is because if science has a duty to critici e other systems of thought and cosmologies, the latter too have a duty to criticise science. The idea that the scientific critique of religions is a respectable sociology of religion, whereas a theological critique of science is a reactionary ploy, is obscurantism of the worst kind. Also, one should be allowed to criticise a system of knowledge not merely from the points of view of other systems of knowledge, but from outside all systems, We should be willing to defy conventional concepts of normality, rationality, order and maturity.

(10) If science takes credit for the achievements of technology, it must take responsibility for the misdeeds of technology. For the moment, in societies like India, the politics of science cannot be divorced from the politics of technology, though conceptually it is vital to distinguish between science and

technology.

(11) Finally, the ordinary citizen has a right to know more a out the politics of science, which is very ugly and is hardly likely to inspire others to trust the scientists. Hence the effort by the scientists and their PR consultants to hide the politics of science and vend science as an apolitical expertise.

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