Journal of Indian Council of Philosophical Research

JICPR

Editor D. P. CHATTOPADHYAYA

VOLUME III
NUMBER 2
SPRING
1986

JICPR

is a half-yearly philosophical journal published by the Indian Council of Philosophical Research (ICPR). It is devoted to the publication of original papers of high standard in any branch of philosophy. One of the objectives of the ICPR is to encourage inter-disciplinary research with direct philosophical relevance. Accordingly, contributions from scholars in other fields of knowledge, dealing with specific philosophical problems connected with their respective fields of specialization, would be highly welcome. However, good and original contributions pertaining to any branch of traditional philosophy would be equally welcome.

In addition to the two regular issues each year (Autumn and Spring) there is a plan to bring out one special issue of the journal which will be exclusively devoted to some specific topic to be announced in advance from time to time. Each regular issue of the journal will contain, besides full-length papers, notes and discussions, notes on papers, book reviews, information on new books and other relevant academic information. Each issue will contain about 160-180 pages Royal 8vo.

If you have something interesting and original to say about any topic of philosophical relevance and you wish to have it published with the minimum delay in a professional journal with an international readership then JICPR would be your best choice.

Annual Subscriptions

	Inland	*Foreign*	
Institutions	Rs. 60	U.S. $ 15	(Surface Mail)
Individuals	Rs. 40	U.S. $ 12	-do-
Students and retired teachers	Rs. 20	U.S. $ 8	-do-

Bonafide students and retired teachers are requested to ask for special subscription forms.

Air mail cost will be charged extra to those subscribers who want to get the Journal by air mail. Request for air mail delivery must be made in writing.

For subscription and all other business enquiries (including advertisement in the JICPR) please contact directly:

Subscription Department
MOTILAL BANARSIDASS
Bungalow Road, Jawahar Nagar
Delhi 110007, India.

All subscriptions must be prepaid.

All contributions to the Journal, other editorial enquiries and books for review are to be sent to the Editor.

Journal of Indian Council of Philosophical Research

VOLUME III NUMBER 2 SPRING 1986

Editor D.P. CHATTOPADHYAYA

Indian Council of Philosophical Research
USO House, 6 Institutional Area, New Mehrauli Road, New Delhi 110 067

Printed in India
by Jainendra Prakash Jain at Shri Jainendra Press, A 45 Naraina,
Phase I, New Delhi 110 028
and Published by Shri Kireet Joshi
for Indian Council of Philosophical Research,
USO House, 6 Institutional Area, New Mehrauli Road,
New Delhi 110 067

Contents

Whitehead: objective immortality and religious consciousness

ANIL KUMAR MUKHERJEE
R. N. College, Bishnapur, West Bengal

I

'The final real things', of which the universe is stated to be composed, are designated *actual entities* in the Whiteheadian scheme. Each actual entity is regarded as a concrescent process of becoming in time having arisen from an antecedent world of actualities, a selected aspect of the infinite realm of forms (i.e. qualities) termed *eternal objects* and *creativity* with its unfettered freedom in its choice of alternatives. At each phase of its concrescence, an actual entity is also considered to be a unity of manifold experiences, all being subjective reactions to the environment as active in the concrescence.[1] Whitehead also recognizes the ultimate destiny of each as inescapably characterized by the tragedy of perishing. A subject comes to its *finis* immediately upon its achieving satisfaction, i.e. upon completion of its becoming in a final unity. Whitehead, however, takes further care to note interestingly that the perishing of an actuality is the gateway to its objective immortality. In perishing, one gets divested, indeed, of one's subjective immediacy—to become, however, a real component in other living immediacies arising from the wreckage or the deposit of the perished. Thus:

> *Our echoes roll from soul to soul,*
> *And live for ever and for ever.*

'Peace', says Whitehead, 'is the understanding of tragedy'.[2] One should recognize and accept with a heroic boldness one's doom as a surpassing of oneself into the spheres of others' becoming. Whitehead may here be recalled as referring to the 'zest of self-forgetful transcendence belonging to civilisation at its height'.[3] A creature may be ruined in failures of various kinds; and yet he may keep up his 'peace' in having the refreshing thought of his 'self-forgetful transcendence' implying an anaesthetizing of his life's anguish and also continuance of his being as an element, that is to say, as objective datum, in the living world of future which, although arising from the wreckage of the past, may become more accomplished than the antecedent one. An actual entity belonging to the life period of a creature, say a human self, feels enduring for the whole period by reason of its persistence as an objective datum in all the successive concrescences over the period. So also, a creature enduring for a period, say seventy years, as a society of many actualities, each becoming and passing into another, may feel himself to be above the doom that engulfs things by riding the tide of the concre-

scences and prehensions of all future societies, of the entire temporal world ensuing from the previous actualities. The fulfilment of a creature consists in its having become a definitely significant factor, and a permanent one, in the future of the advancing universe. One may distil from the statement a type of humanistic religion aimed at the goal of a highly refined socialism, where one's individuality goes, in a spirit of heroic self-sacrifice, into a relative insignificance in the overwhelming depth of importance of the life of the enduring society advancing on the road of civilization. One's wisdom lies in one's effective perception of the goal so as to wilfully offer oneself, along with the other factors of the antecedent universe, to the following processes of concrescence. Though the basis of the life of a society rests on the lives of the individual occasions composing the society, its perpetuation and ever-increasing richness depend upon the perishing of the individualities.

The qualitative patterns displayed by actual entities and societies are also recognized to be permanent in the midst of the flux of lives. These may be reproduced in the future actualities whenever wanted. The quality, ingredient in an actual entity, is, therefore, something inheritable; and a society endures because of the persistence of its qualities in all its changing phases amid 'the passing of beauty, heroism and daring'. An actual entity may be characterized as attaining objective immortality in this sense also, i.e. in having worked out enduring forms to be repeated as ingredient in future actualities. Indeed, it can even be said that the real basis of an actual entity is constituted by its realized forms, which are the only elements to be commonly found in the formal (subjective) as well as objective modes of existence of an actual entity. It will not, however, be true to claim that each one of the forms that have been realized in the past will become definitely ingredient in all future actualities; but it will certainly not be out of accord with Whitehead to claim that the form, realized in the antecedent world, will potentially enter into all future concrescences with varying degrees of relevance, and it is to be considered as ingredient at the region where the relevance is definitely found as complete.

The forms taken in their pure and original aspect, i.e. as apart from all temporal situations, are raised to the rank of *eternal objects*, considered to be entities more permanent than societies. 'The mountain endures. But when after ages it has been worn away, it has gone. If a replica arises, it is yet a new mountain. A colour is eternal. It haunts time like a spirit. It comes and goes. But when it comes, it is the same colour. It appears when it is wanted.'[4] Thus, a distinction is made between *enduring permanences* and *eternal objects*. Societies are enduring permanences also considered as *organisms*. There are organisms of varying dimensions, smaller and larger, and the universe of actualities is the society, an organism, of the greatest dimension containing in itself all other societies. When Whitehead writes of *peace* as 'the intuition of permanance'[5] he seems, in the first instance, to be advocating a transcendentalism, i.e. something more than the humanistic religion aforementioned, introducing us to the realm of forms. Should it be thought that Whitehead is referring here to man's mystical religious experience of communing with the absolute region of eternal objects, transcendent to space-time and relativity? Whitehead's own statement is that 'the higher intellectual feelings are haunted by the vague insistence of another order, where there is no unrest, no travel, no shipwreck, there shall be no sea'.[6]

It is to be noted further that Whitehead considers eternal objects as values, and characterizes the main aspect of one's religious cognitions as one's awareness of value. 'The peculiar character of religious truth', he says, 'is that it deals exclusively with values.'[7] Indeed, a good deal of religious language speaks of values that are permanent over against change. The eternal objects are arranged in a hierarchy of values, which is in some measure reminiscent of the Platonic world of *eternal ideas* where 'good' holds the paramount position, though there are much specific differences between the Platonic hierarchy and the Whiteheadian one. The hierarchy of Whitehead shows the orders of increasing complexity implying varying depth and richness of the unity of the realm of values ranging from the least degree to the highest. For Whitehead *goodness* and *beauty* are interwoven as signifying one another; and they constitute those aspects of our lives and the universe which are concerned most with religion. 'Religion', he proclaims in *Science and the Modern World*, 'is wholly wrapped up in the contemplation of moral and aesthetic value.'[8]

Whitehead's characterization of *peace*, as the intuitions of what are permanent over against all becoming and perishing, has also a reference to God whereby the characterization becomes more significant. God comes into the spectacle as the grandest manifestation of the *creative energy* of the universe; first, as the organizer of the realm of eternal objects with its infinite possibilities; and, then, as the chief and permanent agent of all objectifications in the world of actualities. In his acts of ordering eternal objects, God is described as having a *primordial nature*, constituted by his *conceptual prehensions* of the infinite variety of potentialities for the actual world in countless forms. Though the conceptual prehensions are said to be occuring beyond time where God lives his life above all actualities, eternal objects are thought to be arranged (by God) in a unique hierarchy of relevance to each new actuality, so that the actual world may be thought as conforming to God's primordial nature without being necessary to its existence. Of course, God is further characterized as an actual entity having a temporal aspect, termed *consequent nature*, consisting of his physical prehensions of all other actual entities. Now, in having 'the intuitions of permanence', a finite actuality may be understood to be aware of God as the organizer of the orders of permanence and of the eternal creativity pulsating with its infinite freedom within the organizer. Nevertheless, creatures' participation in God's non-temporal acts of organizing eternal objects is an impossibility in the philosophy of Whitehead. Creatures are capable only of indirect cognitions of the non-

temporal world. It is to be mentioned, in this connection, that Whitehead had postulated some important specific differences between *creatures* called *actual occasions* and God, though both the types are comprehended as belonging to one genus of *actual entity*. The chief difference is that whereas God has a primordial nature constituted by his non-temporal acts of conceptual prehension, actual occasions are devoid of such nature being capable of physical prehensions only. God emanates as an actual entity, greater and grander than all other actualities, directly from the background of his primordial nature; but each actual occasion is derived from the preceding actual occasions. An actual occasion, having no possibility of any direct connection with the non-temporal realm, cannot be aware of eternal objects except through a process of abstraction from the physical prehensions. Whitehead would assert, in agreement with Locke, that one's concepts are gained by abstractions from one's percepts. If, however, Whitehead be interpreted to have characterized 'peace' of a creature as belonging to this direct awareness of eternal objects and to their participation in the non-temporal phase of God's life, then the interpretation will certainly stand moot or questionable.

However, the view that creatures do have direct awareness of the consequent nature of God and that they can envisage eternal objects through their physical prehensions of God may be looked upon as integral to the main doctrine of Whitehead's philosophy of organism—specially speaking, to that aspect which is concerned most with objective immortality. The actualities have to be objectified and preserved by God in order to be given to and prehended by the next rising world of creatures. 'In a conversation with Whitehead in 1942', A. Christian recalls, 'I understand him to assent to the suggestion that God is the ontological ground of the givenness of the past.'[9] Since any actuality, x, perishes just as it has become what it is, x itself cannot be regarded as the ground of givenness of itself to the new actuality, A, whose essence lies in its prehensions of x. Nor can the new actuality, A, begin without x as already given to A. In the relevance of a Whiteheadian scheme, therefore, one must be led to assume an everlasting temporal subject to validate the doctrine of objective immortality of creatures.

God's consequent nature is understood to be permanent. God does not perish like actual occasions upon attaining satisfaction. It is mainly because God has a primordial nature forming the basis of his consequent nature. 'The given course of history presupposes his primordial nature, but his primordial nature does not presuppose it.' God's timeless envisagement of the realm of eternal objects enables him to continue his formal existence as an actual entity and be ready, upon each satisfaction, for a new exposure to new actualities. It means that the potentiality of God's subjectivity cannot be exhausted at any time. God is both objectively immortal in the immediacies of creatures and subjectively everliving always acting in 'unision of becoming' of the creatures.

Whitehead's 'intuition of permanence' may now be interpreted as one's

perception of the consequent nature of God. Every individual occasion is capable of prehension of other occasions only by a mediation of God's consequent nature. One can, therefore, deepen the religious significance of one's own life by focusing all one's conscious attention upon that phase of one's own concrescence, which is marked by a direct contact with the divine actuality. An individual can widen the metaphysical and theological moments of his life, increase the depth or dimension of the religious aspect of his becoming, which is wrapped up in the contemplation of the highest values, by employing all his energy of life in realizing a creative harmony with God.

Some writers have approached Whitehead's theology, with considerable hesitancy, as to whether it can be an integral aspect of a coherent scientific view of the world as consisting of temporal individual occasions of becoming and perishing, where 'laws of nature' are defined by the dominant structures displayed in their interrelations. Emmet raises the question: 'Whether there must be some basic structure, and whether this must be thought of as uniform, permanent, and still more, as including not only structure but 'appetition' towards the realisation of the values which it makes possible, and whether there is any reason to think of this realisation as 'good'.[10] Nevertheless, we cannot deny the claim of Victor Low that 'the metaphysics which Whitehead drew from general experience and speculatively formulated as the philosophy of organism was already theistic'.[11] Whitehead's philosophy, whatever might be the questionable elements in it, is highly relevant to the quest for a theology, as Daniel D. Williams emphatically affirmed in the concluding lines of his essay 'Deity, Monarchy, and Metaphysics'.[12] The theistic concept is, in the opinion of Victor Low, so integral a part of the Whiteheadian system that without it we could not apply the system to anything. 'If you start [he says] to use its fundamental categories—creativity, actual entities, and eternal objects—in the manner prescribed by Whitehead's categorial scheme you cannot avoid introducing an actual entity which from eternity to eternity holds the entire multiplicity of eternal objects in its conceptual experience. And once you have this primordial nature of God, the completeness of the system in its own terms necessitates some doctrine of God's consequent nature.'[13]

The highest understanding of tragedy consists, therefore, in the knowing that by perishing one attains objective immortality not only in the becoming of other actual occasions but also in the everliving immediacy of God. In this way, as Victor Low interprets, two religious cravings are jointly satisfied.[14] One is the craving for novelty that each future shall bring freshness and the other is the yearning for permanence. The novelty of the temporal world of finite occasions lies in its passing into the formation of other actualities. And such formations require for their data the previous actual occasions to be prehended and preserved by God before being delivered into the self-building of other actualities. Thus, the craving of creatures for permanence is fulfilled, in course of their achievement of novelties, by the objectifying acts of God for whom 'novelty does not mean loss'. 'In this way, [Whitehead

concludes in *Process and Reality*] the insistent craving is justified, the insistent craving that zest for existence be refreshed by the ever-present, unfading importance of our immediate actions, which perish and yet live for evermore.'

Victor Low observes most sensibly that Whitehead is not offering here any bland assurance in the face of mortality; his tone is felt in the phrases 'tragic beauty' and 'the sense of Peace' which he uses in the last paragraph of *Adventures of Ideas*.[15] Whitehead seems now to be suggesting on the existentialists' line, in agreement with Heidegger, that one should respond to the challenges of suffering and to one's inevitable doom by understanding and accepting them with courage and cheer. The suggestion of this kind has now been a tool in the hands of some of the modern psychiatrists in their treatment of anxiety neuroses. The important religious aspect of this suggestion lies in the idea that it is far better to perish in divine perfection than to go on living in numerous imperfections.

For Whitehead, God's aim for each creature is 'depth of satisfaction as an intermediate step towards the fulfilment of his own being.'[16] All achievements of an individual are intended exclusively for adding to the depth of God's satisfaction. A creature should, therefore, give up his vain efforts to continue forever in his formal mode of existence and also to realize the falsity of one's hope to be led ultimately into 'the land of promise' as an award for one's creative acts in one's life. The poem, *Sonar Tori*, of Rabindranath Tagore, the famous philosopher-poet of India, may be taken to have expressed the same truth. The harvester, after having created and collected the golden corns, expects standing on the riverside that he will be taken by the divine messenger in the boat to sail for the land of immortality. But, to his utter disappointment, the boatman takes away his corns only, without taking care of his individuality. He then realizes:

No room, no room,
No more can it hold,
My golden grains
Fill it fold on fold.

A vedantist would, however, respond to the challenge of suffering in a different way; and the above lines from Tagore may also be construed accordingly to mean an emergence of a higher self free from egoistic desires, i.e. the raising into relief the divine aspect of a creature, in supersession of his lower self tied to mortality by its selfish desires. The achievement of the ultimate value—the *summum bonum* of life—consists, for a vedantist, in being lifted above the world of relativity into the state of existence marked by the triumph of subjectivity and consciousness where bliss reigns unchecked. On the other hand, the *Nyāya-Vaiśeṣika* philosophers of India would hold, in common with Whitehead, that consciousness is not an intrinsic value of a soul, and, therefore, the ultimate ideal of life has nothing to do with it. The state to be achieved by self in liberation (*apavarga*—escape from suffering)

is characterized by the *Nyāya-Vaiśeṣika* philosophers as divested of consciousness. During the period of living, however, the human self is capable of consciously enjoying its own process of self-realization towards the attainment of the ultimate value. The doctrine does not deny the reality of pleasure as a positive experience; but it recognizes pain as equally real. Here, the ideal of life is represented as the enlightenment implying the recognition of suffering as an indispensable fact about one's conscious empirical existence, which is involved in the flux of time and history; and also as an escape from it (*apavarga*) in a transcendent mode of existence. In this escape, the subject ceases to be conscious. For Whitehead, also, 'peace' is self-forgetful transcendence in which all forms of subjectivity, including consciousness, are surpassed.

Whitehead seems to be considering consciousness as extrinsic to value when he claims that even the actualities below the level of conscious organisms do aim at value. However, he recognizes that consciousness does appear as an aid to the organism in its efforts to realize the high values, specially when such efforts are confronted with the difficulties arising from the complexities at the highest levels of evolution. Besides, the highest values, when being realized, are to be illuminated in consciousness, because they are realized only at the latest phases of integration of lives, i.e. at the crowning phases of human existence which are conspicuous by the presence of consciousness. Consciousness, thus, adds to the depth of our insight into the truth about life, the significance of tragedy. 'As soon as', Whitehead says, 'high consciousness is reached, the enjoyment of existence is entwined with pain, frustration, loss, tragedy.... The inner feeling belonging to this grasp of the service of tragedy is peace, the purification of emotions.'[17]

Thus, consciousness illumines values and aids in the sublimation of emotions into the hightened sense of values; but when the values themselves are fully achieved, the self-hood, together with consciousness, is annihilated as what happens in the achievement of the state designated as *nirvāṇa* by Buddha.

II. Review

(*a*) *The Metaphysical Presuppositions*

Should Whitehead be understood to have propounded a kind of monism in characterizing each actual entity as objectifying the whole antecedent universe of actualities and then ultimately becoming a real component in all other actual entities emerging upon its own perishing? Each one appears to be the whole of the universe seen from a new and unique synthesis of its relations to the rest of the world. But this doctrine, even if we call it a monism, is not on all fours with the type advocated by Xenophanes, Spinoza, Bradley and Śaṅkara in which *all* are regarded as *one*. For Whitehead, each actual entity is a new centre of the universe being an outcome of a selection of a pattern of aspects of the totality from which it has arisen. Indeed, all eternal objects are stated to be involved in the constitution of every actual entity;

but this statement is characterized by an emphasis on varying grades of relevance. Some are described as most positively relevant to an actual entity, some are stated to be less relevant, and some are viewed as negatively relevant where incompatibilities are observed. By these emphases on the notions of relevance and incompatibility, Whitehead differs from even Hegel who holds that, though there exist different entities which can be mutually distinguished, each one is equally related to the rest of the reality. Hegel stresses the notion of universal internal relations so much that *one* becomes *many* only apparently and not really. But for Whitehead, the many arise atomically. They arise as new events having been characterized by the unique ways in which they feel the rest of the world.

Are we thus led into a kind of pluriverse where each actual entity may be described as having an autonomous existence? However, the autonomous actual occasions, instead of being the windowless monads of Leibnitz, arise from their direct connection with the antecedent world of actualities from which are gathered up and appropriated the data for their own self-building. They are autonomous only in the sense that no data can force themselves or be forced into their experiences. The initial phase of a concrescence, having a direct casual relation with the external world, is termed *causal efficacy* as distinguished from its next phase which is called *subjective immediacy* when it remains closed in an absolute privacy of self-building. Whitehead's category of subjective harmony and subjective unity requires that the multiplicity of physical data, received from outside in one's initial phase of concrescence, should be inwardly absorbed into a unity of feelings, and that during the whole subsequent period of concrescence there must not be any response to the influences of the external regions. 'There must be a duration', interprets A. Christian, 'when the concrescence is closed to further physical data; otherwise the process of concrescence may go on and on and never be satisfied.'[18] Thus, the actual entity turns out to be really windowless in its phase of subjective immediacy which ensues upon its causal efficacy.

While Bradley and a vedantist are absolutists claiming that nothing exists separably from the absolute and that in speaking of anything one is making a reference to the *ultimate reality*, Whitehead holds, like a pluralist and a relativist, that each finite actuality, though enduring shortly as a subject, possesses a definite individuality which cannot, during the tenure of its formal existence, be reduced to anything beyond itself. In talking of *existence-consciousness-bliss*, the vedantist is describing the absolute only, and he characterizes one's final spiritual goal as one's feeling of oneness with the absolute—in a state of liberation from one's finite mind and body where shines a blissful self-conscious, self-existence. Mutual immanence of all creatures and that of God are stated to be occurring always subjectively—a fact which is concealed from ignorance but illumined at the heights of one's spiritual knowledge. Whitehead holds, on the other hand, that self-enjoyment of each actuality is marked eminently by a privacy of inner life which can be neither shared by any other actual entity nor affected by any external reality.

No two monads can, therefore, be alike, as Leibnitz had proclaimed. But while Leibnitz maintains that each monad, being absolute in its privacy, perpetually goes on evolving like God who has no *finis*, Whitehead speaks of each actual entity as only transient. Leibnitz seems, here, more self-consistent than Whitehead. How could a free subjectivity, which transcends all forces of the outside world, be conceived to have a real *finis*? How, in other words, could the energy of formal activity of an actual entity be consumed by another actuality while the said energy remains closed within the former actuality? The form of energy is convertible, of course; but a conversion cannot take place except under some influencing condition. In this instance, however, all the conditions that may influence the formal mode of activity of an actual entity lie within that subject alone. There may, therefore, be a change from one subjective form to another in a continued life of the same actuality, as we noticed in Whitehead's God. But will it be true to hold that there will be a total extinction of its subjectivity or a conversion of a subjective mode of existence into an objective one without leaving any residue of the subjectivity?

However, as we have observed on some previous occasions, God exemplifies an exception within the category of actuality in being subjectively immortal. He continues in his living immediacy even when he becomes a superject or an object of prehensions by other actualities. Can we, then, construe the doctrine of Whitehead about God's subjective immortality as implying God's subjective immanence in creatures? In that case, the Whiteheadian theology will profit from the notion of the possibility of creatures' direct response to the influence of God's living immediacy. Whitehead says, referring to God's immediacy, that 'the present holds within itself the complete sum of existence, backwards and forwards, that whole amplitude of time which is eternity'.[19] 'Indeed', he says in his *Process and Reality*, 'if this cosmology be deemed successful it becomes natural at this point to ask whether the type involved is not a transformation of some main doctrine of Absolute Idealism on to a realistic basis.'[20] Charles Nartshorne interprets Whitehead's God in terms of panentheism that God includes, in his temporal immediacy, the whole concrete world in all its phases, objective as well as formal, i.e. in his primordial nature.

Nevertheless, Whitehead is very clear on the point that any causal relation is what exists between a past event and a living one, so that it is not possible for any actual entity, be it God or an actual occasion, to influence directly (i.e. affect causally) any contemperary living immediacy. One can be active in another only in the former's objective mode of existence. It will, therefore, be an error to interpret what Whitehead calls 'divine immanence' as God's subjective immanence in the living creatures. God, however, may be considered to be a subject in relation to the past actual occasions while he is, together with the rest of the past world, objectively immanent in contemporary actual occasions. But we have noticed Whitehead describing God as holding in his immediacy 'the complete sum of existence... that whole ampli-

tude of time, which is eternity'. This may be assigned only to the non-temporal essence of God, i.e. to his primordial nature conceptually prehending all eternal objects each of which is involved in the constitution of all actual occasions in different modes of relevance.

When creatures receive, in their *causal efficacy*, data from God, God cannot, as we have seen, act upon them in his own immediacy. God can only lay before creatures alluring lines of activity without being able to transform them according to his subjective aim for each. God can subjectively operate only upon the dead world of objectified creatures.

(*b*) *God's Consciousness in His Relation with Creatures*

According to Bradley, God's satisfaction is absolute having resulted from the transformation of the living immediacies of creatures in his own immediacy. But since the Whiteheadian God reaches his own satisfaction by taking up and appropriating into his own self a dead world, the satisfaction cannot said to be complete. Nevertheless, Whitehead is understood by A. Christian to have characterized God as achieving his highest satisfaction at every moment of the world's course, as if, for God, the world is a fully realized value. But will it be true to say that every happening in the world, notwithstanding its tragic aspect, confirms an absolute quantum of desire in the divine reality? In fact, however, what God wills for the world does not come to pass absolutely. A creature being transient and limited in its creative efficiency cannot find the time and freedom required for bringing itself up perfectly to the norm laid by God. 'Any creature may fail to realise a creative harmony within itself, with other creatures and God', as Daniel D. Williams points out. 'It may', he adds "tragically end in self-destruction of various kinds. In some sense, all creatures thus fail.'[21] Does it mean a genuine loss for God? Or should we view God as the aesthete who, lacking in an adequate principle of discrimination, draws a complete satisfaction from every world scene, however terrible it may be? On the other hand, Whitehead's God seeks, in his absolute love, the good of the creatures. His aim for each creature is, as he says, 'depth of satisfaction as an intermediate step toward the fulfilment of his own being.[22] God cannot, therefore, remain unmoved at the evils and sufferings in the lives of creatures. Whitehead seems to be well aware of this when he speaks of God as 'the fellow sufferer who understands'. It follows further that '*peace* is', for God as for creatures, 'the understanding tragedy and at the same time its preservation.'[23] So, in his religious feeling, Whitehead is painfully aware of God as suffering in his love of creatures because all that he wills absolutely for creatures do not come to pass. God cannot directly influence the living creatures who have already been given autonomous self-building existence. God's will, though absolute in a certain sense in his primordial phase, becomes relative and constricted in his phase of adventures among actualities. The high merit of the situation is that God stands there as a democratic constitutional monarch in his relation to the creatures, not the arbitrary ruler, for his will, not working absolutely upon

creatures, becomes a persuasive force only, not coercive. He only offers to each actual occasion its possibility of value to be selected decisively and realized by the self-creating occasion itself. He does not force his own way of having his world into the experiences of the creatures. But, for the same reason, God may be characterized as suffering humility in his temporal aspect not being able to effect, by his direct intervention, the desired union of *natura naturata* with *natura naturans*. God's persuation remains miserably ineffective where a creature voluntarily resists fulfilment of the divine mission. Can God, then, lift those who, having fallen 'on the thorns of life' feel poor and orphaned and cry for God's compassionate attention? Charles Hartshorne says, following in the footsteps of Whitehead, that God is in some respect perfect and in some other surpassable. The only thing that God can be expected to do, as a means of achieving his own satisfaction, is transformation of the dead world toward making it a better field for activities of the new creatures to come into existence in future. Nevertheless, God's aim is understood by Whitehead to include, in an absolute love, the good of all creatures.

Stephen Ely interprets that the Whiteheadian God sees everything in an ideal setting that renders it an enjoyable sight.[24] He might have referred to the distant view of the universe which God could have in his excelling foresight. This interpretation would be plausible, if God could see through the happenings in the life of each creature an awaited future to be worked out and enjoyed in the future immediacy of the same creature allowed to survive subjectively. A creature could achieve perfection, if he could have an endless life affording him adequate opportunity to develop through a long series of his efforts along the processes of trial and error. In such cases, God could feel that the wrongs and sorrows in our lives are but incidents in a greater drama that will end in life, power and glory. But Whitehead himself is obviously reluctant to grant subjective immortality to creatures.

(*c*) *Man's Religious Consciousness*

Whitehead recognizes that religion comes out of a self-conscious life, and can never be divorced from it. True, man cannot live any more without a religion than he can escape from his own life. The threat of 'non-being'—of being annihilated—constrains a man to brood over his existential problem: how can he establish himself, that is to say, have a meaningful being in a hostile world which keeps on threatening his existence all the time? The problem often induces one to refer to the ultimate concern of man, which, in the popular language of theism, is known as God.

Though Whitehead has taken God and religion very seriously, his view that an actual occasion cannot find a place and rest in the bosom of God, except in its objective mode of existence, seems far from giving full satisfaction to the religious aspirant, who craves not merely for his objective immortality but also for a perpetuation of his own conscious subjectivity in unison with the divine consciousness. Subjective mortality and objective perpetuity are facts of the spatio-temporal world, belonging to empirical

evidence, relevant to science and our discursive understanding. But the highest religion of mankind is concerned with these values that transcend the common facts of the ordinary human lives. It aims principally at reaching the depth of man's formal existence which lies unruffled beyond the tumult of spatio-temporal regions.

The final destiny of all, we are talking of here, does not mean either an extinction of consciousness or a *finis* of life or the state of void as implied by *nirvāṇa* which the average people look on rather with dismay. Why should a man engage himself in a ceaseless endeavour to purify his self, deepen his life and integrate his personality so as to attain the highest tune with the forms of divine life, as long as he remains pessimistic about his subjective immortality, unless, in other words, he has a haunting sense of life-beyond life unapproachable by death?

Kant seems to have observed very wisely that the moral consciousness of a man, his knowledge of right and wrong gives him an insight into a region that far transcends the world of matter presented to our senses. The moral reason assures us that a good man must be happy, that the highest good consists in both virtue and happiness. But virtue does not generally easily unite with happiness in a moment, in the short period of the formal existence of an actual occasion; the unity may not be achieved even during the entire life-period of a 'person' from its birth to death. One has, therefore, to endure long beyond one's physical death to be immortal subjectively so as to attain the ultimate goal of one's moral life. An actual occasion may, according to Whitehead, draw some encouragement from the thought of laying down some ideal conditions to which future actualities should conform in order to be happy. One may, indeed, derive inspiration from the hope of handing down to one's successors a kind of heritage that will be conducive to full flowering of their prosperity and well-being. But this is not enough for providing the foundation of the moral zeal and emotional tone of a religious life.

References

1. A.N. Whitehead, *Modes of Thought*, p. 228; *Science and the Modern World*, pp. 27-28.
2. —*Adventures of Ideas*, p. 368.
3. —Ibid., p. 381.
4. —*Science and the Modern World*, p. 106.
5. —*Adventures of Ideas*, p. xxiv.
6. —*Process and Reality*, p. 481.
7. —*Religion in the Making*.
8. —*Science and the Modern World*, p. 258.
9. A. Christian, *An Interpretation of Whitehead's Metaphysics*, p. 326.
10. D. Emmet, *Whitehead's Philosophy of Organism*, p. xxxiv.
11. Victor Low, *Understanding Whitehead*, p. 100.
12. Ivor Leclerc, (ed.), *Relevances of Whitehead*, (an essay by D.D. Williams), p. 372.
13. Victor Low, *Understanding Whitehead*, p. 102.
14. Ibid., p. 97.
15. Ibid., p. 98.
16. *Process and Reality*, p. 147.
17. *Adventures of Ideas*, p. 329.
18. A. Christian, *An Interpretation of Whitehead's Metaphysics*, p. 331.
19. A.N. Whitehead, *Aims of Education*, p. 23.
20. *Process and Reality*, p. viii.
21. *Relevance of Whitehead*, I. Leclerc, (an essay by D.D. Williams), p. 372.
22. Ibid.
23. Ibid.
24. S.L. Ely, *The Religious Availability of Whitehead's God*, p. 41.

The Real and the bounds of slumber: Sārdarshan

A STATEMENT OF MONISM IN THE LATE TWENTIETH CENTURY

R.K. MISHRA
All India Institute of Medical Sciences, New Delhi

Introduction

During this very brief moment, some ten thousand years long in the eternity of Nature, since words were found by humans in order to cogitate and to communicate, one has argued on the question of what is Real and what is merely cerebral, neural or corporeal: an idea, dream, illusion. We have thus two extreme cases with all shades of opinions in between. One view is that observables to our sensorium define the outline, the hue and texture of the Real. The object so defined, i.e. if it can be sensed, is a member of the Real. Movement in space then is an event. The time-course of the event describes its history. And when one describes several such events in succession, one labels a prior one by the word 'cause' and the succeeding one as 'effect', provided nothing else intervenes between the two. Phenomena now emerge. It is the business of science to disentangle the belief-worthiness of the time-course of phenomena in the language of cause and effect. This is the physical level (level 1). We hope to show that it is, in fact, a map of metaphysical level (level 2).

The other view is that level (2) is the metaphysical one which expresses that our sensorium is a cloud, in the words of Paul Valèry*,[1] which obscures the Real and which is in itself unreal, illusory, transient, plaything. The other views in between are:

*Il y a des personnages qui sentent que leurs sens les séparent du Réel, lêtre; ce sens en eux infecte leurs autres sens. Ce que je vois m'aveugle, ce que j'entends m'assourdit, ce en quois je sais, cela me rend ignorant, J'ignore en tant et pour autant que je sais. Cette illumination devant mois et un bandeau et recouvre ou une nuit ou une lumière plus. Plus quois? Ici le cercle se ferme, de cette étrange renversement: La connaisance, comme une nuage sur l'être; le mond brillant, comme une taie et opacité. Otez toute chose qui j'y voie!

[There are persons who feel that their senses separate them from reality, from existence, these senses, in fact, separate their other senses. What I see makes me blind, what I hear makes me deaf what I know makes me ignorant. I ignore during the instant and to the extent that I know. The light before me is a bandage and covers a night and a greater light. Greater than what? Here the circle closes itself, this is strange reversal: knowledge is like the cloud on existence, a brilliant moon hidden by a small cataract in the eye. *Remove all things so that I can see*!]

(i) that both are real and are different and non-different, probably more non-different than different;
(ii) That both are in some sense non-different and different in some other;
(iii) That both are absolutely different; and
(iv) That both are Real and nondifferent.

Mahaprabhu Chaitanya emphasized the relationship between the two to be like an interphase between two immiscible liquids; or the river bank, the precise location of which can never be accurately described as long as they exist. He also emphasized the consciousness and the psycho-physical relationship between the two, epitomized in tenderness of belonging to each other, *Mādhurya*, the indispensible hallmark of love and blending of one into the other.

The Corruption of Knowledge of the Physical Reality

Given two superposed domains, two alternatives result. We may believe in (1) or in (2) as the proper, complete description. We could believe in both. Many don't. We in general try a choice. The compulsion is forced by the need to use, a corruption of knowledge under the brute force of our demanding corpus.

The Distinction and Need for Choice Would Not Arise if We Did Not Wish to Use Things

First let us try the metaphysical level. Should it be described in physical terms, really in actuality in terms of human qualities? Almost all theistic doctrines approve such a view. Or the second that the metaphysical is real, the physical is its inner interplay perceived as real by our instruments of perception. Use it to describe the physically real. These are then the extreme views: Metaphysical is non-existent, or that the physical is illusory. With due reverence we say *that the metaphysical is real and pure but not property-free.* It has 'properties'. We describe these properties and show that physical and metaphysical are non-different, and, perhaps curiously, the better view which is consistent with physics, is that physical view (1) is a map of the *essence* (2). Now we do not refer to the properties of *Ātman* and the world and not the relationship of 'life monad' to the living being, where the former microcosm grows up into the latter macrocosm by simple expansion. We speak of the essence as a pattern, actually representability, which manifests at one time or suppresses itself at another to its observers posited within itself. Much internal structure is not called for and no *Prakriti* or *Purusha*. The reality is inherently autocrine. This is a term to be understood by referring to terms like endocrine, apocrine. The pattern is inherent action or manifestation-prone. This view has important influence on a definition of human reality and destiny.

If we do not insist on the testability by use or by manipulability, then the ideal view, shorn of these constraints, remains paramount and in correspondence with the philosophy of modern physics. There is also no need to implicate anthropomorphism and its ancillary objects like purpose, pleasure and pain, reward and punishment, the epiphenomena of the 'givens'. We could talk only of the Real and the Manifest Real. Ethics and aesthetics are epiphenomena of the 'givens'.

The Observable

How reliable is the knowledge of the physical world? Can we live with it? Is it sufficient and efficient for that purpose? The endpoint of physical enquiry or an investigation by a physicist is to describe the state of universe independent of man, indeed of any observers. We admit that observer or instrument both alter reality, and our reality so sensed is private to us for that moment in time, that point in space and the emotive state of the observer. We speak in general. But it is admitted even by the most rigorous physicists that reality cannot be perceived in physics; indeed, quantum theory suggests that in absolute sense, this is impossible. Data based on senses and motion of objects and bodies, as time goes on, give rise to phenomenology, evolution, sequence of events; in usual phrase: cause and effect. If senses are determinants of objects, then consciousness, intelligence, egoity, ideas, emotions and psycho-physical counterparts of sensations, for example, sense of 'sound' corresponding to sonic waves or 'colour' due to electromagnetic waves of optical frequencies must be regarded as objects. This also means that man's concept of nature must necessarily be partial. Indeed, when we communicate our experience, based on correspondence of image evoked possibly by the same object, we are not necessarily talking of identity of the objects sensed by two observers, we only seek to use the same term for the object claimed to be seen. Images, ideas, percepts, concepts, readiness to perceive, need to perceive, will, emotionality, memory are the very important filters through which an object can be perceived. Quite clearly, the rebirth of the 'psychological unconscious' and 'subliminal perception' state that all sensations are necessarily partial and need based. This need is for survival, avoidance of pain, for pleasure, gain, etc. Witness a picture of library taken by a camera; it records everything. But you see and remember and gravitate to the book you wish to use. If any other specific books are present, you just profess ignorance: you would say you did not know if they were there. But enlarge the photographic image and defuzz it, the evidence is there. We do not see the physical reality as it is. What is bewildering is that our knowledge of external or internal world is all that '*need*' would allow. Indeed, a whole family of 'truths' based on same data would emerge. In generality, we carry on the business of existing by *operational truth*, facts which can support our living. It is clear that even if we were to start twelve hours before the sche-

duled departure of a train, we may still not be able to go, reach, catch the train or perform the journey. This would happen in all countries. But we are told to start operating and make motions to catch the train, half an hour before, if that is the probable necessary interval. It is this by which we survive, by knowing our home, friends, foes, family, nation, state and the general dynamics of things. But if my life and neck depended on proving that I did not catch the train because I could not, one might start proving that I did not have the proper ticket while the checking of tickets was absolute. The definition of a proper ticket now enters in the argument, and the four walls of the definition determine whether I had proper ticket to make a journey. Thus, from operational truth, we shift to juridical truth and for the court it is all the truth it would wish to know—the juridical truth. We now survive by this truth. The philosopher's or scientist's truth is truth independent of man, independent of observer, and, in spite of all statistics, this is out of reach. It is to be considered, imagined, pondered upon, investigated, but in all cases it is unsusceptible to an *absolute description.* Indeed, science would give up this quest; and it is best stated, perhaps in contrast to philosophers, that science would be satisfied if it does not state something as 'true' but states to what extent, at what time, place and physical *environment you can attach belief proportionate to evidence at hand.* Operationally, at the moment there does not remain a gap between science and philosophy; no philosopher would seriously contest if the evidence is made comprehensible to him. But science must overreach evidence. It must need use philosophy, if it has to serve human use. *It is not that we know so much by the methods of science but rather how much we claim to know when we observe so little.* Science performs expansions of observational lessons, as may be demanded by use in the context of death, survival, pleasure, labour saving, time saving, comfort generating—all that is required. No wonder science is constantly changing grounds, although inexorably polarized to greater accuracy and newer, truer and more comprehensive generalizations. This is what gives science its value, its worth, its glory, its prestige.

If the above were not barriers formidable enough to perceive truth, there are axioms of physical knowledge which act as absolute barriers. These are capabilities to perceive only *indirectly* matter, energy and time. These are realized by *their consequences* and unbreakable connection between them and the effects. But it is the effect which is directly sensed, sometimes in an inverted manner. For example, space occupied by an object is fundamentally immeasurable but, given an object, the extent of the matter of the *object* determines the space. We call it volume.

We also, then, have the basic assumptions that same volume of space cannot be occupied by two objects of matter at the same time. Were this not so, the idea of discreteness of objects, the concept of numbers, the *sāṁkhya,* would not have arisen at all. This leads to the conclusions that translation or other form of motion would not have been perceived. Since energy is the

capacity to do work and to cause motion, even energy would have remained undiscovered to the observer. But we come back again to the same conclusion that the *physical reality is handmaid of* use and *ideas.* Determinability without corruption is an ideal impossible to attain to the constraints are further compounded by the fact that the communication is impossible. World view is inaccurate.

If perception is not immured against need, use, memory, 'value' then that we can understand each other to the extent we do is remarkable.

In the attempt to acquire belief proportionate to evidence, we have progressively lost some principles like the use of testimony, intuition and anecdotal evidence. *These are not reliable guides,* but the scientific method is dominated by the validity of operational truth. Can we operate, i.e. shall we be right as if gravitation was a fact? Can we operate if red were red? The null hypothesis and all the tools of statistics, notwithstanding the theory of the probability are tailored for this psychological objective. Indeed, much effort is exerted to prove the importance of this dominance by many schools of pragmatism, logical positivism and others. Even the philosopher's or physicist's truth, thus independent of man, are ignored as useless pastime. 'Use' or 'utilitarianism' is the very central touch stone of this scienticism. No wonder the rise of technology and that of 'exact science' (as precision tools) are the consequences. These would be of no import, were it for the tragedy that they have abrogated our sense of 'value'. Science and even Nature are regarded as value-free. Admittedly what remains of value is partial and represents the hypertrophy of want. In addition to this partial view, the colouring, abstractions, additions and conjuring and engnieering of fact are appended to our needs. We do not mean dishonesty. The 'racial unconscious', and developmental and other contributions to the 'unconscious' and its modifications by hunger, pain, endocrine secretion, age etc. alter the whole psycho-physics of the body. *Indeed, thought in response to physical real, is best regarded as a secretion of the brain* in physico-social millieu of the body. We see what we are thus 'allowed' to see, and we do what we are 'allowed' to do.

As if enchained by these limits, one can regard as mystery some of the phenomena which are not necessary, and actually useless for scientific existence—for example, love. 'I shall walk a million miles to see you smile.' 'Your being is more important than mine' or 'I would die in war' or 'perform a dance even if it means death'. 'I shall be just even if it seems impossible for my wellbeing.' No wonder Mahaprabhu Chaitanya specifically envoked *Mādhurya.* Perhaps, the most puzzling aspect of reality that we see are the phenomena of consciousness and life. So close and so intimate, yet one can never say what they are. We discover them as a fish discover water when deprived of it.

The limitation of philosophical foundation for comprehending reality (1) are now obvious, and leads us into an extraordinary situation.

On the other hand, we pass into great expressions of human spirit, the

metaphysical Real. Here the global cause determines local phenomena. The most durable here is the Real. The reality of less durables and the visible is a matter of controversy, and so is the relation between the two. Let us now apply a maxim and observe its consequences. We shall soon see a correspondance between the 'scientific' and the 'religious' points of view.

The Maxim I

Discard all descriptions of the real that are patterned after the behaviour of man as a model. We already saw that a vanishingly small fraction of the cosmos and man's experience can be no guide to the totality, to the whole.

Gone would be the concepts of benefactor, punisher, will, desire, object, purpose, anger, frustration, pleasure, pain, merit, demerit, *karma* (other than causality like sequence of events), birth and death; and one stands face to face with serene, untrammeled unendingly Real, the unperturbed, tranquil Real, the metaphysical Real. Given an object, we make a test; we simply ask each time: is this what man does? If the answer is 'yes', exclude it. Perhaps, an aspect of this is *Sākshīvāda*; of the real (2) there is no witness. It witnesses all, one cannot see the Real, one could only be submerged and transformed into that consciousness.

However, in this process one bisects badly the connection between the Real and the Manifest. We said Real is incomprehensible, invisible, indescribable, intangible. If it is the prius of all phenomena, it cannot be the 'absence' of all. What then are the patterns it imbibes? Is there something in the Real of which human consciousness, *Jeeva*, *manas* and love are reflections? Did body inherit the Infinite to give birth to the variegated finite endowed with colour, music, love? For this a second maxim is necessary.

Maxim II

All phenomenal world is an evolute of a *triad of aspects* of consciousness. *Responsivity*, '*doability*', *representability* and *Bliss are the elementary tetrad of this phenomenal world.*

To reject all description on the touchstone of 'antropromorphism' is to be left without any 'form'. It also means that concepts of energy, *shakti*, *māyā* could not be used. But the testable and verifiable phenomenal world—maybe for human purpose alone—could not come out of nothing. In the broadening and deepening awareness of the indescribable state—let us call it Presence—one gets in the last analysis, assimilated with a *triad* of psychophysical data all at once:

(1) An attenuated but definite consciousness polarized to the Presence;
(2) An ever-active responsivity of the Presence for (1);
(3) A 'locking-in' of (2) and (1).

There would, then, be a response pattern that the Presence must possess so long as it can be sensed, can be belonged to, become united with.

The above property (1) shows the capability of inducing polarization. It subsumes that responsivity or the possession of a response potential is unavoidable so long as we can sense, infer and describe. We also know that all modalities, i.e. space, time, matter, energy respond to their proper stimulus—to their eigenstimulus with an eigenresponse. This also leads one to a capacity to do things, in other words, to energy. We thus see that consciousness has energy as one of its evolutes in the domain of responsivity.

Property (2) refers to global responsivity to the (1); drop and ocean relationship. It again asserts the interaction in the plane of pure consciousness of the individual, microcosmic consciousness with the infinite one.

Property (3), the locking-in of pure microcosm with the macrocosm, represents the essential, irreducible aspect of the property called love. These contribute the inherent triad of the metaphysical presence. It is evident, then, that at a grosser level they generate a tetrad of capacity: to respond (response), to do (doability), to exist in bliss, and, taken all together, to act, as representation of (representable) dynamic structure including motion and responsivity. *The pattern is the map* on which hangs all physically Real (1). This is the Essence, the *sār*.

One of the important criteria of love is the identity with the object loved and, indeed, the sense of being it. We have in this the notion of the relating part to the whole. The object of love is so important that you suffer gladly. Indeed, this is a remarkable experience when the two are driven to be one—the abolition of egoity. Thus, if local consciousness achieves the primal state, the identity must needs be some such stratum of bliss, and bliss is a fundamental aspect of this state. 'I' and 'non-I' are abolished.

We are now posited to evolve the entire body of numbers, objects, motion, dynamic structure, sound, colour, heat and all that one could sense. Response of the mathematically complex will automatically generate these.

Properties of the transcendentally Real (i.e. II), which generate phenomena of the physical world by coupling (informing) with bodies which, later, are themselves, are consequence of the tetrad. The description of metaphysical Real should not reflect the description of physical as done hitherto—except by Shankar, but the reverse; the *physical is the reflection of the Real.* The aspect of responsivity and its local measure is ubiquitous, coextensive with all the Real, and is its undivorcable property. Space, time, energy, matter—all respond to their own specific stimulus—eigenstimulus. Thus consciousness is inherent in all and is fundamental basic unbroken property. And indeed, it is one single property from which all can be derived. By the doability we connote the capacity to perform, to change, to move *energy* to be exact (for the physicist). This then mothers 'work', and leads to matter and time. One day—not too far—we shall understand in some unified concept if the impenetrability of matter may reside in the opacity to other fields and interaction.

We may then get visible bodies and by their interaction colour or vibration and 'sound'.

We then conclude that the physical description of the universe and man are a map of the *Real* which is informing the complexities created, rather than the reverse, the Real seen as a map of man (anthropomorphism). Denuded of influence of the complexities we discover the inner Nature of the Real, unperturbed, conscious, locked-in complexity, bliss, and capacity to represent and reflect in all its dominions the local and the general when active.

In all such descriptions, the question remains: what is the state of consciousness of bodies when situated locked-in with the total consciousness (*Samādhi*), and its manifestation of having 'become one with It'? Quite clearly, it must involve one's consciousness as striving for the transformation into the transcendantal consciousness and the 'locking in' in phase. This would be 'grace', the response of the general or absolute to the local. This triad of 'complex' consciousness is perhaps the final state achievable.

Much controversy exists on the question of 'life'. The biologist explores as if the ingredients and mechanisms, when gathered together, will represent a living organism. This is false. This objection is best demonstrated in case of perfectly normal person dying suddenly of physical causes, say, very loud sound. A quality vanishes. The life in the metaphysical Real is the *representability* which is apparent in the similarity of models of physics of physiology, sociology and engineering. It thus means that meaning, i.e. recognition of reproducible representation, is an inherent property. If, say, fifty sounds of Nature must naturally represent objects of Nature, language, when unaffected by man's mind and emotion, must automatically express the happenings in Nature. Inherent structure formation ability and their interactions determine energetic compulsions which give rise to ethical behaviour and esthetogenic potential, which we have discussed elsewhere.[2] The living body is a map of cosmic Reality becoming manifest due to the complexities emergent from the Primal Reality. No anthropomorphic description is a correct guide to the 'fine' structure of creation, since coarse reflects the fine but not vice versa.

Time is the measure of a dimension or dynamic lifetime and objects; it cannot be seen. Many would, therefore, subscribe to 'life principle', independent of body but associated with, as necessary for it. This had given to a heated controversy. The vitalist theory asserted that there was a vital principle necessary for life. At its height, it stated that molecules of living bodies could only be made in living bodies. Wohler's synthesis of urea, a compound that exists in the living body, acted as a source of a severe disillusionment. But the controversy is not ended.

There did always seem to be something mysterious in 'life', controversy shifted to the General Systems theory to account for wholism—whole body as an integrated system affecting local functions and various levels of hierarchy for functional purposes of the whole organism. The other point of view is that

dynamical order is imposed due to open system and throughput of energy. Still another is the view that the missing principle is consciousness. We advocate the view that consciousness as response potential is ubiquitous and coextensive with all Reality. When system is 'active'—i.e. not in a state of—equilibrium and is mathematically complex, behaviour is generated; and in conspicuous manner intelligence, memory and the whole aspect of personality, seemingly independent of the body is generated. These comprise patterns of response of the body (*Jeeva*). This cannot be observed in disassociation with the associated living matter which is "Jeevanta".

It has often been stated that man's affairs are 'guided' by unseen hand. Another assertion is that man in highest state of consciousness is able to perceive transcendental truth—a part of the system envisions the whole system. This is possible, if the visible Reality is map of the transcendental when seen in its autocrine complexity.

We, thus, present a view of *reality as an essence* manifesting autocrine *responsivity*, '*doability*' and *psycho-physical awareness of homogeneity* (the abolition of I, the unending bliss) and a *fundamental representability, which repeats again and again and again in the smallest to the largest.*

A SYNOPTIC VIEW OF 'DARŚANA' BASED ON SĀR (ESSENCE)

I. Physical Reality (Māyāvi for Achārya Shri Shankar)	1. *Description*: space, time, matter, energy, physical and psycho-physical evolutes. 2. *Nature of Proof*: testable by sensorium of the point that belief-worthiness is proportionate to evidence at hand. FINAL VIEW: *this approach is limited at various levels by* (1). usability, (2) incomplete observability, (3) physical indeterminancy, (4) incomplete communicability; (5) bias provided by the 'racial unconsciousness', 'subliminal perception', space, time, memory, pleasure, pain, survival, herd instinct, pecking order, etc. 3. *Consequences*: (*i*) phenomenal world in dynamic order becomes visible. (*ii*) absence of belief in metaphysics and underpinnings of value, ethics, aesthetics. 4. *Total Attitude in the Observer*: no metaphysical reality; if at all, describe it in terms of objects, phenomena as observed in the World as seen by man.
II. Metaphysical Reality	1. *Description*: primordial response potential, boundless in all dimensions. 2. *Nature of Proof*: direct supralogical as image or reflection in mirror. BASES OF PROOF: (*i*) *triad* of aspects in psychophysical state of awareness (*a*) local polarised to General, (*b*) general everactive 'Response Potential', (*c*) locking in of (*a*) and (*b*) mutually in phase. *Final view by this view is determined by perceptability of reflection-like likeness of the Real by*: (*i*) attaining purity of individual consciousness,

II. Metaphysical Reality

(*ii*) abrogating memory of the anthropomorphic and the physical Real [same as (5) in I, 2];
(*iii*) Triadism, [2 (*i*)] above.

3. *Consequences*: A tetrad as evidence of reality in 'active' aspect:
   (*a*) *Responsivity* generates (*b*);
   (*b*) Doability (≡energy) generates (*c*);
   (*c*) Phenomena (≡Manifestation of space, time, matter; dynamism; 'cause', 'effect');
   (*d*) "*BLISS*" steady state of Dynamism generates 'value', 'ethics', 'asthetics'
4. (*3a to d*) *All together at one and same time—Representability* [Repeated similar representations of relatedness emerging from above at all levels: material, mindal, emotional, ideational].
5. *Total Attitude generated in Observer*: only one Real, *Definitely not* like humans in shape, description or human potential. *Unbroken, endless, intrinsic, all absorbing, Responsivity*. This polarizises all to it and can get locked in phase. Physical aspect of the real is consequence of local responsivity 'doability', structuration and representability. By the last, one means that same set of relations is manifest at all levels of the manifest real. Manifest Real is *a map of the transcendental Real.* That is the total *Real in the meaning* of this communication.

References

1. Valèry, Paul, Monsieur Teste, 1946, pp. 60-61, (Nouvelle edn.) Paris.
2. Mishra, R.K., 1984, 'An Approach to General Theory of Values', *Journal of Indian Council of Philosophical Research*, pp. 123-35.

Sartre's early views on consciousness and his critique of Husserl

S.A. SHAIDA
Indian Institute of Technology, Kanpur

Sartre's theory of consciousness emerges as a prelude to his examination or critique of Descartes, Kant and Husserl. His more familiar and well-known views have, indeed, come to us through his *magnum opus*, *Being and Nothingness* (1943, Eng. trns. Banres, 1956). But it was in his first important existentialist treatise, *The Transcendence of the Ego* (1937, Eng. trns. Williams and Kirkpatrick, 1957), that Sartre clearly expounded his non-egological theory of consciousness as a consequence of his rejection of the notion of transcendental ego which had become associated with the second phase of Husserl's phenomenology. It is in this work that Sartre develops his distinction between the pre-reflective and the reflective consciousnes which has been fully exploited in *Being and Nothingness*.

Sartre's preoccupation with phenomenology is marked by his serious search for a method which could facilitate the complex description of his existentialist themes with which he was grappling in early thirties of the present century. On the authority of his most authoritative and perceptive biographer, Simone de Beavoir, we know how excited Sartre had become when, sitting in a restaurant, he first heard about Husserl and his method from a friend who had just returned from Germany.[1] Till then, he had thought of literature—plays and novels—as the most competent medium of expression for his accounts of human reality.

Thus, he found an irresistable attraction toward Husserl's phenomenology, so much so that his earlier works on imagination and emotion can be characterized as phenomenological analyses of perception, imagination and emotion. But his relation with Husserl can be described, ironically enough, as one of acceptance and rejection at the same time. In his eassy on *Imagination* (1936, Eng. trns. Williams, 1962), for example, he tried to show how Husserl's *epoche* (bracketing) distorts and confuses the distinction between perception and imagination. This theme runs through all his psychological and philosophical works till *Being and Nothingness* which he subtitles as a Phenomenological Essay on Ontology. In what follows we will first have a closer look at Sartre's criticism of Husserl as reflected in *The Transcendence of the Ego* and at what Husserl has said. Thereafter, we will turn to Sartre's own views.

The opening lines of *The Transcendence of the Ego* state the problem and succinctly bring out the basic difference between Sartre and Husserl. It reads:

> For most philosophers the ego is an 'inhabitant' of consciousness. Some affirm its formal presence at the heart of *Erlebnisse*, as an empty principle of unification. Others—psychologists for the most part—claim to discover its material presence, as the centre of desires and acts, in each moment of our psychic life. We should like to show here that the ego is neither formally nor materially in consciousness, it is outside, *in the world.* It is a being of the world, like the ego of another.[2]

Sartre sets the problem of the ego or the *I* in Kantian context but understands Kant as one who did not posit an *I* as inhabiting consciousness. The Kantian statement that 'the I think *must be able* to accompany all our representations' does not entail the view that 'an I *in fact* inhabits all our states of consciousness and actually effects the supreme synthesis of our experience'.[3] For Sartre the Kantian phrase 'must be able to accompany' rather suggests that 'there are moments of consciousness without the I'. What is true as conditions 'for the possibility of experience' should not, Sartre warns, be turned into reality. This ontologizing of a purely epistemic principle raises the bogey of 'transcendental consciousness'. As he says: 'For Kant, transcendental consciousness is nothing but the set of conditions which are necessary for the existence of an empirical consciousness.'[4] In short, Sartre's interpretation of Kant's argument leads him to formulate the question concerning the status of I in these words: 'Is the I that we encounter in our consciousness made possible by the synthetic unity of our representations, or is it the I which in fact unites the representations to each other?' (*TE*, p. 34). As it will be clear soon, the obvious answer for Sartre is the former interpretation of the *I*. In his views, the argument of Kant's *Transcendental Deduction* establishes that 'I can always regard my perception as mine'. This does not warrant a belief in a transcendental *I* which substantially inheres in these processes.

The rejection of what he calls the post-Kantian interpretation of Kant and yet his search for the solution of the 'problem of the existence *in fact* of the *I* in consciousness' bring him at the doorsteps of Husserl's phenomenology.

At the very outset, Sartre emphasizes: '...phenomenology is a scientific, not a critical, study of consciousness. Its essential way of proceeding is by intuition' (*TE*, p. 35). By calling phenomenology scientific, Sartre wants to focus our attention on the descriptive nature of phenomenology. As a descriptive science, it must originate from 'facts', must look at facts and must appeal to facts as self-correcting and self-revising fiats. However, as we shall have an occasion to see later, Sartre's characterization and limitation of Husserl's phenomenology, as stated above, is at best true of the initial stage of Husserl's thought. The later stages outgrow such a delimitation. Or one can say that in the later Husserl we find a radically changed concept of 'fact'. But, surely, Sartre would like to remain a phenomenologist in this sense alone and the later developments in Husserl will be criticized not only as superfluous and irrelevant but also inconsistent with the phenomenological method. However, Sartre points out that for Husserl intuition 'puts us in the presence of *the thing*', i.e. it is 'an act of consciousness by which the object under investigation is *confronted*, rather than merely indicated in *absentia*'. It does not entail certainty but only points out that 'the primary mode of evidence in any cognitive inquiry must be intuitive'.

From his characterization of phenomenology as a 'science of fact', he derives that 'the problem it poses are problems of *fact*' (*TE*, p. 35). To any student of Husserl, it may be clear that Sartre substitutes the term 'fact' for 'essences'. What is to Sartre a 'science of fact' is a 'science of essences' (meanings) *to Husserl*, and this is quite significant. It appears that Sartre, advertantly or inadvertantly, has given a particular direction to phenomenological enquiry which may not be wholly acceptable to Husserl. However, putting the *cogito* in the context of 'facts', Sartre observes that 'problems concerning the relations of the I to consciousness are therefore existential problems'.[5] Kant's transcendental consciousness, when grasped by 'epoche', 'is no longer a set of logical conditions. It is a fact which is absolute.' As he says, it is not merely

> ...a hypostatization of validity, an unconscious which floats between the real and the ideal. It is a real consciousness accessible to each of us as soon as the reduction is performed. And it is indeed this transcendental consciousness which constitutes our empirical consciousness, our consciousness 'in the world', our consciousness with its psychic and psychophysical *me*[6].

Sartre, indeed, rejects the 'absolute fact' of a transcendental consciousness underlying the empirical ego, and moves towards his theory of empirical ego. He says:

> Like Husserl, we are persuaded that our psychic and psycho-physical *me* is a transcendent object which must fall before the *epoche*. But we raise the following question: is not this psychic and psycho-physical *me* enough? Need one double it with a transcendental *I*, a structure of absolute consciousness?[7]

In *TE* Sartre, indeed, does not say anything clearly about 'epoche'; he neither accepts it nor rejects it, though in his later works he forecefully rejects it. Nevertheless, from the mode of formulating the above question, it is obvious that his answer is a 'no', and the consequences of such a negative answer are:

(a) The transcendental field becomes impersonal; or 'pre-personal', *without an I.*
(b) The *I* appears only at the level of humanity and is only one aspect of the me, the active aspect.
(c) The *I think* can accompany our representations because it appears on

a foundation of unity which it did not help to create, rather, this prior unity makes the *I Think* possible.

(d) The abstract personality of an *I* is not a 'necessary accompaniment of a consciousness' and one can 'conceive of absolutely impersonal consciousness' (*TE*, pp. 36-37).

In order to develop a theory of consciousness, which takes care of the above-stated points and can accommodate these conditions, Sartre finds it necessary to reject the belief in a transcendental *I* developed by Husserl in his *Ideas* (cf. Sec. 57)[8] But, at the same time, desirous of remaining a phenomenologist all the same, he expresses his approval of Husserl's position in *Logical Investigations*.[9] Let us here interpolate a brief discussion of what Husserl exactly held in these two works, and whether these two views are as discordant as they appear or are made out to be by Sartre.

In the first edition of *Logical Investigations* (hereafter *LI*), Husserl does not accept an ego which is not empirical. He is averse to any concept of the ego as the centre of conscious life which supports and gives rise to all acts of consciousness. The phenomenal or the psychical ego is all that brings about the intentional acts or 'conscious facts'. These acts are not essentially related to the ego but only confront the mind with an object. As Maurice Natanson describes in *LI* 'Husserl held to a "non-egological" conception of consciousness, that is, he treated consciousness as completely contained and fulfilled in and through intentional acts.'[10] In other words, Husserl did not consider it necessary to posit some ground or source of intentionality. The ego is only an ensemble of intentional acts, located in experience. The complexes of these conscious facts are nothing but their co-existence and succession. It is said that Husserl later changes his mind and in *LI* (second edition) and *Ideas* he comes closer to Natorp's theory and insists on transcendental ego as the ground of intentional acts. There emerges an egological theory of consciousness and a clear differentiation between a 'pure ego' which gradually comes into limelight and the 'empirical ego' which is being relegated to the murky background of reducibility, nay, even dispensability. However desparate or incompatible this shift may appear, it is not difficult to find some methodological or phenomenological reason for this, even though to many it may sound unconvincing. Besides, even in *Ideas I*, Husserl appears to have said things which are closer to the earlier views of *LI*, except that an undefined and unexplained pure ego is assumed. He says:

> The experiencing ego is still nothing that might be taken for itself and made into an object of inquiry on its own account. Apart from its 'ways of being related' or 'ways of behaving', it is completely empty of essential components, it has no content that could be unravelled, it is in and for itself indescribable: pure ego and nothing further.[11]

In *Ideas II*, Husserl describes ego as the 'functional centre'. Again, it is here that the self-constitutive nature of the ego is talked about, a view which receives clearer treatment in the *Cartesian Meditations* (1931, Trns.D. Cairns, 1960). Between *LI* (1901) and *Ideas* (1913), the centrality of the transcendental ego has also been hinted at in his 1907 lectures, published as *The Idea of Phenomenology* (1950, trns. Alston and Nakhnikian, 1964). Even Spiegelberg, in his authoritative work, *The Phenomenological Movement*, recognizes the major shift in Husserl's position by 1913, and calls it a complete reversal:

> ...in the first edition of the Logical Investigations, Husserl rejected the conception of an identical subject over and above the intentional acts of consciousness, very much in the manner of David Hume. But by the time Husserl published the *Ideen* (1913) (i.e. *Ideas*), he had completely reversed himself.[12]

Now, before we resume our discussion of Sartre's theory of an egoless consciousness, let us make a few points about Husserl's phenomenology and its various stages of phenomenological analyses in order to see whether the transcendental ego is or is not demanded at least by his own method.

A brief description of the aims and methods of phenomenology, specially of Husserl's, is a difficult task not only because of some alleged shifts in his positions made in his various works between 1900 and 1931 but also and, primarily, because the three major works of Husserl—*LI*, *Ideas*, and *Cartesian Meditations*—clearly show a rigorous self-criticism and self-analysis to which he subjected his own reflections. His lack of satisfaction with what he achieved, at any given moment of time, speaks eloquently of his restless spirit. Moreover, the entire gamut of his thoughts is a continuous development wherein some of the preceding elements appear either suppressed or radically modified by later developments or innovations. All this is born of his relentless self-corrections and self-revision. Nevertheless, let us venture a statement of his essential position even at the cost of neglecting the complexity and sophistication of his analyses. I seek reader's apology if it sounds oversimplified.

Following points are some of those which are accepted to hold good of Husserl's phenomenology by most of the students of this movement.[13]

(*a*) The subject matter of Husserl's phenomenology is the general essences of the phenomena of consciousness. He makes a distinction among these phenomena between the intending acts and the intended objects. Without specifying the content of these phenomena, he specially focuses his attention on the modes of appearance in which the intended referents present themselves.

(*b*) His phenomenology, even all phenomenology, is based on the centrality of the notion of intuition (which he also calls 'primordial dator intuition'). The intuitive experience or even 'seeing' and the faithful description of pheno-

mena are taken within the context of our lived experience, *Lebenswelt*.[14] This is also greatly relied upon in order to avoid reductionist oversimplifications and, sometimes, overcomplications by preconceived theoretical patterns.

(*c*) In order to obtain the completely possible range of phenomena and to achieve indubitable foundations, Husserl uses his peculiar method of reductions which suspends all beliefs born of our natural attitude. It finally traces back the phenomena to the constitutive acts in a pure subject which proves to be irreducible.[15] (One may note here a close resemblance between Husserl's views and Kant's position concerning the constitutive role of the categories of understanding.)

This cursory account of the aim of Husserl's phenomenology and particularly the last point mentioned above takes us to some general points about his method. Husserl seems particularly interested in tracing the development of our thought from the pre-phenomenological stage to the phenomenological one. The first step is the recognition of the naturalistic attitude, characterized by the standpoint of everyday life which assumes a world of things in space and time over against the knowing self which is also a part of the world. In this pre-phenomenological stage all essences and mental contents are overlooked. Therefore, in order to arrive at the general essences (*meanings*) of the phenomena of consciousness, certain modes of reduction are recommended. Husserl uses the Greek term 'epoche' or bracketing (taking the cue from mathematics) suggesting only a temporary suspension of the consideration of the bracketed items—not its rejection, though in the final analysis these are completely forgotten. However, we find three kinds of reduction in Husserl's thought: (*a*) phenomenological reduction; (*b*) eidetic reduction; (*c*) transcendental reduction. (These terminological differences may not have Husserl's complete approval, but for the sake of clarity I shall still maintain them.)

(*a*) *Phenomenological Reduction.* The first stage of Husserl's phenomenology, which can be termed as descriptive phenomenology, is a descriptive study of psychical life as it is in itself. This is conducted at two different levels of successive reduction: phenomenological and eidetic. As Husserl says in his *Encyclopaedia Britannica* article entitled 'Phenomenology', phenomenological reduction consists in 'bracketing out' the external world, leaving only 'the phenomena of actual internal experience', i.e. the empirical ego and its immediate intuitions—the essences. This constitutes voluntary suspension of interest in, but no doubt of, their existence. Husserl accepts Brentano's intentional theory of consciousness, but phenomenology, unlike psychology which is an empirical science, ignores the objects of consciousness.

(*b*) *Eidetic Reduction.* This stage is, of course, often difficult to be distinguished either from the preceding stage or from the following stage, but it seems to consist in further bracketing of the empirical ego—the stage which marks the above-stated shift from *LI* to *Ideas*. Thus, what are left are only the essences which are identified as true objects of phenomenology. In Husserl intentional experiences include the subjective and the objective aspects of experience or, in other words, *the noeses* and its objective correlates, the *noema*. These essences are both immanent and transcendent in so far as they appear in individual stream of consciousness and as the essences of things outside. For Husserl all things are known through their appearances, the real 'thing' being that which physical sciences reveal. The appearances to the senses or the 'essences' are the signs of the presence of the 'thing' in the outside world. The reality and appearance of anything are inseparable correlates. As he says in *Ideas*: 'What things are...they are as things of experience' (p.147) or 'reality...essentially lacks independence' and exists only as 'consciously presented as an appearance' (p. 154).

(*c*) *Transcendental Reduction.* Though only in Husserlian scholarship and works we come across the term transcendental phenomenology, I have taken the liberty of using transcendental reduction to mark the stage where the transcendental ego, after assuming the task of constituting the *noemata*, puts everything else, except itself, into brackets and finally turns into a monad.[16] Thus, in this stage, all objects and empirical egos are unified into one universal 'Transcendental Ego' which includes the world. The kinds of phenomenology, which emerge along with the three methodological stages, can be termed as descriptive phenomenology, transcendental phenomenology and constitutive phenomenology. One may find here many parallels—Berkeley, Hegel or Croce. The charge of solipsism is well known, and I prefer not to enter into its discussion. What I would like to submit is that the concept of pure consciousness is consistent with Husserl's aims and with his phenomenological method, and that the rejection of the former may require the rejection, or at least a radical transformation of the latter.

As has been stated above, if one of the aims of phenomenological analysis is to concentrate on the general essences of the phenomena of consciousness, then the empirical ego need not be exempted from it. Once consciousness in its phenomenological mode becomes self-reflexive, its initial 'radical empiricism' gives way to phenomenological idealism. Hence the task of bracketing turns inward, and consciousness looks for its own essence. The noematic correlates ultimately pale into insignificance in the face of the most general and universal essence of pure consciousness. The emphasis on lived experience (*Lebenswelt*), within which the intuitive inspection and the faithful description of the phenomena assume significance, ultimately points towards pure subjectivity. It is to this end that the transition from phenomenological reduction to eidetic reduction is effected. And to carry it to its logical extent, it culminates in what has been termed transcendental reduction. The search for the foundation of knowledge, if conducted beyond what is given in knowledge, invariably takes us to some such concept of pure ego which is available to us through 'self-perception'. In the second volume of *Ideas*, Husserl maintains that pure ego, by its very essence, can be directly seized by self-perception. It is neither capable nor in need of a special constitution. He also dis-

tinguishes between the pure ego as the focus of all our experiences and the empirical human ego with its factual properties, its character, aptitudes, etc. Like Sartre, Husserl treats the latter ego as a 'transcendent object', constituted by the transcendental consciousness with its focal ego.

Let us now return to Sartre. To Sartre the unity and inwardness of consciousness is not dependent on *I*. He maintains that the intentionality of consciousness implies that 'consciousness transcends itself', and thus there is no need of *I* as 'a transcendental and subjective principle of unification'. 'The object is transcendent to the consciousness which grasps it, and it is in the object that the unity of the consciousness is found.'[17] The transcendental *I* of the *cogito* is neither consciousness itself nor a unifying principle. The *I* is not a condition but only an expression of the inwardness of consciousness. According to Sartre:

> ...the phenomenological conception of consciousness renders the unifying and individualizing role of the *I* totally useless. It is consciousness, on the contrary, which makes possible the unity and the personality of my *I*. The transcendental *I*, therefore, has no *raison d'etre*.[18]

For Sartre, besides superfluity of the transcendental *I*, it also becomes 'the death of consciousness'. Sartre emphasizes both the self-reflexiveness as well as the self-transcendence of consciousness. This is to say that consciousness, in one sense, is absolute and, in another, relative. 'The existence of consciousness is an absolute because consciousness is consciousness of itself. And consciousness is aware of itself in so far as it is consciousness of a transcendent object' (*TE*, p. 40).

This consciousness at first appears as *unreflected* or *pre-reflected* or *non-positional* consciousness which means that it is 'not for itself its own object'. He says: Its object is by nature outside of it, and that is why consciousness *posits* and *grasps* the object in the same act. Consciousness knows itself only as absolute inwardness.[19] As Sartre argues, the *I* as an inhabitant of consciousness carries an opacity which goes to hide,nay, even destroys, the translucence of consciousness and darkens it. Its spontaneity falls before the opaqueness of *I*. For Sartre, consciousness must be apprehended as a 'phenomenon' whose 'being', like that of any other phenomenon, is identical with its 'appearance'. And against Husserlian *I*'s absolute character, Sartre also asserts that the *I* can only have relative existence as it must be 'an object *for* consciousness'. What Sartre does not see in *The Transcendence of the Ego* and which becomes clearer in *Being and Nothingness* is that consciousness for him is also relative. There is a general categorial confusion between the epistemic and the ontological nature of consciousness. The relationship that is established between *being-for-itself* and *being-in-itself* in his later work assumes the primacy of being; and because all the content of *for-itself* lies outside, on the other side of the divide, the *for-itself* only remains a mere possibility or potentiality unless it relates itself, in various possible ways, to the *in-itself*.

Even in the earlier work under discussion the *reflective* or the *positional* consciousness becomes in a sense relative. As regards the reflecting consciousness, he says:

> It becomes positional only by directing itself upon the reflected consciousness.... Thus the consciousness which says *I Think* is precisely not the consciousness which thinks. Or rather it is not *its own* thought which it posits by this thetic act.[20]

Hence the positional or thetic consciousness is not absolute in the sense in which pre-reflective consciousness is. Its 'positionality' or 'theticity' is dependent on the 'pre-positional' state.

In Sartre's thought neither the pre-reflective nor the reflective consciousness contains the Cartesian *I*. He underscores the point:

> The *I Think* does not appear to reflection as the reflected consciousness: it is given *through* reflected consciousness. To be sure it is apprehended by intuition and is an object grasped with evidence...the *I* of the *I Think* is an object grasped with neither apodictic nor adequate evidence. The evidence is not apodictic, since by saying *I* we affirm far more than we know. It is not adequate, for the *I* is presented as an opaque reality whose content would have to be unfolded.[21]

Sartre at the same time poses an additional difficulty that if the *I* is a part of consciousness, there would be two *I*'s—one of the pre-reflective and the other of the reflective consciousness. And, referring to Eugene Fink he also includes the 'third *I*, disengaged by the *eopche*, the *I* of transcendental consciousness.'

In Sartre's views what brings about the self-fulfilment of consciousness is only its directionality. It is only with the reflective acts, i.e. the conscious acts about the prior acts that an ego arises. Man's being in the world is originally merely intentional—prior to any 'positional' act:

> The *I* cannot be a part of the internal structure of *Erlebnisse*, we must, therefore, conclude: there is no *I* on the reflected level. When I run after a street car, when I look at the time...there is no *I*. There is consciousness *of the* street car-having-to-be-overtaken, etc., and non-positional consciousness of consciousness. In fact, I am then plunged into the world of objects; it is they which constitute the unity of my consciousness.... There is no place for *me* on this level. And this is...because of the very structure of consciousness.[22]

The burden of Sartre's criticism of Husserl mainly rests against Husserl's *Ideas* as he admits that both in *LI* and in *Phenomenology of Internal Time-Consciousness* (1928; ed. Heidegger, trns. Churchill, 1964) Husserl does not

resort to the unifying and synthesizing power of the ego. Rather, it is only James'—like stream-character of consciousness which is advocated. But even in *Ideas* the pure consciousness as the phenomenological residuum, obtained through transcendental reduction, is accepted in its ultimate generality as the condition of the possibility of the empirical egos and their world. Maurice Natanson thinks that there are not transcendental egos but *The Transcendental Ego* which is the phenomenological ground and source for the individual consciousnesses within empirical reality.[23] Thus, both Sartre and Husserl remain more or less faithful to the concept of impersonality in their respective fundamental notions—Sartre in his concept of pre-reflective consciousness and Husserl in his concept of Ego. There is an obvious inconsistency in Husserl's position, though, as we have tried to understand this point at some length, these shifts, to a large extent, appear to be demanded by his method. But, similarly, even Sartre appears in his later work, *Being and Nothingness*, to be half-serious about the impersonal character of the stream of consciousness.

To sum up Sartre's central thesis, we may say that his phenomenological study as well as his purely psychological examination of 'intra-mundane consciousness' leads him to the following conclusion:

> ...the *me* must not be sought *in* the states of unreflected consciousness, nor *behind* them. The *me* appears only with the reflective act, and as a noematic correlate of a reflective intention...the *I* and the *me* are only one...
>
> The *I* is the ego as the unity of actions. The *me* is the ego as the unity of states and of qualities. The distinction that one makes between these two aspects of one and the same reality seems to us simply functional, not to say grammatical.[24]

But Sartre's claim about phenomenological study must be understood with its own distinct and peculiar features, so as to see how it is not identical with Husserl's. The difference in approach is evidently recognized on all hands, because phenomenological existentialism is a common term which is accepted by all the students of existentialism. What is involved in this brand of existentialism is that it does not restrict itself to pure phenomenological description of phenomena, and adopts a particular kind of interpretation which seeks to decipher their meaning and significance for existence. This is called the hermeneutic method. It is for this reason that Husserl's phenomenological reduction is rejected, and his transcendental subjectivity as the basis of all being is criticized. It is motivated by Sartre's main concern with the dimensions and facets of an awareness that is of a mode of existence which the existentialists generally characterize as authentic existence—chiefly a way of life. Nevertheless, Husserl's emphasis on the ego as the centre of our conscious existence seems compatible with Kierkegaard's position concerning inwardness. As Spiegelberg holds, Sartre's attack on the pure ego for which

he substitutes a stream of impersonal ego 'actually volatilezes existence.'[25] That is, by denying the ego a centre and the dimension of inwardness he deprives it at the same time of its existential weight. But Sartre, on the other hand, might reply that he brings phenomenology back into the thick of human reality, saving it from the precipice of transcendentalism.

Notes and References

1. See her *Prime of Life* (tr. Peter Green). The friend referred to is Raymond Aron.
2. Jean-Paul Sartre, *The Transcendence of the Ego* (tr. Williams and Kirkpatrick), The Noonday Press, p. 31 (hereafter, *TE*).
3. *Ibid.*, p. 32.
4. *Ibid.*, p. 33.
5. *Ibid.*, p. 35.
6. *Ibid.*, pp. 35-36.
7. *Ibid.*, p. 36.
8. *Ideas: General Introduction to Pure Phenomenology* (tr. W.R. Boyce Gibson), New York, 1931.
9. *Logical Investigations*, (vols. i and ii, 1900-01, rev. edn., 1913, tr. J.N. Findlay), New York, 1970. See *TE*, p. 37; Marvin Farber also says about the early views of Husserl: 'His point was that the phenomenologically reduced ego, or the purely psychical ego restricted to its phenomenological content...is simply identical with its own unity of connection'. See *Foundations of Phenomenology*, p. 338.
10. Maurice Natanson (ed.), *Essays in Phenomenology*, Martinus Nijhoff, The Hague, 1966, p. 17.
11. *Ideas*, *op.cit.*, p. 214, 8:80.
12. Herbert Spiegelberg, *The Phenomenological Movement*, vol. i, Martinus Nijhoff, The Hague, 1965, p. 140.
13. I am omitting some very obvious points like intentionality of consciousness which is taken by Husserl, on Brentano's authority, almost as an axiom.
14. This term and the concept mainly occur in *The Crisis of European Sciences* and has been fully exploited later by Merleau-Ponty.
15. I am indebted to Herbert Spiegelberg for his insightful suggestions on this point. See his article 'Phenomenology and Existentialism', *Journal of Philosophy*, vol. lvii, 1960.
16. Spiegelberg calls this stage 'Transcendental Monadology', *The Phenomenological Movement*, vol. i, *op.cit.*, pp. 157-59.
17. *TE*, p. 38.
18. *Ibid.*, p. 40.
19. *Ibid.*, p. 41.
20. *Ibid.*, p. 45.
21. *Ibid.*, p. 51.
22. *Ibid.*, pp. 48-49.
23. *Essays in Phenomenology*, *op.cit.*
24. *TE*, pp. 59-60.
25. 'Phenomenology and Existentialism', *op.cit.*

Philosophy of perception: eastern and western*

SURESH CHANDRA
University of Hyderabad, Hyderabad

Once I proposed the thesis that the development of philosophical systems depends on the environmental conditions. I did not expect any response to my thesis either from the West or from the East. The West is to be followed, and the East has to follow the West. Even for the invention of our academic face-saving devices we have to depend on the West. While proposing my thesis I leaned heavily on the philosophical issues of perception. Therefore, what I wrote earlier fits well into the scheme of the present seminar. What I write here is certainly not new to me, but everything may be new to my academic colleagues in philosophy. I take advantage of the Western wind which does not allow us to see each other, which keeps our gazes fixed on the stars arising on the Western horizon.

The question that has been worrying me for a long time is certainly not a usual question of philosophy. It is rather unusual. So also the answer that occurs to me is an unusual answer. No one would doubt that the style of doing philosophy in the West differs from the style of doing the same in the East. But what brings about this difference? Why do the two styles, Eastern and Western, differ so much? Is it possible that a certain style of doing philosophy is connected with a certain sort of environment? Could a style of doing philosophy be compared with a style of using a dress? Woollen dresses are useless for the summer season, and cotton dresses are not sufficient for winters. Not all sorts of dresses are suitable for all sorts of places and environments. So also the stylistic variations in dresses for one sort of environment are not suitable for the other sort of environment. Could we say the same thing about the stylistic variations in philosophy? Could we say that the Western style of doing philosophy is unsuitable for the Indian climate, and the Indian style of doing philosophy is unsuitable for the Western climate?

The range of problems that attracts the attention of an Indian mind is different from the range of problems that attracts the attention of a British

*This paper is based on my book *Philosophy and Environment* which I decided not to publish, for the simple reason that the six papers that I published in connection with the theme of my book hardly made any impact. In preparing this paper I lean heavily on my published paper 'Philosophy in the Environmental Setting', *Indian Philosophical Quarterly*, April, 1977. Of course I have used good amount of material from the other five papers in the series. But all the material revolves round the paper of April, 1977. I must thank my student Meera Shenoy for her help in organizing the material and bringing about some kind of coherence and going through the final draft of the paper.

or a German or a French mind. Not only the problems, even the tools used for solving the problems differ. There is no doubt that the environment makes a lot of difference to the development of a mind. Does it also make a difference to the thoughts generated by a mind? Does it also make a difference to the philosophical systems generated by different minds?

What makes a British mind so much devoted to the problem of perception? What makes a British philosopher so much worried about the perception of tables, chairs, coins and tomatoes, etc? What has led him recently to make the distinction between 'sense-data' and 'material objects'? Since the dawn of technical philosophy in Britain, the theory of reality has remained a subject of secondary importance. It is just a consequence of the epistemological analysis. And what is the state of British epistemology? It is nothing but the theory of perception. The technical distinction between sense-data and material objects, recently introduced, is the legacy of traditional British philosophy which owes its origin to the thoughts of Locke, Berkeley and Hume.

Is there any understandable reason why a British philosopher should distinguish 'the bulge of a tomato' from the 'tomato itself'? The answer is simple. The dark and foggy environment of Britain and the inability to perceive things clearly, leads a British mind to think more about the philosophical problems of perception. The general environment of Britain poses a real challenge to its inhabitants. The darkness and fog envelop a material object, say, a tomato, in such a fashion that it appears as a patch, a coloured patch, bulging out towards your eyes. For example, referring to the perception of a tomato, Professor H.H. Price says:

> I can doubt whether there is any material thing there at all. Perhaps what I took for a tomato was really a reflection: perhaps I am even the victim of a hallucination. One thing, however, I cannot doubt that there exists a red-patch of a round and somewhat bulgy shape, standing out from a background of other colour-patches, and having a certain visual depth.[1]

The real tomato remains hidden behind the darkness and fog; what succeeds in breaking the curtain of darkness and fog is simply a 'red-patch of a round and somewhat bulgy shape'. It is only when one comes closer to a tomato, touches it, and performs all those activities which the British philosophers describe as 'verificationary activities', that a tomato is ultimately perceived.

The anxiety of the perception of even such an insignificant item as a tomato has become so excessive in Britain that some British philosophers (the so-called 'phenomenalists') have come out with the declaration that there is no end to the process of verification, that whatever we do our hands can never catch a *real* or *physical* tomato. What they mean is that a tomato is never 'ultimately perceived'. Referring to the process of testing a judgement of perception, Ayer says:

> There is no theoretical limit to this process of testing, it is always logically possible that I am mistaken. However many favourable tests I may make, the possibility still remains that my subsequent experience will consistently be such as to make me conclude that the perceptions that I had to my satisfaction proved to be veridical were not so really.[2]

He further says:

> ...we do indeed verify many such propositions to an extent that it makes it highly probable that they are true; but since the series of relevant tests, being infinite, can never be exhausted, this possibility can never amount to logical certainty.[3]

This implies that we can never be certain that we have a real tomato as an object of our perception. This is the consequence of adopting phenomenalistic analysis of perception.

In their attempt to catch a tomato, the tomato has slipped out of the hands of the British philosopher, in a slightly different fashion than that in which their empire has slipped out of their hands. What remains in the hands of the British philosopher is just the bulging shape of a tomato, nothing but a patch of colour, without any juice and pulp in it. Price's 'red-patch of a round and somewhat bulgy shape' certainly does not have any juice or pulp in it; for it is not a material thing. What has juice and pulp in it is a tomato, a real material something. But in perceiving a red-patch of colour, whatever its shape and size may be, I am certainly not perceiving a tomato. There is no surprise that these bulging patches of colour become independent sorts of things, and as a consequence obtain a technical name 'sense-data'. Referring to the introduction of sense-data as the kind of entities which lie between a material thing (a tomato, for example) and its observer, Ayer remarks:

> The suggestion seems to be that the object interposes its appearance, like a sheet of glass, between itself and the observer. The glass may be so frosted that we are left in doubt as to the character, or even the existence, of what lies behind it. ...We are to think of physical objects as detachable from their looks, or from their tactual qualities, in the way that they are detachable from the sounds that they produce.[4]

In disclosing the nature of sense-data what comes easier to Ayer is the case of a 'frosted glass'. Certainly, there is no chance for the frost to appear on the glass in a place which has heat and sunshine. Sense-data are identical, not with the glass, as Ayer suggests, but with the frost. Even the glass remains hidden because of the frost. Material objects are lost behind the frost. The loss of empire has already introduced considerable difficulties for the British, but now they have added worries because of their phenomenalism. It is not

only India and the other colonies which they have lost, the whole *material* world is dead and gone for them; what remains with them is just the fog and frost of philosophy.

How can one understand, relish or be stimulated by the problems of British philosophy without living (at least for some time in one's life) in the dark-foggy and frosty atmosphere of Britain? How can these problems be exported to those countries where there is light and bright sunshine, where the environment of fog and frost is missing? Even the philosophically developed neighbours of Britain, countries like Germany and France, for example, have failed to be impressed by the philosophical systems of Britain. Britain can smuggle its philosophical literature into another country, but not its environmental setting. The British are quite aware of this fact, and therefore, they try to get their philosophical views exported by importing sometimes people from other countries to make them acquainted with the environmental setting of Britain.

The British fog and cold is responsible not only for the philosophical problems of Britain, but also for the growth of her imperial power, the search for territories having sunshine and heat. The recent introduction of the central heating system in Britain is not a bad compensation for the loss of the empire. But the fog and frost in Britain continues to persist; therefore in some form or the other, the phenomenalistic analysis of perception also continues to persist. Of course, recently some other problems of philosophy, other than the problem of perception, have found their way into Britain. The conditions of illumination and visibility of things in Britain have made considerable advancement over the past.

There is no doubt that sense-data are the sorts of entities that have been extremely favoured in the British philosophical circles. Though it is not only the philosophers of Britain but also the scientists, the artists and the artisans of Britain—i.e. the people from the other walks of life too, happen to see on occasions only colour patches and hear buzzing sounds, the technical term 'sense-data' has been provided to them only by the British philosopher. The phenomenon of seeing colour patches and hearing buzzing sounds, rather than seeing rats and cats and hearing bells and whistles, occurs throughout the world in a drunken state. But in a normal state, this phenomenon occurs more frequently in Britain than elsewhere; for the dark and foggy atmosphere of Britain does not allow its people to have direct contact with material reality. Since drinking is a phenomenon quite prevalent throughout the world, the introduction of sense-data by referring to the drunken state of the people is the most effective way of introducing sense-data to the people, who do not have direct acquaintance with the environmental condition of Britain.

Consider the development of British philosophy, and give a historical look at it. Britain enters into the race of philosophers with Hobbes and Locke. Both Hobbes and Locke tried to break their links with the beautiful Greece, known for Plato and Aristotle. These philosophers formed a new link, the

link with Descartes, a philosopher of the neighbouring country. The neighbouring country in question feels sometimes the blow of Scottish winds. Both Hobbes and Locke brought philosophy closer to the boundaries of the British Isles. About Hobbes, Russell writes: 'At fourteen years Hobbes went to Oxford and studied classics. Scholastic logic and Aristotle's metaphysics were part of the curriculum, and for these Hobbes developed a thorough dislike which remained with him throughout his life."[5] So the old links are given up. Concerning the new links forged by Hobbes, Russell writes: '...while in some respects he belonged to the empiricistic tradition, he also has an appreciation of the mathematical method which links him with Galilio and Descartes.'[6] Similar is the case of Locke. He, too, was in search of new links. 'Though a teacher of Greek and philosophy at Oxford', Russell writes about Locke, 'the Scholasticism then still prevailing at Oxford was not to his liking, and we find him taking interest in scientific experiments and in the philosophy of Descartes.'[7] Thus, Descartes becomes the focus of interest. In the twentieth century, we find a further attempt at the national growth of British philosophy, doing away even with the new links. Ryle is the leader of the group that started hostility against the Cartesian link. His predecessors, Berkeley and Hume, did make an attempt to break the link in question by attempting to demolish the 'material substance'. Unless the material substance is demolished, the British foggy and frosty philosophy does not arise. (Even the present-day British phenomenalists realize it.) This was known not only to Hume, even Berkeley knew it. But like Locke, Berkeley and Hume failed to delink themselves from the Cartesian influence, for both of them accepted the existence of 'mind'. Berkeley clearly accepted it, and Hume accepted it by reducing it to the 'mental states'. Ryle's attack on the Cartesian philosophy has gained historical importance. He converted the Cartesian mind into 'the ghost in the machine'. Thus, with Ryle emerges the national philosophy of Britain in its new dress (with the 'British double dealing'—nothing lost and nothing gained. Neither minds exist nor bodies exist, and both exist.)

Ryle's greatness lies not in establishing sense-data but in disestablishing them, as if he has started a war against the British regionalism, British narrowness.

He first equated sense-data with sensations, and then demolished them. Ryle is attracted towards the similarities between the two myths—the psychologists' myth of sensations and the philosophers' myth of sense-data. The myth of sensations presupposes a dualism of mind and body; it ultimately leads people to live in their private secluded world of sensations. The myth of sense-data removes these people further from reality. These people live in a dream-like world. Sense-data are helpless in introducing material solidity to their world. Each person is not only living in his private world, there is no possibility that the world of one person can ever coincide with the world of the other. Mere demolition of sensations is not sufficient. So also mere demolition of sense-data is not sufficient. Both sorts of entities have to be demolished.

Ryle first equates sensations with sense-data, and then demolishes them. This equation not only exhibits economy of labour but also shows that the philosophers' myth of sense-data is an outcome of the psychologists' myth of sensations. Why use different sorts of weapons ? Why divide forces when both the enemies, sensations and sense-data, can be destroyed with the same weapon and the same strategy? In demolishing sensations, Ryle has taken a step to suffocate the ghost living in the human body. Human body is supposed to be a machine driven by this invisible ghost. Once the ghost is dead, the machine is free to operate in its own fashion, for the machine is not lifeless. In demolishing sense-data Ryle has brought the machines to share a common physical reality. It is philosophically less objectionable to have automatic machines than to have machines driven by the invisible beings.[8]

Though Ryle, on the surface, is quarrelling and attempting to break his link with Descartes, he is as a matter of fact quarrelling and attempting to break his link with the British darkness and fog. Descartes is not the real enemy, the real enemy is British darkness and fog which has converted phenomenalism into the 'national philosophy' of Britain. Phenomenalism must be rejected, a new national philosophy of Britain must be evolved. Locke, too, is no good, for he has sent the material world into the realm of the unknowable (unperceivable). And Berkeley's prayers to God cannot save British philosophy. So also Hume's 'sensationalism' must be rejected, for it leads to isolation and seclusion which the British darkness and fog demands. In quarrelling with Descartes, Ryle is quarrelling with his narrow nationalism. Descartes symbolizes the British environmental condition. Once the Cartesian darkness and fog is gone, there will be light and sunshine. It would be possible for people to communicate with one another, and to live in a common physical world. Ryle's view exhibits that the British too have a genuine desire for living and thinking like those people who come from the places having bright light and sunshine.

But how could Ryle, an Englishman by birth and temperament, revolt against his own foggy and frosty philosophy ? It is a borrowed revolt, a revolt borrowed from Wittgenstein, a man from the Continent. One need not go to the *Investigations*.[9] All the views of Ryle, except his literary style, can be traced back to *The Blue and Brown Books*[10] of Wittgenstein. Wittgenstein's entry into Britain, changed, to some extent, the philosophical climate of Britain.

A brief discussion of Strawson's position may also not be out of context, for Strawson occupies a respectable position in the hierarchy of British philosophers. Strawson, too, has attacked sense-data and has attempted to bring into the world material objects and other persons in a fashion quite different from that of Ryle. Ryle demolishes sense-data, whereas Strawson simply degrades their status. Sense-data have not to be demolished, they have simply to be degraded from their respectable position. In order to establish contact with the other people, Ryle reduces them to their bodies. But Strawson

succeeds in having contact with other persons without using the weapon of reductionism. Further, the kind of metaphysics which Strawson preaches claims to have environmental neutrality. His metaphysics, as Strawson claims, makes explicit the basic structure of human understanding. It does not matter in the least whether such understanding occurs in the Indian and African jungles or in the snows of Iceland. So Strawson's metaphysics is supposed to have crossed the boundaries of the British Isles. In referring to his metaphysics as 'descriptive', Strawson has attempted to establish his link with Kant, a German philosopher of high repute, and with Aristotle, a Greek philosopher, who along with Plato brought philosophy into existence and repute. So Strawson's way of combating is very different from Ryle. It is not by delinking but by linking with the outside world that one can give a tough fight to the foggy and frosty philosophy of Britain.

But has Strawson succeeded in isolating himself from the fashion in which philosophy is being pursued in Britain? What has led Strawson to construct an ontology in which persons and material bodies are given primary importance? What is the purpose of raising the question of ontological priority? Can one say that Strawson has made a complete departure from the traditional British philosophy? There is no doubt that he has made a departure, but certainly not a very significant departure. His view that sense-data occupy an inferior ontological status, that material objects are ontologically prior to sense-data, is meant for showing that sense-data succeed in introducing only a flimsy curtain, that they fail to hide material objects and other persons. Strawson is not denying the existence of sense-data, he is simply denying the position of honour that they used to occupy in the British philosophy since its beginning. And in dishonouring sense-data, Strawson is showing that it is not difficult to overcome the darkness and fog of Britain.[11]

Similarly, Strawson's argument that one cannot ascribe experiences to oneself without ascribing them to others is a sort of threat. If one does not accept the existence of other people, then one's own existence is in danger. I have argued in my earlier work, *A Study in Ayer's Epistemology*.[12] that there is not much difference between the views of Strawson and those of a revisionary metaphysician like Berkeley. The distinction between descriptive metaphysics and revisionary metaphysics is not as sharp as Strawson has made it out. Like Ryle, Strawson, too, is busy with the British darkness and fog. Strawson has certainly failed to make a departure from the sort of thinking which takes its birth in the British environment, the urban environment of Britain in which one misses not only light and sunshine but also the vegetation and animal life. Except an occasional glimpse of a dog or a cat, the industrial towns of Britain are thick with human beings and material bodies, the two basic ontological categories of Strawson. Therefore, it is not surprising that Strawson is not sure whether 'animals are conscious'.[13]

Let us now come down to the heat and sunshine. Why were pyramids constructed in the deserts of Egypt? Why were they not constructed in India,

when the civilizations of the same sort, as the archaeologists claim, prospered in these countries? The answer is simple. Would a piece of forest attract your attention if it is planted in a piece of land adjoining the never-ending forest? Could a pyramid become an item of wonder if it is planted in the land of the Himalayas? Could a foothill catch your attention if your eyes are busy with the never-ending Himalayas? Further, where, in what sort of land would a person like to hoard treasures? Certainly not in a treasureland. What reason is there that the Indians failed to develop techniques for the preservation of their dead in the fashion in which they were preserved in ancient Egypt? Why have the archaeologists failed in unearthing a mummy from the Indian soil? The reason may perhaps be traced to an ancient Indian belief that what is immortal is not the body but the soul. The destruction of the body does not necessarily lead to the destruction of the inner self. The option to cremate the body exhibits this belief. On the other hand, it seems that the concept of the immortality of the body is an ancient Egyptian concept. An Egyptian mummy exhibits not only the artistic achievements of a people but also a highly developed technique for the preservation of the body of a person for the day of judgement.

Prof. B. B. Lal, the leading archaeologist of our country, finds similarities between the graves exacavated by him in the Lower Nubia (Egypt) with the graves he exacavated in the South of India. These similarities have led him to think of the possible cultural link between India and Egypt. According to him, the cultural link between India and Egypt 'might go as far back as the Middle Stone Age, say, roughly 25000 years ago.'[14] It is possible that India had cultural links with Egypt from as early a period as that calculated by Prof. Lal. There is no doubt that India had a flourishing trade with Egypt long before the birth of Christ. However, the similarities to which Prof. Lal refers are not sufficiently illuminating. Suppose the Indian sparrow builds its nest in the same fashion as an Egyptian sparrow. This does not imply that these sparrows have any kind of 'cultural links' between them. But if the techniques used by the Egyptian sparrow for building its nest are superior to those of the Indian sparrow, then it is certainly an illuminating fact. For it would delink the Egyptian sparrow from the Indian sparrow. In the context of archaeology, what is striking is the later development of the sophisticated techniques of burial (mummy, pyramids, etc.) in Egypt. These techniques were completely missing in India. These techniques delink the people of India from the people of Egypt. Perhaps, at the time at which the Egyptians were developing the finer techniques of burial for preserving the bodies of their dead, the Indians were developing the finer techniques of cremation, the technique of burning up the bodies of their dead. Unfortunately, cremation is the destruction of the archaeological evidence, hence no dates can be fixed when the bodies started to be cremated rather than buried. For the dating of the characteristic Indian funeral customs, one would be on a wrong track if he depends on the judgement of the archaeologists. Again, cremation is not

something that came into existence on the Indian soil for the first time. Russell traces it to Greece from the middle of the eighth century to the middle of the sixth century 'when bodies were cremated, not buried as we know they were in Myceanean time.'[15] And the custom of cremation continued along with the custom of burial till the days of Plato, if not afterwards. This is proved by the fact that Crito asks Socrates how to treat his body after the execution, whether to bury it or to cremate it. And Socrates reacts: 'I shall not remain when I die but shall up and begone, in order that Crito may bear it more easily, and, when he sees my body either being burnt or being buried, not to be distressed on my account as if I were suffering something terrible.'[16] Of course, if the soul is different from the body in the sense that it can depart from the body and may continue to survive independent of the body, then there is nothing wrong in what Socrates says. But if the soul is tied to the body, then it is impossible to cremate the body, the body has just to be buried.

Let us now consider the question that has led Indian philosophers to their other-worldly metaphysics. Why have they lost love for the physical bodies or the worldly treasures? In India there is no problem of the visibility of objects, be they as big as elephants and as small as tomatoes and pennies. Rather the bright sunshine and excessive hot climate make an Indian disinterested in the problems of 'external perception'. To a Western philosopher the Indian theories of perception, in spite of their complications, would appear as naive. They lack sophistication. The distinction between *nirvikalpaka pratyakṣa* (indeterminate perception) and *savikalpaka pratyaksa* (determinate perception), over which the different schools of Indian philosophy have been quarrelling through the ages, does not coincide with the Western distinction between 'sensing' and 'perceiving'. Though sense-data may not be the same kind of objects as material objects, there is no indeterminacy involved in sensing sense-data. Those Indian philosophers, who apply the western epistemological distinctions to the Indian thought and think that the Indian distinction between indeterminate perception and determinate perception coincides with the western distinction between sensing and perceiving, are clearly on the wrong side. The fact that perceiving presupposes sensing, in the fashion in which determinate perception presupposes indeterminate perception, does not imply that these presuppositions are of the same sort. Again, it is also wrong to say that the Indian analysis of perception is true, and the western analysis is false. Not all sorts of analyses of perception are applicable to all sorts of environments. The environmental condition of Britain supports the British analysis of perception, and the environmental condition of India supports the Indian analysis of perception. The environmental condition which supports the Western analysis of perception may fail to support the Indian analysis of perception.

The environmental conditions force an Indian to withdraw himself from the existence of the outside world. He closes his eyes to what is going on

around his body, and as a result becomes interested in getting a glimpse of his 'inner self'. The construction of an 'invisible self', the invention of the problem of 'internal perception' and the elaborate 'internal psychology', which is not only unknown to the western world but impossible to be understood by the western mind, are the outcome of excessive heat and sunshine. The uneasy, restless, physical bodies are rejected as parts of the real self. Hot winds, storms, floods and the outbreak of tropical diseases can torture only one's physical bodies; they cannot touch the 'real self'. Without postulating the distinction between 'the unreal self' and 'the real self' it would be impossible for an Indian to face the anger of nature against India. The real self is pure happiness and bliss, and, therefore, one should not grumble about the suffering of his physical body. Rather, the proper course is to allow the bodies to suffer. Consider the concept of 'fast' which became so popular on the Indian soil. I am not referring to the origin of this concept; for fasting is good for both, the over-fed and the ill-fed. For the sake of health, the over-fed should sometimes go on fasting. But the ill-fed would not so much suffer from the pangs of hunger, if they have already developed the habit of fasting. From the ritual of fasting, therefore, it cannot be inferred that the Indians, at one time, were either ill-fed or that they were hungry hordes. For they might have been over-fed, and hence they introduced the practice of fasting to decrease their weight. Whatever be the origin of fasting, it certainly refers to the fact of bodily suffering. The body is the vehicle of suffering; so the proper (natural) course of action would be to allow the body to suffer. Fasting is one of the ways in which the body could be made to suffer. The extreme way of rejecting the body would be to commit suicide. Therefore, there is no immorality associated with the concept of suicide in the Indian philosophical scene. Jainism considers suicide as one of the virtues. How shocked would be Kant to know our philosophical heritage!

Even those, who reject the existence of the inner self—the real self—as Buddha did, have not denied the fact of bodily suffering. The liberation from bodily suffering is the major concern of Indian philosophy. The bodily suffering, caused by the environment of India, has not escaped the notice of philosophers. Even the Charvakas, who were quite unlike the Buddhists and the Jains and the other Hindu thinkers, were worried about the fact of bodily suffering. But, according to them, one can achieve liberation from the bodily suffering, not by fasting, penance or committing suicide, but by caring for the well-being of the body. And its well-being consists in having sensuous pleasures. It is not in terms of the other world, not in terms of the life after the death of the body that a solution to the problem of suffering has to be evolved. The wise and enlightened are they, according to Charvakas, who make the best use of *this* world without caring for the other. For, what is the guarantee that the other world is not pure sorrow and misery? Maybe that to avoid the sorrows and sufferings of the other world, this world has been evolved.[17]

The fog of Britain does not allow one person to see another (the genesis of the problem of 'other minds'), and each person lives his independent solipsistic life. But for an Indian there is no such thing as the problem of other minds. The issue of solipsism remains a permanent source of anxiety to the western philosophers. The problem of other minds is the by-product of this problem. Such great philosophers as Russell, Moore, Wittgenstein, Ryle and Strawson have devoted considerable amount of their time to the issues of solipsism and other minds. If one takes a global view of philosophy, then one may discover that what goes in the name of Indian philosophy is so very different from western philosophy. There is complete absence of the issue of solipsism from the Indian scene; therefore, also the absence of the issue of other minds. Why were the philosophers of India not attracted towards solipsism when this issue has remained a permanent source of anxiety to the West? How could the problem of solipsism arise in India if one does not feel secluded and isolated ? Rather, the Indians desire seclusion, they do not find a secluded and isolated place where they may be away from the thick of material bodies and persons. Their desire for seclusion, isolation and having solipsistic existence is expressed in their religion. One desires to have what one does not have. The West lives a solipsistic life, so its religion strives to be non-solipsistic. East lives a non-solipsistic life, so its religion strives to be solipsistic.

The supreme concern of an isolated and secluded man is to establish contact with others, a union with his fellow-beings. An Indian, on the other hand, finds himself too close to others. (He does not require a fire-place; heat drives him away from his home. He is always in need of fresh air). A person who is in the thick of persons would try to secure isolation and seclusion. His supreme concern would be how to get rid of others, how to be alone. A church (so also a mosque) is a place of assembly, a place where a person of the faith expects that he would find other people of his faith. In going to the church, a Christian goes in search of God, but that is not the only objective. He is also going in search of other people. A temple, on the other hand, is a place of seclusion, it is an isolated corner in which a Hindu expects that he will not be disturbed by his fellow-beings. Hinduism is not a congregational religion whereas both Christianity and Islam are. Because of the congregational character, both Christianity and Islam have their fixed day of worship.

In matters of religion we must make a distinction between the attitude of 'running into the world' and that of 'running away from the world'. The Semitic religions have an attitude of running into the world. Hinduism, on the other hand, exhibits an attitude of running away from the world. Only those who are too much with the world would try to run away from the world. And those who are isolated and secluded would try to run into the world. There is some justification in characterizing Hinduism as a world-negating religion, and Christianity and Islam as world-affirming religions. It is only by negating the world that one would be free from it. And it is easier to give

up the world if the world is accepted as Maya, some sort of illusion or hallucination. But if one is required to be with the world, to be in the thick of it, one cannot afford to have an attitude of negation, one cannot grant the status of illusion to the world. The religious ideal of social service is certainly a by-product of the attitude of running into the world. Such an ideal could not be part of Hinduism, because Hinduism preaches the ideal of running away from the world. Hinduism allows society to be handled by the state. It is not the business of religion to meddle with society. There is no time with religion to do all this.

A western philosopher certainly feels a *distance* between himself and others. Not only philosophy, religion, too, exhibits an attempt to remove this distance. Is there no connection between these psycho-philosophical worries of the western mind and the environmental setting of the West ? Strawson, the first rank philosopher of Britain, thinks that 'the strictly disembodied individual is strictly solitary'.[18] Thus, solitariness for the British is restricted not only when he is embodied, even after his death he remains a solitary figure. Have these worries of solitariness, of seclusion and isolation any scope in the environmental setting of India ? Our forests are full of *rishis* (saints) who are in search of solitariness. Even our *heaven* is full of household problems, and our Gods have wives (Goddesses) who create as much problems to their husbands as created by the wives on the earth. How artificial would it be for an Indian philosopher to work on the issues of 'solipsism' or 'other minds'? How can one undergo the anxieties felt by people having their so very different roots? How can the same problems worry us which worry the western mind ? There is no doubt that the variety of living creatures, called 'human beings', have occupied every sort of land—be it a mountain, a forest or a plain land. He finds no trouble in living on the snow, in the air or on the water. But is it possible for all people to share the same kind of dresses or the same kind of food or the same kind of thoughts? Then, how can they share the same philosophical or religious worries? How can they have the same artistic creations? How can they live in the same kind of conceptual realms?

But is there no such thing in India as the *distance* between one person and another? What about untouchability? Does not caste hierarchy in India create a distance between one person and another? But this concept of 'distance' is quite unlike the one which has occupied the mind of a Western philosopher. The Indian philosophers have attempted to remove their distance in a simple fashion. Though one person remains beyond the touch of another person in this world, these persons become one and the same person as soon as they give up their physical bodies. It is only the physical bodies that suffer; it is the physical bodies which are responsible for making people touchable or untouchable. Everything is wrong with the physical existence. Things will be set right once physical existence is given up. What an Indian philosopher fails to achieve at the physical level, he succeeds in achieving at a higher (metaphysical) level. Social unity, like happiness and well-being of

a person, cannot be achieved in this world; therefore, it is an item to be taken care of in the other world.

Just as the concept of 'social distance' obtains a peculiar meaning on the Indian soil, the concept of 'colour consciousness' also obtains a peculiar meaning on the Indian soil. An Indian philosopher clearly gives vent to his colour consciousness when he provides a *sattvika* body to his inner self. *Sattvika* is associated with white colour, and *tamas* with black colour. So it does not matter that an Indian is a coloured person physically, for he happens to be a white person in *reality*. He has a *tamasik* (black) body but a *sattvika* (white) self. So an Indian is in reality not a black man; he only *appears* to be a black man. Ramanuja allows people to go to the heaven with their bodies. But the heaven of Ramanuja is constituted out of only one element, the *sattvika* element. In order to enter into the heaven, a person is required to give up his present body, for this body has *tamas* in it; he must acquire a pure *sattvika* body. Thus, Ramanuja's heaven is not a place for the black men. Only white men are entitled to enter into the heaven. An Indian succeeds in discarding the natural colour of his skin, and obtaining the colour of his choice, in a slightly different fashion than that in which he obtains a social unity with his fellow-beings. It is not the chemical but the metaphysical recipe that has been utilized for the purpose of changing one's colour, similar to the one which is utilized, for changing one into a touchable being.

Were the original Indians white in colour? Have they really migrated to India from the cold region? Or is it that India, or the part where the original Indians lived at one time, was a cold place? Have the Indians acquired the black colour of their skins by living in the hot climate? Such questions as these would naturally be asked, if it is accepted that the real colour of the self is white and what is black is the body. There seems to be considerable material in the religious and the philosophical writings of Hindus which can function as the clue to their past; what kind of life they have lived through the ages.

Though pragmatism had a chance birth in the Continent, it failed to survive in the Continental climate. It is only when pragmatism was transplanted in the business community of America that it survived. And it is only the superior Aryan race of Germany and the tall bony structure of its people that can give birth to an abstract structural philosophy. One may feel dizzy in climbing the heights of a German philosophical system. When one refers to the German philosophical systems, one is reminded of Gothic structures. And neither the British theories of perception nor the German Gothic structures could influence the sublime, sensuous people of France. In spite of the racial minglings, the philosophical achievements of a region remain independent of the other region. Though there is mingling of the races, there is no mingling of the environments. Culture itself is the by-product of the natural forces. Indian culture is the product of agriculture; the growth of urban life was late in India.

How different, how much regionalized are the pictures of philosophers and their philosophies. There is no such thing as phenomenalism, prior to it or posterior to it. For India never had any foggy and frosty philosophy called phenomenalism, so there was no prior to or posterior to phenomenalism in India. Even the recent adventures of the British philosophers into ordinary language analysis, besides their concern with perception, has a local base. The ordinary language for the British philosophers is identical with English language. In analysing ordinary language, he is analysing a language for which one requires Oxford and Cambridge dictionaries. It is no surprise that Austin used to carry English dictionaries in his discussion classes. The issues of philosophy have been converted to the issues of the English language. Though they have lost the empire, the British do not intend to give up their leadership in philosophy. If philosophical difficulties could be resolved only by making an appeal to the English language, then the British would certainly continue to retain its leadership in philosophy. There should be some international events which she must win, in which she must lead. There is no doubt that Austin did succeed in his project. For even those people, who cannot write one page of good English prose, started talking about Austin. Even researches are being conducted on 'How to do things with words' by those people who know nothing about English language. What is important is the fashion, and the British introduce fashions. They want that their fashions must be followed throughout the world.

My study of perception in particular and philosophy in general is open to one simple objection which I must state and resolve before closing this paper. Men are not static entities like plants and houses. They move from one place to the other, and, therefore, their ideas also move from one place to the other. The contact of people with one another leads to the contact with their philosophical views. What happens to the impact and influence which the people of one environment may have on the people of the other environment? One civilization has impact on the other, so philosophical views of one civilization may have impact on the other. It is the archaeologists and the anthropologists, no less than the philosophers, who will be agitated with my thesis. I would like to point out here that sometimes the talk of impacts and influences is prompted by reasons other than the academic. The fact that one civilization has some sort of impact on the other has sometimes led the scholars to think that one civilization functions as a blueprint for the birth and growth of the other resultant civilization. This is a malady which archaeologists and anthropologists share in common with the philosophers and the theologians. Extra-academic reasons are responsible for this malady.

Some of the studies of philosophical impacts are certainly false. These studies try to show impacts where there are none. We try to read our own thoughts in the thoughts of others. We sacrifice objectivity. Further, I do not maintain that a philosophical system born and brought up in one sort of environment, cannot have any sort of impact on the philosophical system

which is born and brought up in the other sort of environment. With what I am concerned in this paper is the magnitude, the longivity and the original character of these so-called impacts and influences. A man from Equator may be transferred to Iceland, and he may succeed in surviving there. But for his survival he requires a good amount of woollens, warmer than those used by the Icelanders; perhaps also a change in his food habits. And the descendants of this man will no more be Equatorial; they will be Icelanders. So also this is true about the *thoughts* of a man. An eastern thought may be transferred to the western world, but then it requires extremely warm dresses for its survival. And the descendants of the original thought, born and brought up in the Western climate, will no more remain eastern, they will become western. Similarly, a western thought, presented on the Indian soil, without undressing its woollen dress, will die with the Indian heat. To say frankly, what we are doing in philosophy today in this country has no historical significance. It has no place in the history of Western philosophy, and it has no place in the history of Eastern philosophy. Isn't it a pitiable situation?

Notes and References

1. H.H.Price, *Perception*, London, 1966, p. 3.
2. A.J. Ayer, *Foundations of Empirical Knowledge*, London, 1964, p. 43.
3. *Ibid.*, p. 44.
4. A.J. Ayer, *Problem of Knowledge*, London, 1956, p. 97.
5. Bertrand Russell, *Wisdom of the West*, London, 1959, p. 192.
6. *Ibid.*, p. 192.
7. *Ibid.*, p. 214.
8. Cf. *The Concept of Mind*, Penguin, 1963. Ryle's book is not only philosophical, it is a masterpiece of literature.
9. L. Wittgenstein, *Philosophical Investigations*, Preface, 1945, First edition, 1953.
10. ——*Blue and Brown Books* (Wittgenstein's classnotes) published 1958.
11. See P.F. Strawson's *Individuals*, 1959. Though the book is highly critical of Wittgenstein, it exhibits his influence.
12. *Visva-Bharati*, 1970.
13. P.F. Strawson, *Individuals*, p. 41.
14. B.B. Lal, *Indian Archaeological Expedition to Qasr Ibrim* (Nubia 1962) Antiquities Department of Egypt, 1967, p. 117.
15. Bertrand Russell, *Wisdom of the West*, p. 12.
16. Plato's *Phaedo*, 115 c-e.
17. See my further discussion on the issue 'The Nature of Being', *Philosophical Discussions*, 1979.
18. P.F. Strawson, *Individuals*, London, 1959, p. 115.

Bad news for causal explanation of human behaviour?

KALYAN SENGUPTA
Jadavpur University, Calcutta

I

This paper is an attempt, modest though, to explode the widespread and recalcitrant belief that causal explanation is innocuous in social sciences because they bear on *human behaviour* as opposed to natural sciences that deal exclusively with the *behaviour of objects*. It is this belief that is given a free sway in the following observation of Dilthey:

> All cultural sciences bear on the same major fact: the human race. They describe and narrate, judge and form concepts and theories in relation to this fact.... And in this way the possibility arises of defining the group of sciences by their common relation to the same fact, humanity, and of delimiting them from the natural sciences where "we gain control of the physical world through the study of its laws".[1]

Or you will find the same pro-Dilthey attitude in Habermas when he holds that in natural sciences we work with causal-analytical method or 'mark out nature from the viewpoint of how we can gain control of it as a world of phenomena subject to general laws'. But social sciences, as he observes, aim 'not at the comprehension of an objectified reality but at the maintenance of the intersubjectivity of mutual understanding within whose horizon reality can first appear as something'.[2] And in this respect Dilthey is accompanied not only by Habermas but also by a host of other distinguished thinkers like Paul Rocoeur, Peter Winch or Charles Taylor[3]—all of whom would give their assent to the fundamental point that cultural sciences proceed within a different methodological framework and and are constituted by a different cognitive interest than the natural sciences. And this would perhaps suggest a clue to the reason why they are inclined in favour of the *hermeneutic understanding* of cultural sciences that involves contra-causal reading of human phenomena.

To put in a different way, hermeneutic deciphering of social phenomena like human action, etc. is nourished by the following beliefs.

*In writing this paper I draw heavily on the ideas of Joseph Margolis (*Culture and Cultural Entities*, D. Reidel, 1984).

First, actions are not physical events and hence they are not amenable to causal analytic knowledge. Actions come to life only in the lived world of man, in the horizon of intersubjectivity or inter-personal relations. And this shows why human action cannot be treated as caused and why social sciences dealing with human action will resist any causal account. For causality behaves extensionally, i.e. occurs in the realm of physical events under the constraints operative at the level of physical phenomena; and hence it is inoperative in the realm of action that involves intersubjective relations, interaction or reciprocity. In fact, this has been the contention of Gould—a philosopher under the distinct spell of Marx's *Grundisse*.[4] She observes: '... the category of causality is...inapplicable to the relation of subject to subject ...[That] relation of interaction, which is the primary subject matter of the social sciences...is...reciprocity.'

Again, hermeneutic interpretation is dependent on the unwavering faith that we cannot understand human actions apart from the meanings which they have for agents—meanings which the agents have internalized through their participation in a common form of life and which are expressed through the natural spontaneity of their practices. Since causality is explicable only in the background of external relations between events, it has no bearing on our understanding of human actions which are infused with meanings enunciated within a form of life. To put it in the words of Gould: '...in as much as causal explanations take the relations among the entities which they study to be external, they cannot take into account the understanding which agents have of the meaning of their own actions or of the actions of others.'

And this amply reveals why Gould, along with Winch and other hermeneutists, is intent on explaining human behaviour not by causality but by reciprocity or what Habermas would call the intersubjectivity of mutual understanding according to common norms.[5] Reciprocity is 'inter-individual structure', 'fundamental bond'. It is not what Sartre would call 'negative' reciprocity, but what he would designate as 'positive' or co-operative reciprocity. Reciprocity, in other words, is recognition of freedom of each other, not dominance of the one over the other; it means mutual interaction between free agents on the basis of a shared understanding. Thus reciprocity entails rich intentional relations and involvement in a common cultural milieu.

Now this anti-causal manoeuvre seems to be inspired or supported by some basic ideas. First, action involves choice, and hence 'the incompatibility', in the words of Gould, 'of causal or deterministic explanations with the very concept of an agent or of an action.' Secondly, action is beyond the bounds of causality, since action, as Habermas puts it, is intentional subject to norms in relation to which the actor orients himself.[6] In other words, action is intentional directed to the realization of the purpose of the agent, and it is done according to some norms, standards or conventions. Thus some conventions governing church services give the *point* to a parson's mounting the pulpit. And explanation of human behaviour is given in terms of a purposive, rule-following model, not in causal terms. Further, Richard Taylor[7] points out (along with Wittgenstein and Melden) that the relation between intention and action is logical rather than causal, since intention is identified only in terms of the action it initiates. Again, he holds that psychological concepts like motive or intention that are employed to explain human action are not causal concepts. For intentional account presupposes that what I intend to do—whether to raise my hand or not—is 'up to me': and when I raise my hand, I might have refrained from doing so.

Obviously this contra-causal account contains a profound insight. And we should learn from it. But this account, at the same time, is also vitiated by a profound mistake. And we should prevent it in order to reach the conclusion we favour, viz. that human agent behaves causally.

II

In spite of the persuasive arguments of Habermas, Gould, Wittgenstein, Melden or Taylor against the employment of causality in the realm of human action, the question still recurs: is human action really not amenable to causal explanation? Actually, qualm about causal efficacy of human behaviour continues naggingly only among the erudite philosophers. But if you really listen to the whisperes that go on in the street or around a coffee corner, you will often come across familiar locutions like, 'What caused him to leave the country?' Or 'He intended to study non-standard logic, and that was the cause of his going abroad.' The ease and spontaneity with which common people encounter or answer such questions would reveal that they do not find it a problem to entertain causality in the realm of human action, though they know that human beings are capable of choice or of deliberate commitment to their action. This is a problem only among the brooding philosophers—a problem that often stands between them and their sleep. And arguments for and against causality in human action have such a long story that the disputing philosophers by this time are well acquainted with the distinctive strategies and moves of each other. But what specific moral can we—the onlookers—hope to have from the vast literature about action? Perhaps it is this. Any solution to the problem, whether human action can or cannot be treated in causal terms, depends mainly on how one takes *human action* and *cause*. Further, this problem is *ontological* bearing on the feasibility of mind/body reduction or identity. Again, this is also a problem connected with the prospect of the unity of science with accent on physics as the paradigm of explanatory model. Those who would look at causal explanation of human behaviour with approval are generally disposed towards a certain form of mind/body identity. And this also provokes them to assimilate social science under physical science, to explain human action by the model of laws applied at the level of basic physics. But the intention of this paper is to redraw the picture that is against any kind of reductionism, and

that favours *continuity* rather than *unity* of the sciences. And this we propose to do with reference to Davidson in particular.

In fact, how would Davidson interpret human action? What would he mean by causal talk? There is ample evidence that Davidson would like to identify human actions with physical or bodily movements. Thus, consider his example of *flipping a light switch* which constitutes his favoured specimen of action. Or consider his observation in 'Mental Events' that the statement 'John's desire caused an action' is true by virtue of the fact that both John's desire and action fall under physical descriptions that instantiate a law. All such cases show Davidson's strong inclination for identifying actions with a set of bodily movements. In fact, we have at our disposal the following explicit observations of Davidson: 'All primitive actions (tying one's shoelaces, putting one's finger) are bodily movements.'[8] Or: 'Our primitive actions, the one's we do not by doing something else, mere movements of the body—these are all the actions there are. We never do more than move our bodies; the rest is up to nature.'[9] Again: 'There is a fairly definite subclass of (physical) events which are actions.'[10] And all these observations incidentally reveal his closer tie with Danto or Goldman[11] who would like to identify action with physical or bodily events, treat it extensionally and place it under an explanatory law.

But in what sense is human action treated in causal terms? Or, to be more precise, in what sense does causal relation holds between events? In order to understand Davidson on this point, it is better to start by invoking Mackie's INUS-analysis of causality[12] that is mainly a proposal against the long-standing notion of necessary and sufficient conditions.[13] Consider the causal statement: the short-circuit caused the fire. Now one, inspired by Mill, would think that the short-circuit is both a necessary and a sufficient condition of the fire's occurring. But, on a little probe, we realize that the short-circuit is not a *sufficient condition*, for fire might not have occurred in spite of the short-circuit: many other conditions like the presence of oxygen, of inflammable materials are needed for the occurrence of fire. Again, the short-circuit is not a *necessary condition* either: for fire could have occured even without the short-circuit. We are thus led to the account as given by Mackie, viz. that the short-circuit is the INUS-condition of the fire's occurring.

It seems that Davidson would oppose the INUS-condition analysis of Mackie by exploring the logical form of singular causal statements. If the analysis of the singular causal statement, 'The short-circuit caused the fire' or 'the match stick caused the fire', is construed as a logical form proposal, it may be apparently understood as a conditional statement of some kind. But what, among other things, prevents the conditional logical form from being of any substantial interest is that any singular causal statement commits its assertor to the truth of both the 'antecedent' and the 'consequent'. Rather, a singular causal statement is a relational statement, asserting the relation of *causing* between two events picked out by the noun phrases between which the causal

relation obtains. Thus the logical form of singular causal statements bears no evidence in favour of conditional relations of necessity and sufficiency that obtain between cause and effect. But from this it does not follow that traditional causal talk, in terms of necessary and sufficient conditions, has no relevance in our understanding of causal statements. For that the cause-event is necessary and sufficient for the effect-event is what is achieved by, what Davidson would call, identity-conditions. Events are identified, qua events, only by virtue of their 'causal ancestry' and 'causal consequences'. Thus if the cause-event had not produced the effect-event, it would cease to be the event that it was. Hence the event under the description 'the short-circuit' is an event only because of its appropriate causal consequences. Indeed, other conditions, e.g. the presence of oxygen, of inflammable materials, etc. may be needed for producing fire. But this only means that the event, picked up by the description 'the short-circuit', is the event only because of having all these other conditions; and we need not—or usually do not—mention all these other conditions in our specification of the cause-event.

But in spite of the fact that the necessity and sufficiency conditions of cause-events would be secured by identity-conditions, there still lurks a fundamental epistemological problem in connection with our identification or detection of causal relations. How to detect causal relations between events? How do we understand that 'A is the cause of B' rather than 'A is temporally followed by B'? Indeed this is a very crucial question. And this brings out the significance of Davidson's appeal to covering law. He holds that a singular sequence of events is an instance of a covering-law sequence. Thus a singular causal statement should be backed by a covering-law description that operates at the level of basic physics. Again, if we believe a singular statement to be true, then we have to believe that there is some covering law because of which the singular statement is true. Thus though conditionals do not enter into the logical form of singular causal statements, yet, given a covering law, a statement about a singular causal relation is always entailed by a statement about covering law. And in this way a covering law model solves the epistemological problem of how to detect causal relations as opposed to purely temporal relations, and also insures the necessity and sufficiency of a causal-event.

But the above causal account of Davidson should be understood in its right perspective. His account should not be misconstrued as an echo of what we have already heard from Hume and Mill. Mill and Hume were definitely mistaken in thinking that to specify the cause of an event on a particular occasion is only to specify the covering law of which it is an instance. Thus Davidson holds that 'singular causal statements entail no law and that we can take it to be true without knowing any relevant law'.[14] In other words, he holds that an actual causal relation between two singular events may be detected without bringing in any laws to bear. I can know on this particular occasion that falling of the plate caused it to smash without benefit of access to the relevant laws, e.g. the effect of stress on crystalline structures. But this

does not mean either that causality does not entail that there is no covering law. In fact, we have found Davidson's explicit preference for the nomological character of causality: '...where there is causality, there must be a law: events related as cause and effect fall under strict deterministic laws.'[15] Thus his causal story ultimately culminates in the following way. I can detect or believe a singular causal statement to be true without any reference to any covering laws. But this does not mean that there is no covering law, that there are no causal regularities behind the occurrence of particular sequence of events. This only means that we need not know which causal law is the appropriate one.

Again, Davidson would be in favour of extensional reading of causal relations that hold at the level of basic physics. His account of causal mechanism is connected with the picture of the physical universe where things or physical events *happen* on the impact of the preceding conditions; where these happenings are governed by nomic regularities; where mental concepts or verbs like believing, intending or choosing have no say; and where just a mechanical relation holds between two 'unconnected' states of affairs. It is a picture of how the physical universe is running on from events to events, how this running on operates under invariable law.

With so much said by way of preamble, it is now time to consider the proposals of Davidson about *action* and *causality*. Is action really identified with bodily movements? Further, is human action explicable in causal terms, provided we adhere to Davidson's extensional model of causality? Our response to both these questions is in the negative. And here, perhaps, we are in the same boat with the hermeneutists: here we gain much from their insight. In fact, action is qualified by mental (intentional) states and, therefore, it cannot be treated in an extensional way like physical objects or physical events. For example, I can substitute 'Stone weighs a lot' by using 'iron beam' in place of 'stone', and the truth-value of the statement is not affected by this substitution. But if Othello intends to kill Desdemona and kills Iago instead, we cannot substitute 'Othello intends to kill Desdemona' by 'Othello intends to kill Iago'. Hence action being intensionally and intentionally qualified cannot be identified with bodies or physical events.

Actually speaking, even a little reflection can reveal the inadequacy of all our enthusiasms in favour of any identity-story. Actions have intentional and cultural import, and Davidson along with his friends Danto or Goldman cannot explain how they can be traced to basic or primary actions defined in terms of bodily movements. To take one example from Margolis:[16] suppose that President Nixon's speech has caused even his closest associates to press for his resignation. Now, can we bring out the significance of his speech in terms of his supposedly basic action like utterance of a sequence of sounds? Or, can we explain or identify the reaction of his closest associates only in terms of some bodily movements? Or, can a creative phenomenon like the production of *Gitanjali* by Rabindranath be accounted for primarily with

reference to bodily conditions, unless we take cognizance of some intentional load and the context of some cultural milieu that nourishes it? Of course, action is linked up with body, but any explanation in terms of body is not an explanation of action. For, as Hamlyn[17] rightly points out, human action cannot be identified with body, since the very same set of movements can be present in different kinds of actions. And all these facts will justify the great insight behind Wittgensteins observations: 'The will cannot be a phenomenon, for every phenomenon only *happens*, is perceived by us, but is not something that we do.'[18] And all these facts also go in favour of a hermeneutic plea for the distinction between physical and social or human sciences, and against the familiar assumption of the unity of science entertaining physicalism. For if causal relations behave extensionally, i.e. operate in the way they hold between purely physical phenomena, then there is, indeed, some point for the contention that causality cannot capture action which is always intensionally and intentionally qualified. But should the story end simply with this complacent belief? Are we now sure that everything is settled once and for all, that no sense can be given of our causal talk about action, and that henceforth we should no longer indulge in this kind of deliberation? No. There still remains something to plead for the humiliated causality in the realm of human action. And Davidson, indeed, shows us the way in that direction by correctly emphasizing that intention can be reconciled with causality. Thus he does justice to the crucial common sense insight as embodied in our familiar ordinary discourse. Indeed, the language in which we talk about human behaviour is full of expressions that attribute causal efficacy to states of consciousness. And Feigl correctly notes:

> 'To maintain that planning, deliberation, preference, choice, volition...are not among the causal factors which determine human behaviour is to fly in the face of the commonest of evidence, or else to deviate in a strange and unjustified way from the ordinary use of language.'[19]

Thanks to Davidson, he makes us aware of this once more. Only the way he goes is not very heartening.

According to Davidson:

> '...at least some mental events interact causally with physical events. Thus for example if some one sank the *Bismarck*, then various mental events such as perceivings, notings, calculations, judgements, decisions, intentional actions and changes of belief played a causal role in the sinking of the *Bismarck*.[20]

And this rests on the conviction:

> Suppose m, a mental event, caused p, a physical event; then under some description m and p instantiate a strict law. This law can only be physical.

> But if m falls under a physical law, it has a physical description; which is to say it is a physical event.'[21]

Thus when I intend to flip on the light switch, there is an accompanying brain wave and the consequent physical movement. Obviously Davidson favours an extensional reading of causal relations obtaining between purely physical phenomena under covering law. But how can this extensional model of causality have any bearing on action that is, contrary to Davidson's expectation, not a set of mere physical events? This causal model runs head-on with an account of action having intensional and intentional properties. And this perhaps gives sense to the contra-causal move against Davidson. But then this contra-causal strategy has also a great shadow behind it. It commits mistake in assuming that any causal talk will always be in keeping with the paradigm that Davidson favours. Thus it leaves no room for making any adjustment in our conception of causality. But is it really impossible to make such adjustment? Particularly, is it not possible to show that appeal to covering law is not indispensable? And if that is true, then there is nothing to prevent causal account of action. Further, there is no reason why there should be incompatibility of causal or deterministic explanations with the very concept of an agent or of an action. J. L. Austin[22] has, of course, made an extensive probe against this compatibility in connection with his appraisal of Moore and Nowell Smith. But he seems to flog the wrong horse. Of course, if determinism is true, one does not do otherwise than what one is doing under a particular condition. But from this it does not follow that if determinism is true, one is not capable of doing otherwise than what one does on a particular occasion. Certainly, when one stands up, one is not lying. But from this it does not follow that when one stands up, one is not capable of lying.[23] The compatibility of causal determinism with choice is never hampered, provided one believes that causality is not under the rigid constraint of deterministic law. Determinism is incompatible with choice or our capability of doing otherwise, only if we presume that regularities behind particular actions are nomic regularities which hold between physical events without any exceptions.

III

We agree that to solve the problem about causal efficacy of human behaviour is not as simple as to cross a field. But yet one should try. And this is what we are doing.

It may be that inanimate causal processes are covered by laws. But human actions are not physical events. The paradigm of human actions are free or intentional actions. Therefore, they are mentally or intensionally qualified, and are groomed in a particular culture or form of life. Social or human sciences never deny the relevance of causal account in physical terms of bodily movements connected with action. But they only draw our attention to the

crucial fact that human actions, qua human actions, are not purely bodily movements, but are imbued with intentional and intensional considerations; and that factors leading to different human creativity are always rooted in certain traditions. And all these things prove that causality, which is operative in the physical realm, cannot be extended to the realm of action; that actions are not identified in the same way as inanimate events are identified; and that regularities behind human actions are not law-like regularities, which operate at the level of physically specified phenomena.

But this is not to bid farewell to causality: this is only to hammer that causal relations involving intentions, motives, reason or meaning should be identified, detected, understood in a different way. And when we do this, we should have our first clue from Davidson's contention that causal relations may be detected independent of our knowledge of covering laws. In fact, why should we think that covering-law account is indispensable? What is the harm if we say that we can just understand or detect causal relation on a particular occasion without embarking on a law? And this would square, in the words of Platts;

> . . . with the familiar point that we have much more confidence in the truth of *singular* causal statements than we have in the truth of any given covering causal law; it also squares with the blissful disregard we prephilosophically feel about whether there is any such covering causal law when asserting singular causal statements.[24]

And if what we have said above is well taken, we can perhaps talk quite intelligibly about the causal efficacy of human action without any reference to causal processes falling under strict deterministic laws. But still many things are left in between causality and human action. We still find Wittgenstein pressing the point:

> Willing is immanent in acting itself. It does not evoke an action, it does not remain standing before an acting; in a certain way it is acting itself. Willing is, to act intentionally. But the intention in which the action is done does not accompany the acting as little as the thought "accompanies" the speaking. It also does not precede the acting but is found in acting itself.'[25]

But Wittgenstein seems to be on the wrong track. For in spite of the interdependence of intention and action, we can also press, as Margolis correctly points out, for 'the independence of particular intentional states and the actions they inform'.[26] We can think that one has intended to do X, but still has not done it. Or, some one intended to kill Hamlet but killed Horatio instead. And if particular intentional states and actions they inform are independent of one another, we find no difficulty in providing a link between them by hold-

ing that human agents behave intentionally and produce states of affairs or bring changes in states of affairs. 'How else should we understand human agency', to recall Margolis, 'unless at least as including the deliberate or intentional production of certain effects?'[27] This is only to hold that human agent is capable of causal efficacy, since 'production', as Salmon points out, is a thoroughgoing causal concept. And what is striking or crucial in this picture is this: we can identify particular instances of causality, i.e. can ascertain that *S* has exerted agency or produced an action without recognizing any strict nomic regularities under which particular actions may be integrated.

Yet it is not that human actions are not governed by regularities: it is only that they are causally explained not by covering laws, but by, what Margolis would call, 'covering institutions'.[28] Actions, as we have already said, are intention-guided : they have their full sway (at least primarily) not in the physical but in the mental realm. But intentions, reasons by which human agents bring about actions, are always nurtured by the organized and the organizing cultural horizon within which one grows. In other words, particular actions which people normally do, particular causal efficacy which they normally exert are all controlled or covered by regularities supported by a form of life. Traditions, institutions, rules or conventions regulate particular actions, so that they become meaningful and intelligible to us and win our normative acceptibility. Covering institution is not, of course, akin to covering law, since it is always subject to change. But we cannot explain, in a causal way, actions done by a human agent, in the face of different available alternatives, without reference to circumscribed regularities that are anchored in some socio-cultural context. An appeal to laws which are deterministic, and which limit *possibility* to what *actually happens* are completely inadequate to explain causally the behaviour of human agent who always participates, develops in 'intensionally qualified institutions of one's culture'.

Notes and References

1. Jurgen Habermas, *Knowledge and Human Interests* (tr. Jeremy J. Shapiro), Beacon Press, Boston, 1972, pp. 141 and 142.
2. Ibid., pp. 142 and 176.
3. Cf. Paul Ricoeur, *Hermeneutics and the Human Sciences* (tr. by John B. Thompson), Cambridge University Press, 1981; Peter Winch; *The Idea of a Social Science*, Routledge and Kegan Paul, London, 1958; Charles Taylor, 'Understanding and Explanation in the Geisteswissenschaften' in S. Holtzman and C. Leich (eds.), *Wittgenstein: To Follow a Rule*, Routledge and Kegan Paul, London, 1981. In this paper C. Taylor is concerned with *meaning* of human action, though his conclusion is different from that of Peter Winch.
4. All the quotations from Gould have been taken from Joseph Margolis, *Culture and Cultural Entities*, D. Reidel, 1984.
5. Habermas, op. cit., p. 176.

6. Ibid., p. 165.
7. Cf. *Action and Purpose*, Prentice-Hall, Englewood Cliffs, 1966.
8. 'Agency' in Robert Binkley, Richard Bronaugh and A. Marras (eds.), *Agent, Action and Reason*, University of Toronto Press, 1971, p. 11.
9. Ibid., p. 23.
10. Ibid., p. 4.
11. Arthur C. Danto, *Analytical Philosophy of Action*, Cambridge University Press, 1973; Alvin I. Goldman, *A Theory of Action*, Prentice-Hall, Englewood Cliffs, 1970.
12. Cf. Ernest Sosa (ed.), *Causation and Conditionals*, Oxford, 1975.
13. I owe debt to Mark de Bretton Platts (vide, *Ways of Meaning*, Routledge and Kegan Paul, 1979) for my analysis of Davidson.
14. 'Causal Relations' in *Journal of Philosophy* 1967, p. 702.
15. 'Mental Events' in T. Honderich and M. Burnyeat (eds.), *Philosophy as It Is*, Penguin, London, 1979, p. 219.
16. Joseph Margolis, op.cit., p. 92.
17. 'Behaviour' in V.C. Chappell (ed.), *The Philosophy of Mind*, 1962.
18. Gerd Brand, *The Central Texts of Wittgenstein*, Basil Blackwell, Oxford, 1979, p. 157.
19. H. Feigl, 'The "Mental" and the "Physical"' in *Minnesota Studies in the Philosophy of Science*, vol. ii, p. 388-89.
20. 'Mental Events', p. 219.
21. Ibid., p. 235.
22. vide, 'Ifs and Cans' in Urmson and Warnock (eds.), *Philosophical Papers*, Oxford, 1961.
23. Cf. Winston Nesbitt and Stewart Candlish, 'Determinism and the Ability to Do Otherwise', *Mind*, July 1978, pp. 415-20.
24. Mark de Bretton Platts, *Ways of Meaning*, p. 211.
25. Gerd Brand, *The Central Texts of Wittgenstein*, p. 158.
26. Joseph Margolis, op.cit., p. 78.
27. Ibid., p. 89.
28. Ibid., p. 98.

The philosophy of Sri Aurobindo*

G.C. NAYAK
Utkal University, Bhubaneswar

I

The problem for me in understanding Sri Aurobindo's philosophy lies in its multifaceted and multidimensional character which needs to be properly assessed. One feels at a loss to know what to do with his grandiloquent metaphysical system which claims to give a harmonious understanding of the entire gamut of experience encompassing the past, present as well as future, not only of mankind but of the universe as a whole. What is striking in Sri Aurobindo is that here we come face to face with a spirit inspired by a grand vision which controls every detail of the arrangement of his metaphysical system rather than an enquirer working out the details in order to build a system on the basis of his findings. The vision, a grand one for that, is thus central to Sri Aurobindo's philosophy and his detailed theories regarding man and his destiny, society and individual, life and death, good and evil, the place of reason and intuition in knowledge, evolution and history, etc. cannot be properly assessed without taking cognizance of this unique vision, and herein lies the crux of the whole problem. How are we going to assess this vision *vis-à-vis* other such visions and, what is more important, what would constitute the criteria of demarcation between a metaphysical vision and a vagary?

Whatever in metaphysics cannot stand to criticism is not worth having and that means a great deal, but it does not mean everything. Among things that remain is the vision which, to my mind, can be regarded as the soul of metaphysics. The vision in question is meant to function as a guide, a map, a beacon light for the life of everyman who, at least, cares to take note of it, and this is the actual significance of the emphasis on reality as against appearances found in metaphysical literary works. It is this invaluable guidance which is most lamentably missed by the layman in the present-day linguistic philosophy, and yet the question remains as to the difference between the guidance obtained from metaphysical vision and from the vision of poets, artists and of the saints or religious leaders who are not interested in building a metaphysical system on the basis of their vision. Sri Aurobindo could be viewed as a saint or a religious leader no doubt, but he was also a metaphysician on a grand scale. The difference, to my mind lies in the metaphysician's conscious and consistent effort to examine if his vision is an adequate one and to see how

*Sri Aurobindo Endowment Lectures delivered in the Department of Philosophy, Burdwan University, during April, 1985.

far it satisfies the criteria of adequency. He puts his vision to the tests of critical reflection, and a controversy may be raised and is consciously entertained by the metaphysician regarding adequecy of his system based on the vision and of other metaphysical systems. It is thus that there is a scope for some metaphysical systems being undermined for certain purposes at the hands of fellow metaphysicians.[1] Metaphysical vision can, of course, be distinguished from a mere subjective vagary by criteria of adequacy such as comprehensiveness, power of explanation, avoidance of conflict with established scientific laws, respect for structures built up by empirical enquiries, etc. as envisaged by Emmet[2], and this may be all right in so far as it goes, but what about the truth claim in metaphysics? Vision, only when it is subjected to the test of critical reflection, can be regarded as *darśana* in its technical sense as used in the Indian philosophical context. But is it a vision of reality, *tattvadarśana?* That it is *tattvadarśana*, that it is a vision of the reality, is what is claimed by the metaphysician. The problem is: how are we going to assess this claim? Herein lies the difference between a metaphysical vision and a map. The metaphysical vision is certainly not verifiable in the same way in which a map is verified, and yet the metaphysician claims that his metaphysics does have an assertive content. What about *anubhava?* By assertive content here, are we to mean that his metaphysical vision is verifiable in *anubhava?* It may be so, but it should be borne in mind that it is not verification in the ordinary sense of the term. In that case, should we not take it to be a mere linguistic proposal based on and borne out of one's own experience or *anubhava?* But here again it should be borne in mind that the metaphysical system based on vision involving the transformation of the total personality of man is not a mere proposal. The vision is unique, and the system built upon the vision is also a unique one and it has got to be assessed as such. This is true at least of metaphysical systems like those of Sri Aurobindo.

II

Here we are required to avoid meticulously certain pitfalls which might lie on the way of interpreting the unique metaphysical system of Sri Aurobindo. One such pitfall becomes evident in any attempt to prove that Sri Aurobindo's philosophy is scientific or to show that his vision of reality gets confirmed by recent scientific findings. Dr. Fritjof Capra, for example, in his three lectures,[3] delivered under Sri Aurobindo Memorial lectureship endowment for the year 1980 in the University of Bombay, has taken such a stand which is, however, misleading. Atomic physics, says Capra, reveals a basic oneness of the universe. This is very much the way in which Eastern mystics experience the world. In the words of Heisenberg, one of the founders of quantum theory, 'the world appears as a complicated tissue of events, in which connection of different kinds alternate or overlap or combine and thereby determine the texture of the whole'. After quoting from Heisenberg, Capra goes on to compare this view with that of Sri Aurobindo. 'The material object', says Sri

Aurobindo, 'becomes . . . something different from what we now see, not a separate object on the background or in the environment of the rest of nature but an indivisible part and even in a subtle way an expression of the unity of all that we see'. Capra further speaks of the present-day scientific emphasis on an essential interconnectedness of all phenomena and tries to vindicate Sri Aurobindo's philosophy in this light. The new vision, according to Capra, is now emerging in several branches of science—like physics, biology, psychology, etc. Reductionist, mechanistic views are being replaced by holistic and ecological views. This may be allright in sofar as it goes, and yet we must not allow ourselves to be swayed away by such superficial similarities. Wittgenstein's motto, 'I shall teach you differences', may perhaps be of some value to us here, and one should meticulously avoid being fed by what Wittgenstein would call 'a onesided diet'. Wittgenstein may not have the last say in all philosophical matters, but it is worth remembering that 'the popular scientific books by our scientists aren't the outcome of hard work, but are written when they are resting on their laurels.'[4] Wittgenstein's conversation with M.O.C. Drury regarding *The Mysterious Universe* of Sir James Jeans are relevant in the present context also. 'These books which attempt to popularize science,' remarks Wittgenstein, 'are an abomination. They pander to people's curiosity to be titillated by the wonders of science without having to do any of the really hardwork involved in understanding what science is about'.[5] Metaphysical theories such as those of Sri Aurobindo which are based upon a unique grand vision are better not assessed in terms of any popular scientific creed, or the tempo of popularized science of the day; for it is not meant to be so assessed. Although it may be true that some support for Sri Aurobindo's philosophy could be found in popularized scientific theories of the day, the support, I am afraid, is only superficial and one will do well not to count upon such superficial support based on superficial similarities.

III

Criticisms of Sri Aurobindo's philosophy can similarly be based on a superficial understanding of his enterprise, and we should do well to remember that a piecemeal analysis and assessment of the different aspects of his philosophy without taking into account the unique vision that controls all these different aspects will simply not do. Let us take, for example, Sri Aurobindo's interpretation of history. 'Sri Aurobindo's spiritual and teleological theory of history', says D. P. Chattopadhyaya, 'is likely to be criticised for its alleged and unnecessary mystification of some plain facts and phenomena of history which . . .could well be explained in the plain way without using any transcendental hypothesis'.[6] Sri Aurobindo speaks, moreover, of an inner meaning of history, but can we speak of such an inner meaning? What about the different interpretations of history given by different thinkers like Marx, Toynbee, etc.? How are we going to assess Sri Aurobindo's interpretation *vis-à-vis* all these diverse interpretations? Chattopadhyaya rightly points out that 'one

may challenge the very basic assumption of Sri Aurobindo, namely, the social evolution, the human cycle, is proceeding towards an ideal state of society based on spiritual unity of mankind'. Popper, on the other hand, draws our attention to the fact that 'history has no ends, we can impose these ends of ours upon it; and although history has no meaning, we can give it a meaning'.[7] 'One may point out', says Chattopadhyaya, 'that both the spiritualist and the materialist interpretations of history, inspite of their basic difference, are open to one common criticism. They are untestable and incorrigible'.

Now what are we going to do about all these criticisms. To my mind, all these criticisms of Sri Aurobindo's philosophy of history are fundamentally misconceived, the reason being that here Sri Aurobindo is not putting forward an empirical hypothesis, nor is the thesis meant to be testable in the ordinary sense of the term.[8] Sri Aurobindo does not, as a matter of fact, attach much importance to objectivity of reason when he comes to speak of his unique vision in terms of which everything is interpreted.[9] 'It has been implicitly or explicitly held as an axiom', says Sri Aurobindo, 'that all truth must be referred to the judgement of the personal mind, reason and experience of every man or else it must be verified or at anyrate verifiable by a common or universal experience in order to be valid.' Sri Aurobindo rejects this as 'the false standard of reality and of knowledge'. The sovereignty of the normal or the average mind leads to what Sri Aurobindo calls an 'egoistic illusion', 'a gross and vulgar error'.

D.P. Chattopadhyaya does not fail to refer to this most important trend in Sri Aurobindo's philosophy but its significance, to my mind, can be brought-out fully only by highlighting the role of supramental in his philosophy. In order to have a proper appreciation and understanding of Sri Aurobindo's interpretation of history also, this very point needs to be worked out with special reference to Sri Aurobindo's notion of the supramental; for it is in terms of the supramental alone that the mental plane and all that goes with it can be properly assessed according to Sri Aurobindo, not vice versa. Herein lies the crux of the entire situation, and if this is missed the whole of Sri Aurobindo's philosophy, including his interpretation of history, is likely to be distorted. One may not agree with him, but for a proper understanding of his position the significance of his key concept based on the unique vision needs to be understood and appreciated. This I will be doing in the sequel.

IV

'Supramental' brings out an entirely new dimension in Sri Aurobindo's philosophy, and the crux of the problem is to assess the exact significance of supramental knowledge. The point in question is whether anyone is entitled to speak of a knowledge as supramental. If I know that something is the case, the first condition which has to be fulfilled is that I must be sure of it; and that even is not all, I must also have the right to be sure, and what I am said to know must also be true.[10] Apart from these conditions, we cannot in any

case rely on a supposed mental state acquainting us with truth or reality by virtue of its uniqueness as an infallible cognitive state. Once this preoccupation with an infallible state of mind is gone, we have no other alternative but to analyse an ordinary knowledge-situation in order to ascertain what exactly is implied in our knowledge-claim. If I know that something is the case, I must not only be sure but I must have the right to be sure, that is to say, we require 'a rational or adequately grounded certitude'.[11] Moreover, what is known must, in fact, be the case. But as it has been pointed out:

> ...if knowledge is so defined that we are only knowing when, as well as being and having the right to be sure, that of which we are sure is in fact the case, then knowledge is elevated into something that we may have but can never know that we have. For we can never claim that in addition to grounds for rational certainty that *p*, we have some further and independent guarantee that *p*. There is thus a significant case for defining knowledge, in order that the word shall have a practical use, in terms of rational certainty alone.[12]

Can we then speak of any rational or adequately grounded certitude in case of supramental knowledge-claim? It is always possible for a knowledge-claim to be erroneous, although it is true that knowledge by definition must be true. The question before us, therefore, is whether Sri Aurobindo is entitled to make such a knowledge-claim, and whether it is rationally justified, or, in other words, has he got the appropriate right to be sure? Obviously, we are here not dealing with the usual methods of knowledge nor do we have any recognized criterion for deciding Sri Aurobindo's right to be sure in this context.

We are told by Sri Aurobindo that our ordinary ways of understanding the reality and usual standards of knowledge are not sacrosanct, and that they need to be replaced by a new dimension of understanding and a novel standard when we come to concern ourselves with what he calls 'a vast domain of possible knowledge'.[13] *Life Divine*, the *magnum opus* of Sri Aurobindo, is very clear on this issue. In this context, he draws our attention to what he regards as 'a false standard of reality and of knowledge'. 'The egocentric attitude' which consists in implicitly or explicitly holding 'as an axiom that all truth must be referred to the judgement of the personal mind, reason and experience of every man or else it must be verified or at any rate verifiable by a common or universal experience in order to be valid', far from being a valid standard of knowledge, is, according to him, "an egoistic illusion, a superstition of the physical mind, in the mass a gross and vulgar error', and, therefore, needs a drastic transformation when it comes to deal with matters supernormal. 'The sovereignty of the normal or average mind and its limited capacity and experience', and 'the exclusion of what is supernormal or beyond the average intelligence' are simply unacceptable to him.

'To refuse to enquire upon any general ground preconceived and *a priori*', says Sri Aurobindo, 'is an obscurantism as prejudicial to the extension of knowledge as the religious obscurantism which opposed in Europe the extension of scientific discovery.'

Sri Aurobindo, ofcourse, suggests some check to wild vagaries that might lead one away from truth, but the check suggested is not in terms of verification in ordinary sense but in terms of verification by sameness or similarity of spiritual experience.

> All reality, all experience [according to him,] must indeed to be held as true, be capable of verification by a same or similar experience; so, in fact, all men can have a spiritual experience and can follow it out and verify it in themselves, but only when they have acquired the capacity or can follow the inner methods by which that experience and verification are made possible.

Sri Aurobindo, thus, advocates what I would regard as some sort of theory of verification by the spiritual elite, and for him, therefore, 'the supraphysical is as real as the physical, to know it is part of a complete knowledge'.

Here one thing is clear; Sri Aurobindo talks of 'knowledge' not in any ordinary sense. But then, is he entitled to use the word 'knowledge' in an extraordinary sense? Has he got the right to be sure of the supraphysical, supernature or supramental in any sense? The question is whether it is proper for one who reports a compelling awareness of Supermind or Gnosis to claim to know that the supramental is a reality. In his own experience, of course, and in similar experiences of some others he has a good and compelling reason to be sure of it. And that is why the denial of the workings of the Divine is, from his point of view, only a denial of the truth as it obtains. It is, therefore, very natural on his part to condemn in strongest of terms what, for him, is 'the attempt to deny or stifle a truth' as 'a kind of obscurantism' or even as 'a vulgar or rustic error'. 'Real then to the man who had contact with it or lives in it is this cosmic consciousness, with a greater than the physical reality; real in itself, real in its effects and works".[14] If Sri Aurobindo is denied the right to be sure in this case only because he does not have resort to the usual accredited methods of knowledge, it could be pointed out that only because one does not have the requisite experience one is not authorized to deny such experience to others, and to deny that others may properly claim to know on the basis of their experience. It will, of course, not be knowledge in the ordinary sense nor is it meant to be so. As Ayer has significantly observed in another context:

> ...it is possible to find, or at any rate to devise, examples which are not covered in this respect by any established rule of usage. Whether they are to count as instances of knowledge is then a question which we are left free to decide. It does not, however, matter very greatly which decision we take. The main problem is to state and assess the grounds on which these claims to knowledge are made, to settle as it were, the candidate's marks. It is a relatively unimportant question what titles we then bestow upon them.[15]

But, who is to assess, and how is one going to settle the candidate's marks? Our normal assessment of the grounds on which knowledge-claim is usually made is itself challenged by Sri Aurobindo:

> The dialectical intellect [according to him] is not a sufficient judge of essential or spiritual truths; moreover, very often, by its propensity to deal with words and abstract ideas as if they were binding realities, it wears them as chains and does not look freely beyond them to the essential and total facts of our existence. Intellectual statement is an account to our intelligence and a justification by reasoning of a seeing of things which pre-exists in our turn of mind or temperament or in some tendency of our nature and secretly predetermines the very reasoning that claims to lead to it. That reasoning itself can be conclusive only if the perception of things on which it rests is both a true and a whole seeing.[16]

Sri Aurobindo continues to harp on the need for expanding one's consciousness and attaches utmost value to what he calls 'the consciousness that proceeds by sight, the consciousness of the seer', for, according to him, such consciousness 'is a greater power for knowledge than the consciousness of the thinker'.[17]

> *The illumined mind* [says Sri Aurobindo] *does not work primarily by thought, but by vision; thought is here only a subordinate movement expressive of sight.* The human mind, which relies mainly on thought, conceives that to be the highest or the main process of knowledge, but in the spiritual order thought is a secondary and a not indispensable process.

The entire evolution, according to him, is driving towards what he calls 'a wider mind', 'a reversal of values or a discovery of new values and a transfer of life to a new foundation'. And here in lies the crux of the problem. The question is not so much as how to make a rational assessment of the grounds on which knowledge-claim is made in this situation, it is one of how we are going to understand this whole enterprise that puts to question the very validity of rational assessment unless it is backed by the appropriate consciousness, experience, or vision.

Is anyone entitled to speak of the supramental while all our assessments are bound to be made on the mental level alone? All concepts including that of 'assessment' are nothing if not mental. And here we are told of 'a gnostic

change' in which 'there is a supreme and radical reversal of consciousness and the standards and forms of mental cognition are no longer sufficient'. 'Race of mental beings' is going to give place to 'a race of gnostic spiritual beings', we are told; and our mental standards of judgement are inadequate to assess the exact significance of the workings of the spirit which are at the back of the evolutionary process. The problem here for us is mainly one of intelligibility. Whatever may be the truth or reality, it goes without saying that we must, first of all, understand the exact significance of what is being said, what is being claimed to be true or real. Understand we must and our understanding is bound to be on the mental plane, howsoever inefficient the mind may be in understanding spiritual matters. So also assessment is bound to be a rational assessment, if we are not going to be lost in wilderness. Even 'a reversal of present law of human consciousness and life' as envisaged by Sri Aurobindo—'a life of gnostic beings carrying the evolution to a higher supramental status' which, according to him, is a divine life—can only be understood in terms of conceptual tools available to us in our mental plane. And there is no way, apparently, of going out of the situation.

Sri Aurobindo's thesis on our understanding is neither verifiable nor falsifiable. The entire thesis, therefore, stands open to criticism of being devoid of content—of course, from the standpoint of our mind and intellect. Verification by the spiritual elite is not verification in the usual sense, and falsification of such a thesis cannot be conceived in any finite experience. The vision of 'a complete transformation of the earth's life', of 'gnostic individuals in a gnostic community', or of 'a perfected human world' is certainly not falsifiable; and, according to Flew's well-known falsifiability criterion of meaning, it may, therefore, be condemned as vacuous. Every movement of history, every event of the past or the pattern of events which are yet to come can be interpreted as supporting the thesis, while nothing is allowed to count against it. Even examples, worst suited from our point of view to spiritualism of any sort, are interpreted by Sri Aurobindo as evidences for and examples of the divine working in nature. The knowledge-claim involved here runs the risk, therefore, of being devoid of content and vacuous.

One thing is clear; such theses are not, and are not even meant to be, testable. But are we justified in bringing about the charge of vacuity against such theses? They are non-scientific and non-empirical, but why should they be considered 'vacuous' unless the term itself is so defined as to be synonymous with 'non-scientific' or 'non-empirical'?

Moreover, the theory that an unfalsifiable thesis must be vacuous would commit us to the absurd view that well-known significant statement like 'mermaids exist' is devoid of content and vacuous. Pure existential statements like 'mermaids exist' or 'nonblack ravens exist' cannot be falsified, but it would be absurd to hold that they are, therefore, devoid of content and vacuous. It is true that one cannot assert something to be the case without denying at the same time that something else is true. A putative assertion,

to be an assertion, must be incompatible with some other assertions. But then this does not commit us to the view that an assertion, *qua* assertion, *must* be capable of falsification. The state-of-affairs denied by an assertion may be intelligible and conceivable, and yet may be such that its obtainment may never come to be known beyond doubt through any number of finite experiences. The assertion, for example, that 'mermaids exist' denies the truth of, and is incompatible with, statements such as 'mermaids are fictitious', 'mermaids don't exist', and so on. 'Mermaids are fictitious' is, of course, falsifiable, but 'mermaids exist' is not. We understand what we mean when we deny that 'mermaids are fictitious'. What is denied by our assertion that mermaids exist is the state of-affairs expressed by the statement, 'If one were to search every nook and corner of the universe, he would not find a mermaid' or 'Nowhere in the universe there exists a half-human being with the head and trunk of a woman and the tail of a fish.' But as one can never be in a position to say that he has searched every nook and corner of the universe, the assertion that mermaids exist remains for ever incapable of falsification. Coming to consider Sri Aurobindo's thesis that the entire evolution is guided by spirit and that the goal of history is the descent of Supermind on earth, we find that it is also incompatible with purely materialistic interpretation of history offered by Karl Marx and others, with statements such as 'history has no ends', 'progress is not a law of nature' or 'matter is the guiding force of evolution'. Here, both the original assertion and the assertion with which its incompatibility is shown are incapable of falsification. What is denied by the statement that the manifestation of spirit or the descent of the supermind is our 'evolutionary destiny' is the state of affairs expressed by the statement: 'If one were to come to have a perfect knowledge of history and the nature of universe on the whole he would find no such evolutionary destiny.' Or the statement: 'There is no spirit working in the universe as known in its true nature and completeness'. But, as one can never be in a position to say that he has a perfect knowledge of the universe in its true nature and completeness, the absence of spirit or failure of the supramental to replace the mental in the evolutionary process can never be pointed out; and the statement that the supramental manifestation is our evolutionary destiny can never, therefore, be falsified. The thesis is thus non-scientific and non-empirical, but it cannot be condemned as vacuous on that ground.

Now, the problem is: can we talk of verification and falsification in case of a thesis which is itself somewhat vague? Do we have a clear notion of what supramental is like? Unless we have such a notion, how can we say that the statement regarding supramental descent is falsifiable or not? But how on earth are we going to have a clear grasp of the supramental in terms of conceptual tools or conceptual schemes available to us in the mental plane? Sri Aurobindo's view on the matter is that 'it is difficult for mental thought to understand or describe supramental nature'. Moreover, 'it is impossible for the mind to forecast in detail what the supramental change must be in

its parts of life-action and outward behaviour', for 'supramental nature does not act by mental idea or rule or in subjection to any inferior impulse: each of its steps is dictated by an innate spiritual vision'. According to Sri Aurobindo: 'A mental description of supramental nature could only express itself either in phrases which are too abstract or in mental figures which might turn it into something quite different from its reality.' How, then, are we to grasp the supramental descent in terms of our own conceptual framework beyond which we cannot go by virtue of our status in the evolutionary process? Sri Aurobindo himself has an answer for this. 'Certain deductions can be made', according to him, 'from the very fact of this difference of nature which might be valid at least for a general description of the passage from overmind to supermind or might vaguely construct for us an idea of the first status of the evolutionary supramental existence.'

V

How, then, are we going to assess the language of the supramental? Certainly, language cannot function here in a normal way, for we are confronted here with a new dimension of reality which is supposed to transmute the entire ordinary conceptual framework of ours. It is not inconceivable that during one's life-time one may stand face to face with an experience which, in the very nature of the case, it may be impossible to classify as such and such, and which, therefore, can at best be pointed to be something transcending the categories of human understanding. The supramental in this sense may be acknowledged to be impinging itself, as it were, on the threshold of the mind. Our language and conceptual tools are suited to our practical needs; they serve us well in our day-to-day transactions in the world. As a matter of fact, they are only meant to do this job, but they inevitably fail us when they are applied to a field for which they are not originally meant. Certain amount of extrapolation from the empirical and an analogical understanding with the help of empirical models are, of course, permissible and are perhaps the only means to understand the alleged unique experience. This understanding is, no doubt, bound to be inadequate in view of the fact that our conceptual tools are not meant to function in all possible circumstances. If and when there is a complete transmutation of the human personality through a unique experience, categories of human understanding, being intrinsically unsuitable for such an occasion, cannot *ipso facto* function here as usual. Here, one has to express himself through figurative descriptions by means of symbols and models. The language of the supramental is thus bound to be analogical and figurative in its implication. The description of the ascent, on the part of the spiritual seeker followed by a subsequent descent of the supramental or a light descending and touching or enveloping or penetrating the lower being, the mind, the life or the body, etc. are all to be understood analogically or in a figurative sense as attempts at describing an unusual experience alleged to be transcending the mind and its categories.

But, howsoever analogical, figurative or even vague the description of the vision may be, there is also a knowledge-claim involved, here, the claim that the seer is confronted with another dimension of reality not known to the ordinary mind, and that there is a 'radical reversal of consciousness'. It is, therefore, not irrelevant to raise questions of verification and falsification in such a context. The thesis is obviously developed on the basis of an experience or a vision, a unique one for that matter, and the reasoning advanced is only meant to make the entire gamut of our experience intelligible in terms of that unique experience or vision. Of course, there is no question here of evidence in a scientific sense. Even if the theory of evolution is referred to throughout in support of the thesis, it is not so much with a view to give an invincible proof, in the scientific sense, of the supramental as to explicate the entire vision in terms of a scientific theory in order to make it both intelligible and acceptable in our framework. How else can one explain the possibility of the same scientific theory being cited in support of two alternative pictures of the universe mutually opposed to each other? The experience or the vision here is what is most important which cannot, however, be said to function as an evidence in support of the thesis as an evidence does in science. In the very nature of the case here, no such evidence can be forthcoming The entire human history and the universe are interpreted and assessed in terms of a unique experience or vision and, what is still more important to note, the knowledge-claim involved here is meant to be justified and assessed only by a reference to this unique experience alone, not by any external criterion.

VI

Any account of Sri Aurobindo's philosophy should, I think, be considered incomplete without a reference to his masterpiece in mystic poetry, *Savitri*. *Savitri* also testifies to the same emphasis on unique vision and experience. In his 'letters on Savitri', Sri Aurobindo clarifies his position and declares: 'I am not writing a scientific treatise'.

> The mystic [says Sri Aurobindo] feels real and present, even ever present to his experience, intimate to his being, truths which to the ordinary reader are intillectual abstractions or metaphysical speculations. He is writing of experiences that are foreign to the ordinary mentality.

Sri Aurobindo again points out:

> To the mystic there is no such thing as an abstraction. Everything which to the intellectual mind is abstract has a concreteness, substantiality which is more real than the sensible form of an object or of a physical event. To me, for instance, consciousness is the very stuff of existence and I can feel it everywhere enveloping and penetrating the stone as much as man or the animal. A movement, a flow of consciousness is not to me an image but a fact.

Sri Aurobindo is aware that there is not only the problem of truth and objectivity involved here but that the main question here is that of intelligibility. But whatever problem arises here is due to the fact that the experience or vision in question is unfamiliar and the thinking connected with it, according Sri Aurobindo, is not intellectual but intuitive.

> When it is not understood, it is because the truths it expresses are unfamiliar to the ordinary mind or belong to an untrodden domain or domains or enter into a field of occult experience: it is not because there is any attempt at a dark or vague profundity or at an escape from thought. The thinking is not intellectual but intuitive or more than intuitive, always expressing a vision, a spiritual contact or knowledge which has come by entering into thing itself, by identity.

This concept of 'intuitive thinking' in Sri Aurobindo is in the least bewildering no doubt, but the implication is quite evident. The idea is that here vision which is a unique one determines, controls, and envelopes the entire process of thought of the philosopher. The problem is how to decide and who is to decide if the vision is not a misleading one. It may, for all we know, be an illusion after all. Here again, according to Sri Aurobindo, the ordinary mind, the normal intellect, is incapable of judging.

> It is not the opinion of the general mass of men that finally decides, the decision is really imposed by the judgement of a minority and elite which is finally accepted and settles down as the verdict of posterity; in Tagore's phrase it is the universal man, Viśva Mānava or rather something universal using the general mind of man, we might say the cosmic self in the race that fixes the value of its own works.[18]

The vision may have been the possession of only a few, and yet it is not condemned to be subjective or illusory simply on account of this. Sri Aurobindo is not averse even to the poetic form in which he has expressed his vision in *Savitri*; for 'the door', according to him, 'that has been shut to all but a few may open; the kingdom of spirit may be established not only in man's inner being but in his life and his works. Poetry also may have its share in that revolution and become part of the spiritual empire.' Sri Aurobindo speaks of 'overhead poetry' in this connection.

> Savitri [says Sri Aurobindo] is the record of a seeing, of an experience which is not of the common kind and is often very far from what the general human mind sees and experiences. You must not expect appreciation or understanding from the general public or even from many at the first touch; as I have pointed out, there must be a new extension of consciousness and aesthesis to appreciate a new kind of mystic poetry.

What is unique in the spiritualistic vision of Sri Aurobindo can be well brought out by a comparative study of *Savitri* with another masterpiece of spiritual mysticism, viz. *Gitanjali* of Tagore. Both derive their inspiration from the Upaniṣads, the original source of the entire body of Indian philosophical literature barring, of course, the heterodox schools of thought. The vision of an all-pervasive spirit governing the entire scheme of things is common to both. But what is unique in Sri Aurobindo is the idea of a supramental or gnostic race of beings. What is envisaged is not merely the transformation of a single individual but of the whole mankind, a total change of this very earthly existence into a life divine. In *Gitanjali* as also in *Savitri*, evils, imperfections, destruction, etc. find their culmination in the realization of spirit which lies at the end. Tagore points out that whatever remains unfulfilled or incomplete in life-time is not pointless and has its due place in the universal scheme.[19] Similarly, Sri Aurobindo also points out that 'even pain and grief are garbs of world-delight'.[20] Everything fits into a grand scheme, a harmonious whole. But for Sri Aurobindo this very earthly existence, while retaining all its specific glory, assumes a new dimension of meaning by the life divine. 'Heaven's touch', says Savitri, 'fulfils but cancels not our earth. ...Let us go through this new world that is the same. For it is given back, but it is known, a play-ground and dwelling house of God'. In a life divine, 'all now is changed, yet all is still the same'. 'Our love', says Savitri to Satyavan, 'has grown greater by that mighty touch and learnt its heavenly significance. Yet nothing is lost of mortal love's delight'. The ideal envisaged is not merely a transformation of an individual life and existence, but, in the words of Savitri, 'to raise the world to God in deathless light, to bring God down to the world on earth we came, to change the earthly life to life divine.'

A unique vision claiming to reveal the nature of Reality is thus expressed with a promise of its final fulfilment and consummation in life divine on this very earth of ours. The thesis is a metaphysical one, of course, as it is not verifiable, testable or falsifiable in a finite period of time, nor is it meant to be so in the manner of an empirical hypothesis. What is important to note from the standpoint of Sri Aurobindo is that a new extension of consciousness is a necessary prerequisite for even an appreciation of this unique metaphysical vision.

Notes and References

1. Cf. Isaiah Berlin, *Concepts and Categories* (paperback), Oxford University Press, Oxford, 1980, p. 10. Berlin writes: '...models often collide; some are rendered inadequate by failing to account for too may aspects of experience, and are in their turn replaced by other models which emphasize what these last have omitted but in their turn may obscure what the others have rendered clear.'
2. Cf. D.M. Emmet, *The Nature of Metaphysical Thinking*, London, 1945.
3. Cf. Dr Fritjof Capra, *The New Vision of Reality*, Bharatiya Vidya Bhavan, Bombay, 1983.

4. Ludwig Wittgenstein, *Culture and Value* (tr. Peter Winch), Basil Blackwell, Oxford, 1980. p. 42 e.
5. Rush Rhees (ed.), *Recollections of Wittgenstein*, Oxford University Press, Oxford, 1984, p. 117.
6. D.P. Chattopadhyaya, 'Sri Aurobindo and the Subjective and the Objective in History', Special Lectures on Sri Aurobindo delivered in Indian Philosophical Congress, Kanpur Session, 1972.
7. Karl Popper, *The Open Society and Its Enemies* as quoted in *ibid.*
8. Cf. Isaiah Berlin, 'Historical Inevitability' in Patrick Gardiner (ed.), *The Philosophy of History*, Oxford University Press, Oxford 1982, p. 162. 'We attribute purposes to all things and persons not because we have evidence for this hypothesis; for if there were a question of evidence for it, there could in principle be evidence against it. ... We are plainly dealing not with an empirical theory but with a metaphysical attitude... .'
9. Cf. Passmore's problem with regard to matters of interpretation. In his words: 'Some little time ago, I wrote a book which purported to be an interpretation of Hume's philosophy. One reviewer addressed me somewhat as follows: "...a possible interpretation but other interpretations are equally possible". How is one to reply? See John Passmore, 'The Objectivity of History' in Gardiner (ed.), *op. cit.*, p. 154. This particular problem raised by Passmore would not be perplexing for Sri Aurobindo who subscribes to some sort of a theory of verification in an extraordinary sense by the 'illumined mind' in his wider consciousness and experience—an experience that can be shared by all, provided they acquire the requisite capacity. This, of course, does not solve the problem on the intellectual plane, but what is important to note is that, in matters supramental, the intellectual plane itself, the very standard of rationality as it is normally understood, is challenged, devalued and undermined by philosophers like Sri Aurobindo who plead for a widening of consciousness.
10. Cf. A.J. Ayer, *The Problem of Knowledge*, Penguin Books, 1962, p. 35.
11. John Hick, *Faith and Knowledge*, London, 1967, p. 207.
12. *Ibid.*, p. 208.
13. *Life Divine*, Pondicherry, 1970, bk. ii, pt. ii.
14. *Ibid.*, bks. i and ii, pt. i, p. 22.
15. Ayer, *op.cit.*, p. 34.
16. *Life Divine*, Pondicherry, 1970, bks. i and ii, pt. i, p. 493.
17. *Ibid.*, bk. ii, pt. ii.
18. Letters on 'Savitri', *Savitri*, Pondicherry, 1970.
19. Cf. *Gitanjali*, 'Jivane jata pūjā holo nā sārā, jāni he jāni tāo hayni hārā', etc.
20. *Savitri*, Pondicherry, 1970.

Morals and the value of human life

M.M. AGRAWAL
University of Nigeria, Nsukka

A. What do you call just and unjust?
B. What seems so to the world as a whole?
VOLTAIRE

In the first section of this paper, I present and defend the following thesis. A large part of what we call moral discourse is directly concerned with procuring a relevant kind of *justification* for an actual or proposed act of an individual, a group of persons or, indirectly, of an institution. When in actual life we justify our actions morally, we do so by reference to certain values, generally accepted by the members of the society in which the question of justification is raised, and recognized by them as moral values. But to give a moral justification is, in principle, to provide an *ultimate* kind of justification, which presupposes the notion of 'ultimate value'. The moral values of a particular society, therefore, should be seen to interpret to its members the notion of an ultimate value, which they may or may not consciously recognize. Thus, the notion of ultimate value serves as the regulative principle for the determination of moral values, and, in certain cases, it may serve to disqualify an accepted value as a *moral* value. In a society, as more and more of its members come to regard morality as a rational enterprise, the role of the regulative principle gathers importance. Conversely, in a hidebound society where morality is simply identified with a strictly prescribed mode of behaviour, the role of the regulative principle awaits a revolution.

In the second part of this paper, I contend that the ultimate value, presupposed to be a rational morality, is the value of human life.

I

In recent analytical moral philosophy, philosophers have concentrated their attention on the study of the logical character of moral *judgments*. Through an understanding of the formal features of a moral judgment, which centrally involves answering the question 'what is one doing *in* making a moral judgement?', one is expected to discover the main burden of moral discourse. To the above question, as we know, the intuitionists, the emotivists and the prescriptivists have given different answers. But unfortunately their attempts have not met with great successes. One main reason for this seems to rest in their (mistaken) approach, which puts the study of the nature of moral judgments at the centre of ethical studies.

It seems clear that a moral judgment is just the tailpiece to a lot of dis-

cussion and reflection on matters of conduct which naturally emerges between human beings in their predicament, characterized by the fact they have to live *together* and have to share the resources of their environment and their labour amongst them, and who, unfortunately, find it hard to secure their 'fair' share without prejudice to other people's interests. It is in these discussions and reflections, generally referred to as 'moral reasoning', i.e. in the business that is conducted or presumed to have been conducted *before* a moral judgment is arrived at, that the main features of man's concern with morality are revealed. Thus, it is more to the point that we try to understand what kind of transactions are made during the conduct of the business in question.

This point is completely obscured by the talk in contemporary moral philosophy of 'justifying a moral or a value judgement' itself. For to seek and give a justification of a moral judgment must be a relatively more sophisticated, second order, activity. In real life, at the first order level of moral discourse, what we have mostly to justify are our *actions* or decisions to act in x, y manner, which we do, among other things, by *making* moral judgments. So, when we are trying to understand the nature of moral discourse, the talk of justifying moral judgments, as a primary task, can be very misleading.

What I am saying here can be explained further by analogy to legal reasoning. In a court of law, first there is a case about someone's alleged offence, and the prosecutor cross-examines the witnesses and the accused to establish the facts of the case including the intention of the accused. Then, reference to relevant laws are made and a judgment, or a verdict by the jury, is arrived at. So far what was up for justification was a certain alleged *act* of the offender, and not a legal judgment. It is only if the judgment in question is challenged that the question of justifying it arises, and then a higher court, following a somewhat different procedure, may discuss the case as presented in the first court and arrive at their own judgment. Similarly, the question of justification of a moral *judgment* arises only when a disagreement is to be settled. Normally, we discuss a case from the moral point of view to be in a position to pass a moral judgment. Of course, a morally aware person has already taken into account the morality of the act he performs; just as a law-abiding citizen keeps on the right side of the law, as though he had done the reasoning which might have been conducted in a court if he acted contrary to the law.

Some philosophers, who do not follow the judgment approach in ethical studies, turn, on the contrary, their attention to the study of moral practices. But here they forget that the following of rules such as 'thou shalt not steal' without, in general, the availability of the backing of moral reasoning will not amount to a *moral* practice; for then there would be no way of distinguishing it from action based upon mere prudence, custom or religious conditioning, etc.

Moral reasoning, as distinct from moral practice, is a self-conscious human

activity. As such it must have a definite *purpose*. Further, as a species of reasoning it is obviously a rational enterprise, while a moral practice can be 'blind'. Thus, to understand, in general terms, the nature of the transactions that take place during moral reasoning we must enquire into the aim or the point of such engagement. What is it that we are seeking to establish through such reasoning, not as a social or a psychological consequence of this exercise, but as its objectively intended result? What is it that enables us to close the business by announcing a moral judgment?

When we are trying to discover the aim or the point of moral reasoning, it may help us to consider what in actual life prompts us to engage in moral discussions. Especially, is there any thing about the human predicament such that at times we could be *required* by the society to participate, even though minimally, in discussion on questions of right and wrong in human conduct?

If, for example, I were a very reserved sort of person, minding mostly, as it were, my own business, it would be unlikely that I would subject other people's behaviour to moral scrutiny. Similarly, if I had the capacity to suffer a great deal of personal loss and injustice, I may never take a stand and go to the extent of condemning other people's attitude towards me. Needless to say that I would not be the right sort of person who would seek to give moral guidance to others, least of all try to influence their feelings and attitudes to turn them into moral creatures. Again, if I were a happy-go-lucky sort of person who lived from day to day without much thought and reflection on life as a whole, I may never, in fact, face a moral dilemma to compel me to reason with myself. And to this extent I may, in fact, have no need for *moral* reasoning. Nor to this extent a tolerant society need find my attitude morally repugnant. But supposing, to take an extreme case, a war broke out, and men of my age and fitness were required to fight in defence while I did not wish to do so. Well, in this situation, I could no longer remain a moral recluse short of being classified 'insane'. The least, surely, I will have to do is to give a moral *justification* of my option which will involve me in moral reasoning.

What I am trying to say is this. Given the social predicament, i.e. given the fact that human beings live *together* and yet are free to pursue the satisfaction of their personal goals, there will always be numerous occasions when the interests of the individuals or groups will clash and people will be called upon to justify their decisions to act in this or that way. That is, it is a feature of the social situation in which a human being finds himself that other people could always reasonably ask him to justify his actual or proposed conduct, when that is expected to affect the well-being of others. That is, unless I am a 'drop-out', my membership of a human society carries with it the assumption that I would normally come forward to justify my actions to others, if need be so. There is a kind of incoherence in the suggestion that a normal person may, in general, refuse to be accountable for his socially relevant kind of conduct to the society which nurtures him. And the kind of accountability that is required here is what we refer to as 'moral'. And the kind of

discussion that produces the required justification is what we call moral reasoning.

We can summarize the point just made as follows. On such occasions as when a man can be *required* to participate in moral reasoning, the context is primarily that of seeking a *justification* for some actual or proposed act. From this it follows that finding the relevant kind of justification, or exposing the lack of it, must be the primary aim or the point of moral reasoning. It is true that, more apparently, moral reasoning is employed not only to seek justification of actions but also to appraise people—their character and motives etc. But it is not difficult to see that our interest in making such appraisals is dependent upon our interest in the nature of what they *do* or what they might possibly do. In recent times, many philosophers, noteably Mrs. Philippa Foot,[1] have argued that moral argument must have a *point*, and that its point is to determine what relationship a given conduct has to 'human good and harm'. There is no doubt that in moral argument questions of human good and harm naturally arise. But that does not explain the point of *moral* argument as opposed to any other argument, e.g. political, economic, etc. The point of moral argument, as we have seen, is to seek a relevant kind of justification; it is a further question whether that justification is procurred by reference to human good and harm or not.

It may now be objected that my analysis of the situation that requires us to invoke morality does not bear with reality. In many societies, the conduct of their members is not judged by reasoning in open public forums. Rather, moral appraisals are made strictly by reference to a prescribed set of standdards. In these societies, people tend to identify the prescribed practices with the content of morality. They tend to think that acting morally *means* behaving in the prescribed manner, and no distinction is drawn between customary expectations, such as regarding matters of etiquette and matters of morality. Moreover, people in these societies tend to think of the dissimilar, although similarly prescribed, practices of other societies as immoral. In these societies, the question of seeking justifications by moral reasoning simply does not arise. How then do I say that, typically, moral questions arise when someone's conduct is required to be shown to have a rational justification?

Now, in the kind of social order in question, it is true that the question of justification is not often raised. But this is not because the idea of justification is thought to be irrelevant to moral appraisal, but because the procedure of justifying has been over-simplified by setting up absolute standards to which behaviour must conform. And this simplification is achieved by sacrificing the freedom of the rational agent to defend himself, if he decides to reject the operative moral standards of his society. It is a feature of an authoritarian society that its people are denied a chance to engage in a rational discussion of the standards of behaviour thrust upon them, to which they can only conform. But the enforcement of a packaged morality does not dissolve the need of rational discussion, it only evades it and consequently brutalizes

morality. Conversely, in an open society, it must always be possible to discuss the morality of particular issues rationally. The conduct of moral reasoning seems to be embedded in the very structure of human relationship, where people expect of each others that certain of their actions should be justifiable, and, therefore, acceptable, to them. In a society of free and rational creatures, it is natural that we demand and offer justification for our actions when such actions seem to threaten or minimize the well-being of people, since to seek justification is to follow a rational procedure in determining what ought to be done. So far, then, our contention is that moral reasoning is characteristically a justificatory enterprise. The next, obviously crucial, question that naturally arises concerns the nature of this justification. More specifically, what is it that justifies actions *morally*? In trying to answer this question, we shall not concern ourselves with the substantial principles that might be appealed to in moral justification. Our effort will be limited to determining some of the formal features of whatever may serve to justify actions morally, and to showing why anything to be considered as a standard in moral justification must possess those formal features.

Now, before we can give a straight answer to the above question, it will be necessary to be clear about the following matters. First, we must note certain general points about the notion of justification itself. Among other things, any process of justification involves:

(*a*) Following a rational procedure, which in turn involves looking for reasons which are *relevant* to the case in view. (If whatever pleased one-self justified one's conduct, then there could be no question of justification.)
(*b*) A reference to some principles or characteristics other than those constituting the contents of the conduct to be justified.
(*c*) This external element referred to should be such that it is either already accepted without needing further justification, or else it can be shown to be acceptable by reference to another element of that kind, i.e. a justification is necessarily impersonal and objective or else it could not come to be *required* by other rational creatures.
(*d*) What eventually justifies must be recognized to possess the highest value or worth in the universe of discourse within which the question of justification is raised.

Next, we must be clear about the context in which a moral justification is sought. For this we need to consider (*a*) the nature of the conduct for which it is sought, and (*b*) the nature of the entity to which the justification is offered. Let us take the former first. While ideally a rational being needs to have some sort of justification for all his deeds, it is not always a moral justification that is required. A commander, for example, in a battlefield may have to take a snap decision and order his forces to withdraw from the advanced positions.

It is a technical decision, and the justification of this decision will be sought by reference to the norms of good combat tactics. And even though his decision affects the lives of many, unless he is suspected of some non-military motives for his decision, he would not be required to give a moral justification for it. Similarly, many things which we all do in day-to-day life, which have no foreseeable consequence for others, such as choosing to have tea rather than coffee this morning, do not need moral justification. By contrast, I think it will suffice us to note that any action, when considered in its non-technical and non-personal aspect and also in terms of its possible relevance to the lives of others, *could be* in need of moral justification.

Now let us consider (*b*) above. At first this enquiry may strike a bit odd, for after all I may have to offer moral justification to all sorts of entities—my father, the head of my department, the government or the trade union to which I belong, etc. But now let us note the following complexity. The justification which I may offer to my father, if supposed to be a moral justification, is not something such that it has to satisfy him *qua* my father, not even if he happens to be the person who is directly affected by the act which is to be justified. That is, in general, a moral justification is not such that it has necessarily to satisfy the person who is the victim of my misdeed. In fact, I may not have to offer a justification to my father at all, since he may not be bothered about it. But my friends and colleagues may be more concerned about my behaviour towards my father. So I may have to satisfy them rather than the victim. In fact, it could be anyone who feels concerned about my behaviour in question whom I may have to satisfy. Similarly, the justification of my behaviour which I have to offer to the head of my department has nothing to do with its being offered to the *head*. It is offered to the head rather than the cleaner only because he is more directly concerned with hearing my case. What these observations show is that the entity to which a moral justification is offered is conceived as *anyone*. When we are giving a moral justification we have to ignore the social status or the personality of the entity to be satisfied. Our moral justifications are not to consist of such reasons which may have a sectarian or idiosyncratic appeal. When we offer a moral justification to anyone—a father, a stranger, the state or the church—it has to be to the satisfaction of *anyone*. That is, a moral justification is not restricted to the satisfaction of an individual or to the members of a select group or a sect, etc. but, in principle, it should be able to satisfy the whole mankind.

We may now attempt to answer our main question concerning the formal features of the standard in moral justification. We have seen, firstly, that the action which needs a moral justification is considered in its non-technical and non-personal aspect, and in terms of its possible relevance to the lives of others. And, secondly, that the justification offered should be such that, in principle, it could satisfy the whole mankind. So much is implied by the context in which a moral justification is sought. And now, these implications, coupled with the last requirement (see [*d*] above) for anything to count as a

justification at all, lead to the answer we are looking for. They lead to the conclusion that to provide a justification in morals, what we appeal to must be ultimately an *universely accepted* value. Such a value must *necessarily* transcend the limitations of creed, race and culture. It must be a sort of value such that by reference to it the historically determined social values of particular societies might themselves be justified. Such a value, then, rightly deserves the title of 'ultimate human value'.

It is pertinent at this juncture to take note of the position taken by Phillips and Mounce, and to compare it with mine. It is true that, in actual day-to-day life, actions are morally justified by reference to certain generally accepted values in a given society. Thus, Philips and Mounce point out: '...when we wish to justify our moral judgements or render them intelligible, we make use of such concepts as honesty, truthfulness, generosity, etc.'[2]

> Within our society, it is taken as a matter of course that a man should tell the truth rather than lie, respect life rather than kill, be generous rather than mean, and it is just because these things can be taken as a matter of course that it is possible for a man on a particular occasion to make a moral judgement or adopt a moral position.[3]

And later they say:

> In order to ask whether something is right or wrong, we must abide by the rules governing the use of these terms. The application of the word 'wrong' to uses of lying is one of our criteria for the use of that term. When we consider lying in a purely descriptive aspect, then for the moment we step outside these criteria. Having done so, however, we can no longer ask whether lying is wrong because in deciding whether an act is wrong we use lying as one of our criteria. One can convince oneself of this simply by trying to imagine the situation in which one would ask whether or not lying is right. One can imagine oneself asking whether a *particular* lie is justified, but if one asks whether lying in general is right, one finds oneself at a loss, not simply to answer the question, but to imagine the kind of consideration that would lead one to answer it.

Now, ignoring the difficulty in justifying moral *judgments* discussed earlier, there seems to be some truth in the position taken above. But Philips and Mounce put too much weight on the contingent fact that certain values are taken as a matter of course in a given society, which obscures the nature of justification in morals. It is, for example, true that unless certain moral values were taken as a matter of course there will be no occasion for a moral discussion. But this fact has no tendency to show that for that reason any set of values taken as a matter of course are unambiguous or unquestionable. Nor does it explain why the values taken as a matter of course are *moral* values,

since a prevailing value may not be a true moral value at all but a historical product of prejudice and ignorance. Consider, for example, a society in which a young prince and a princess are executed in public for loving each other of their own free will but against the wishes of the 'elder' of their royalty. In such a society, the obedience to the authority of the elder is taken as a matter of course, and apparently rated much higher than respect for human life and personal freedom. Are we then going to take it as a true moral value? Phillips and Mounce will naturally retort that it was a true moral value *for that society* but not in all human societies. But then they have to explain to us why *we* should describe it as a *moral* value at all. It cannot be so simple because that value is taken in that society as a matter of course to *justify conduct*. For that is not *our* concept of morality or moral value. In the last quotation above, Phillips and Mounce themselves maintain that 'if one asks whether lying in general is right, one finds oneself at a loss, not simply to answer the question, *but to imagine the kind of consideration* that would lead one to answer it' (*italics ours*). If this is true, then, indeed, we cannot question the truth of 'lying in general is wrong'. But then this would not be so simple because 'within our society, it is taken as a matter of course that a man should tell the truth rather than lie'. Moreover, we need some explanation of the fact why it is so difficult 'to imagine the kind of consideration that would lead one to answer' if lying in general is right. And if it is impossible to imagine this, then 'lying in general is wrong' must be a universally valid belief, irrespective of whether or not, in any particular society it was actually taken as a matter of course.

The truth, however, is that there is no human society in which lying is preferred to truth, where murder and rape are encouraged, where old and disabled, not useful to the society, are dumped in the sea, where ignorance, poverty and disease are contemplated as perfections of human condition. That is, we can separate a nexus of moral values which are universally accepted from those values which are more or less peculiar to a given society. We can then enquire why there is such a universal nexus of moral values, and whether, in the nature of the human situation, it must be so. The answer to these questions will also reveal the limits of the range of values which a society could possibly uphold as moral values.

Thus, it can be argued against Phillips and Mounce that among the values taken as a matter of course in a given society some may turn out to be phoney ones. And often it may be possible to detect them by criteria available from within the axiological resources of that society. The rationale of the distinction between the genuine and non-genuine moral values is, as we have suggested, to be found in their connection with the constitutive principle of the universal nexus of moral values or what we have called the *ultimate human value*. Thus, the values which are taken as a matter of course in a society exhibit the understanding, or its lack, of its members of the true nature of morality, since, as we have noted, they constitute their interpretation of the

ultimate human value. A value is not a moral value unless, in principle, it could be upheld by all mankind. Moral justification as a concept, distinct from other forms of social justifications, could not exist without the assumption that there are certain values which *any* human being will accept if only he had the freedom and reason to perceive them.

The role of moral values can be appreciated now. We do not normally justify our actions by reference to ultimate values. Many of us may never have even thought of any such thing. In day-to-day life we justify actions by reference to what are generally accepted as moral values in the society to which we belong. But if my analysis is correct, the validity of this procedure requires us to assume that the moral values in question embody some or other aspect of an ultimate human value. Thus, in effect, moral values mediate between particular actions and an ultimate human value. Theoretically, one can do without the use of moral principles, if one has the intelligence and time to begin, as it were, always from the beginning. For, one who perceives the true end of morailty and knows how to realize it in actual life, conformity to the ready-made moral principles is unnecessary. The sum total of the moral values of a society is its image of humanity, for it constitutes their conception of human perfection.

II

We have argued that the concept of moral reasoning primarily signifies a rational enterprise, namely, an undertaking to seek and offer an ultimate kind of justification for human conduct. It is a kind of justification which is *in principle* offered to the whole mankind and can be required of anyone. Although, in day-to-day life, moral justification is sought by reference to certain values which constitute the universal nexus of morality, for such a system to work there must exist an *ultimate* value (or values) by reference to which the ultimate character of moral justifications may be established, if need there be. The universal nexus of morality represents the immediate meaning of the ultimate value, and thus, in a secondary sense, it may also be regarded as ultimate. Now, in this section, I offer the suggestion that the ultimate value, presupposed to be morality, is what has traditionally been recognized as the sanctity of human life, and derivatively as the supreme worth of the individual person, or simply as the value of human life or humanity. To value human life is to have respect for persons as *ends*, i.e. to care for them for what they are, i.e. to care for their existence and blossom. Subsequently, to value human life is to value all those things which are necessary for a man to develop all his potentialities to live as a truly rational social being. Thus, moral values can be defined as those in whose pursuit the ultimate value of human life is best realized.

Many philosophers, often as diverse as Kant and Marx, have, from different considerations, reached the conclusion that morality must be universal. Thus, Kant founded morality on human reason which is universal in mankind

and which transcends the limitations of his 'inclinations'. He saw that human beings *qua* rational agents possess intrinsic worth, since they are *ends* in themselves; while other worldly entities, such as seas, hills, forests and animals, are not objects of value or disvalue until they are considered in terms of human interests, goals and purposes. Human beings, he thought, must also be the ultimate end of man's rational pursuits, since man's practical reason can consider only that as an end which is, in some sense, necessarily an end, such as an end-in-itself. Thus, since the ultimate end of man's rational pursuit is the same for Kant as the moral end, he gave the fundamental principle of morality, in one of its formulations, in the following: 'So act that you treat humanity in your own person and in the person of everyone else always at the same time as an end and never merely as means.'[5]

Similarly, Karl Marx, although notoriously a critic of universal morality, was led to a similar ethical position from the considerations of his glorified image of the natural status of man as the bearer of such potentialities which allow him to treat himself truly as an end in himself. Recognizing that in the universe man is the only subject and thus the highest being for man, Marx held that the truly social man is the supreme *end* of morality, and any situation or action that hinders him to *be* that is unethical.[6] Implicitly, then, Marx is also advocating the Kantian ethic 'to treat humanity as an end', and explicitly he goes beyond Kant to advocate the destruction of all those conditions which hinder man in becoming truly human.

Now, both the positions sketched above, suffer from a common malady. Both Kant and Marx (and numerous others), as we have seen, are keen to attribute a certain dignity and worth to man, i.e. to recognize the value of human life, so that man can merit being treated as the true *end* of ethics. But they try, explicity or implicity, to *derive* this value from the consideration of certain facts about the nature of the *individual* man, such as, his possession of a rational will in case of Kant, or his potentiality to become the master of nature and himself in case of Marx. And here they seem to go wrong on two counts. First, it seems clear that from the fact that man is a rational subject or has extraordinary potentialities as a knowing being, it simply does not follow that he has any intrinsic moral superiority over other creatures that exist in nature. (Why, for example, should not man devote his life to the care of animals?) And, secondly, from the fact that man has such potentialities as Marx claims or even from the fact that each individual person is, in some sense, an end in himself, as Kant claims, it can not be seen to follow that each individual must *make* the whole humanity as the supreme end of his rational or moral pursuit. From the fact, that is, that each individual is an end in himself, it does not follow that we should not *use* him as means for our individual ends. Kant and others seem to have raised the wrong question: 'What is the distinctive endowment of man in virtue of which he possesses intrinsic worth?' Traditionally, it amounts to a search for some natural property of man which distinguishes him from brutes. And, then, it is claimed

that in virtue of possessing that property, and not for his *unitary being*, that man is to be classed as a creature of intrinsic worth. And, further, by implication, it is suggested that the claim about the worth of human life is a claim about which we can *decide* in the light of some criteria. But, from what we go on to say about the value of human life, it will be apparent that the above views are totally mistaken.

The notion of ultimate value, as I am employing here, carries within it a sort of necessity, implying a deep-rooted and an unalienable consciousness of worth in all mankind. In this sense, whatever is supposed to have ultimate worth is, albeit a *matter of fact*, not just a naturalistic value, i.e. something that just *happens* to be valued and which could easily be imagined to be otherwise. Nor is the ultimate value a non-naturalistic value in the sense of being absolute and transcendental. Ethical systems based on both types of values have often been proposed, but none has stood the test of time. Further, an ultimate value could not be founded upon personal decision or belief or some kind of authority. For all these could be easily challenged. Nor, obviously, could the ultimate value derive its worth from anything extrinsic to it. In the sense which I am proposing, then, it will be seen that the ultimate value draws its necessity from the fact that, given the human situation, the object of ultimate value must be so valued if human beings are to *be* what they are and act as they do. Thus, if, for human beings, human life must necessarily be an object of ultimate value, it should not, strictly speaking, require us to prove that it is so; rather we should expect it to be manifest in the human situation. We should expect, that is, that when we open our eyes and look, we should see that the value of human life was already recognized to be ultimate. Let us then resist the temptation to ask, 'what gives him intrinsic worth?', and simply acknowledge the facts as they are.

In a society of persons, the attitude of one human being towards another *is* such that they regard each other as creatures of intrinsic worth. To say this is to take note of an inalienable element in human nature. It is to make what Wittgenstein calls 'remarks on the natural history of man'.[7] This attitude is clearly manifest in the fact that one constantly expects of others to treat oneself in a manner which shows respect for one's person. Since, this expectation is not due to the fact that one thinks of oneself as a special case. Rather it is present irrespective of the considerations of one's *social* status. That is to say, that we constantly expect of others to treat us in a manner which shows that they have respect for persons generally. And, further, we expect this to manifest as an exercise of their *freedom*, and not as an expression of their self-interest or some kind of coercion or fear of God, etc. Needless to say that this expectation can be natural to us only if we ourselves recognized the value of human life.

Further, the attitude in question is manifest in our readiness to expect the other to behave as if he valued his own life, and also in our preparedness to accept the other's expectation from us to honour his human status. This

would not be the case if we did not, in general, attribute that dignity and value to human existence, which we find in the human situation so natural to do.

Moreover, it is not that we *decide* not to manipulate others like household objects because of moral reasons, or, as some philosophers think,[8] because we need others in other ways than we need household objects, i.e. because it is profitable not to manipulate them. Rather to manifest this attitude is a part of what constitutes being a human person. To paraphrase an epithet of Wiltgenstein's: 'My attitude towards human life is an attitude towards what is of ultimate worth. I am not of the *opinion* that human life has value.'[9]

We can understand a person who did not show respect for human life in his dealings with certain class of people or in certain special circumstances, such as with people of a different race or in the situation of war. For then we can explain his behaviour by reference to his conditioned upbringing in a philistine culture, or by reference to his role as a soldier which requires him to *adopt* a rough attitude towards his enemy. But we cannot understand a person who showed no respect for human life *generally*, who always showed contempt and disregard for other people's existence. I think it is certain that we will be led to think of such a person as somewhat subhuman.

And further, if we try to imagine a whole people who were totally devoid of the consciousness of the worth of human life, we find it even more difficult to understand what forms of life could exist in their society or, for that matter, if they could exist as a society of persons at all. For, in the human situation, a person exists in constant interaction with others. It is in this interaction that man reveals his personhood to others and realizes his personhood for himself. That is, the interaction between human beings is not like the interaction between mere objects or animals, rather it is of the nature of *inter-personal relationship*. But could there be meaningful inter-personal relationship between people who are naturally disposed to attach no value to each others' existence? The following considerations make it difficult to imagine that it could be.

The ideal form of inter-personal relationship is manifest in communal activity, in which people co-operate with each other for common ends with an understanding of the point or purpose of their pursuit. And in the choices, exercised in communal activity comprising intentional actions of free and rational agents, we clearly *assert* the characteristic human attitude towards each other, viz. the attitude of treating each other with the natural presupposition of the worth or value of human life. In the human situation, we are all for each other, paradigms of existing beings who have intrinsic worth unless, in particular cases, we can produce reason to undervalue someone's life. Clearly, without this attitude human beings could not relate to each other on the level of rational communal activity, and consequently could not realize a society of persons. I conclude then that the recognition of the value of human life is a necessary feature in the human situation. Indeed, it is possible

in many circumstances and in many different ways to oppose or disregard this attitude to the extent that we tend not to realize that it is so deep-rooted in human nature.

If we wish to understand what it is in the nature of things that makes it intelligible why we have the attitude of value in question, we should consider the fact that in order to *become* a person, from the very beginning, one has to be submerged in human life. It is through such immersion that one comes to acquire the characteristically human conceptual frame-work of thought and action. And I do not see how a being, who did not have the attitude of value towards the life of *others*, could actually imbibe, in their fellowship, this framework which is completely essential for his personhood. A man's being is a *being-in* in the web of human relationships. One cannot choose to get in and get out of the web of life. To attain the consciousness of selfhood as a person requires one, choicelessly, to have submitted oneself to the personifying processes of human relationship. And to have done so is to have recognized the value of human life; that is, the recognition of the value of human life is a necessary presupposition to that form of thought in which we think of ourselves in relationship with others. The existence of the whole web of interrelatedness is a ncessary precondition of the continuing realization of one's personhood. Thus, if I am going to attain the characteristically human aspirations, I, surely, could not regard humanity merely as a field for personal exploits. I could not regard my being in the human situation as being in a shop. Nor can I conceive of an alternative human situation.

We grow up to personhood getting woven in the web of life around us. From the very beginning our mode of being in relation to others is characterized by our unconditional and unreasoned *acceptance* of the existence of others and of the whole web of life around them as the only intelligible reality. There is no question of *choosing* our mode of being in relation to that which presents itself as the *original* form of existence, within which we ourselves are being constituted. It is not surprising then that human life appears to us necessarily as a thing of ultimate worth.

In sum, what I have tried to say is that for human beings, human life is unquestionably a reality of ultimate worth. Moral reasoning, concerned with ultimate justification, is possible because man is naturally disposed to uphold the value of human life. The moral values of a rational morality must reflect what we conceive to be the perfection of the human condition, since that is what, in the human situation, we must always value most.

Notes and References

1. See 'Moral Arguments', *Mind*, 1958.
2. *Moral Practices*, Routledge & Kegan Paul, 1969, p. 7.
3. *Op. cit.*, p. 8.

4. *Op. cit.*, p. 11.
5. See *Groundwork of the Metaphysic of Morals*, p. 429.
6. Cf. E. Kamenka, *Marxism and Ethics*, Macmillan, 1969, p. 11.
7. See *Remarks on the Foundations of Mathematics*, pp. 1, 141.
8. See Mrs Foot, 'Moral Beliefs', *Arist. Soc. Proc.*, 1958.
9. See *Philosophical Investigations*, II, p. iv.

The concept of ideology in Karl Marx*

KRISHNA ROY
Jadavpur University, Calcutta and
Indian Council of Philosophical Research, New Delhi

Since Marx the concept of ideology has gained much importance both in the political and intellectual realms. Marx and Engels employed the notion to designate those theories which they sought to refute. But after Marx the concept of ideology has received, over and above its negative connotation, some positive implications, and has undergone numerous transformations. Both the Marxists (e.g. Lukács, Gramsci and others) and the non-Marxists (e.g. Mannheim) have added different interpretations to the concept which have given rise to much confusion and ambiguity. Such dispute over the real implication of the concept of ideology often reminds us of Marx's own remark towards the end of his career, when he declared that 'whatever also he might be, he was certainly not a Marxist'.[1] Bearing this in mind, the present paper does not explicate the post-Marxian transformations but only aims at a brief exposition of the concept of ideology, as expounded in the writings of Marx and Engels themselves.

The question concerning Marxism and ideology may be discussed at two levels: (1) what is Marx's own view on ideology? and (2) whether Marxism itself should be regarded as an ideology or not? These two questions are so much interrelated that one cannot be separated from the other. To be precise, the second question is rooted in the first one, while the first leads to the second. Still, most of the current controversies and ramifications centre round the second question mainly: some claim that while criticizing the previous ideologues, Marx gave us a new 'scientific' theory about society, whereas others opine that this Marxian view itself is vitiated by the same defects as those of the earlier ideologues. Even without going into this intellectual labyrinth, the present paper aims to suggest a clue to end this controversy by directing attention to the meta-level, where the solution can be detected from the Marxian analysis itself.

I

From about the mid-nineteenth century 'ideology' has become quite a familiar idiom in social vocabulory. But it was not Marx who used the term for the first time. The word had already been used earlier by different thinkers or 'ideologues'. Some French thinkers—Condillac, Destute De Tracy and others —coined the word to distinguish a newly conceived science, the 'science of

*This paper was presented at the All India Seminar on Karl Marx held in March 1984, organised by the Department of Philosophy, Jadavpur University, Calcutta 700032.

ideas', from metaphysics. This new science of ideas, negating the past unscientific dubitable hypotheses, gradually became associated with some social and political issues.

Subsequently, the term received much political attention due to Emperor Napoleon's continuous aversion to the new ideology and its supporters. Napoleon believed that those 'ideologues' were unconcerned with reality and its practical problems, and hence used the term in a derogatory sense. The term 'ideology' is thus connected with some social and political upheavals from the very beginning of its coinage.

Though aware of De Tracy's usage, Marx employed the term in a somewhat different sense. While criticizing Hegel and the Hegelians, Marx and Engels felt the need of a new concept. Etymologically, the term 'ideology' suited their purpose, for it could be deftly used to decry the excessive attachment of those idealists to the logic of their own ideas. Further, the Napoleonic pejorative implication stregthened this Marxian usage as Hegelian ideology took us far away from the practical world.

In their voluminous writings, Marx and Engels used the term 'ideology' in many different senses and in many different contexts and, as such, we do not find any clear definition of the term. By 'ideology', they referred not infrequently, to the earlier idealistic tradition, often denoting the distorted, illusory and alienated consciousness. Sometimes, they employed the term as an 'apologetic' body of thought. Moreover, the term has also been used to refer to unproductive occupations in their later writings. Thus it seems, that Marx and Engels used the term 'ideology' to refer almost to each and everything which they did not approve of.

It is well known that since his early days Marx was aware of the pros and cons of the Hegelian philosophy. Even when he became influenced by the Hegelian dialectical method, he was critical of its idealistic aspects. Since the publication of *The Holy Family*, Marx became antipathic to his former associates, the Young Hegelians. But it is mainly in *The German Ideology*—where Marx and Engels wanted to 'settle accounts' with their 'erstwhile philosophical conscience' that we notice scathing criticisms of the then ideologies. In order to fight against the prevailing 'illusions of consciousness', Marx started his polemic against idealists and the Left Hegelians. Marx realized that these Young Hegelian ideologists, in spite of their allegedly 'world-shattering' statements were only fighting against 'phrases'. 'They are in no way combating the real world.'[2]

Both in *The German Ideology* and in other subsequent writings, Marx and Engels repeatedly objected to those ideological theories that considered thoughts and ideas as independent entities and supposedly developed their own intrinsic laws. Thus ideology often became one with the then idealism. 'No specific differences separate German Idealism and the ideology of the other nations. The latter too regards the world as dominated by ideas, ideas

and concepts as the determining principles and certain notions as the mystery of the material world accessible to the philosophers.'[3]

In Marxian tradition, ideology is often being regarded as 'false consciousness'. By 'false consciousness' Marx certainly did not refer merely to any ordinarily mistaken thought or belief. While conscientiously pursuing their studies, a mathematician or a scientist may commit mistakes unconsciously, but they cannot be accused of having 'false consciousness'. When Marx and Engels used the terms, they probably referred to some apparently organized set of beliefs, shared by a class or group of people having extensive social consequences.

It is Engels who clearly expounded this characteristics of ideology:

> '...as a process accomplished by the so-called thinker consciously it is true, but with a false consciousness. The real motive forces impelling him remain unknown to him, otherwise it simply would not be an ideological process. He works with the thought material, which he accepts without examination as the product of thought and does not investigate further for a more remote source independent of thought.'[4]

Such ideology, implying the idealistic interpretation of history, gives rise to mystifications and illusions. These ideological, speculative expressions of reality, divorced from its empirical foundation, have been regarded as 'dreamy fantasies'. Marx said that 'in all ideology men and their circumstances appear upside down as in a *camera obscura*'.[5] Those who support and pursue such ideologies remain unaware of the fact that the material conditions of the life of the people, in whose heads this thought process takes place, ultimately determine the course of their thought process. Being unconcerned of the fact that the human consciousness is continuously being determined by some foundational social conditions, these addicts to ideologies remain aloof in the ivory tower of their abstractions. They often create illusory, dreamy images of the society, rationalize it and then try to mask the real condition of the society. Such ideologists, 'expressing their own interests as universal interests', were being criticized by Marx even of committing 'deliberate hypocrisy'.

Though 'false' in its appreciation of social reality, such ideology may, however, assist the class adhering to it to a period of success and supremacy. The ideologies of the dominant or ruling classes protect their class interests by justifying or rationalizing the *status quo* which lends support to their exploitation of and predominance over the subordinate classes.

It has been mentioned earlier that in the Marxian literature 'ideology' has also been used in the sense of an apologetic body of thought. Though most of the commentators are oblivious of this usage, this Marxian usage of ideology either follows or is related with the then idealism. While universalizing the ideas, the idealists suggest that the ideas are the only authentic forms of

human experience and that the society, structured according to their pattern, is fully human and fairly rational. In so doing, Marx felt, an idealist becomes an apologist.

This concept of *apologia*, though implicity present in their early writings, becomes prominent in Marx's later writings. Both in his *Theories of Surplus Value* and *Capital*, Marx used the term ideology mostly in the sense of *apologia* along with an important distinction. While discussing about the classical economists and scientists, Marx felt that there were some disinterested and impartial thinkers who were primarily interested in the pursuit of truth and knowledge. In contrast to them, there were also some 'sycophants', who systematically and unscrupulously supported the interests of a particular social group, often employing certain pseudo-scientific arguments. Analysing the degeneration of 'scientific bourgeois economy' Marx concluded that 'in place of disinterested enquirers, there were hired prize-fighters, in place of genuine scientific research, the bad conscience and the evil intent of apologetic'.[6]

Consequently, Marx rejected the views of De Tracy, Burke and Malthus among others either as 'vulgar' or as 'plagiarist in the service of the reactionary aristocracy'.

The point to be noticed here is that Marx was not equally averse to all bourgeois thinkers as such. Rather, he appreciated the contributions of some bourgeois thinkers, who helped the advancement of the scientific spirit. Marx could recognize that Adam Smith and David Ricardo, with their 'scientific impartiality', had a sound understanding of the economic basis of of the society. But, in spite of being 'scientifically honest', Smith and Ricardo failed to realize that their theories would be advantageous to the rulers of the society. Still, Marx regarded Adam Smith and David Ricardo as scientists, for instead of consciously hindering social progress, they made honest, impartial attempts to further it. Thus, classical political economy has been regarded as both scientific and ideological. Such description may apprently seem confusing or contradictory; but if we try to understand its implications, it will be of great significance in solving much current intellectual and social disputes.

When Marx designated 'bourgeois science of political economy' as both 'scientific' and 'ideological', he implied that it was really disinterested but only within a fixed social context. In his *Capital*, he remarks that it 'really and impartially investigated [economic life] within the bounds of the bourgeois horizon'. In spite of its scientific integrity, it could not overcome some sociological and ideological constraints. Such 'scientific bourgeois economy' 'nearly touches the true relation of things without, however, consciously formulating it. This it cannot do so long as it sticks in its bourgeois skin'[8] Moreover, the classical theory could not be fully successful, because it belonged to an unprepared social milieu, when class struggle was not yet developed.

Thus we notice that though its presuppositions were bourgeois and apologetic its *telos* was really scientific. Marx appreciated that scientific spirit, but the appreciation did not refrain him from criticizing the ideological aspects. Even without going into the details of those criticisms 'we can only mention that Marx was unsparingly critical of all ideologies which were in currency during his life time.

In addition to its popular usages, we also notice that, the word 'ideology' received, in course of time, a somewhat wider implication both in the writings of Marx and Engels themselves as well as in those of many later Marxist thinkers; and the term was subsequently employed 'in the sense of the totality of the forms taken by the superstructure of a historical epoch'.[9] Thus, even without admitting any 'epistemological break' between the early and the later developments of the Marxist thought, we may note various dimensions of ideology as employed in tackling different issues. Such transformation in the usages implicitly keeps open the possibility of further fresh usages in newer social circumstances, while explicitly it shows how Marx himself often used the term 'ideology' along with the scientificity of the classical bourgeois economy.

II

One may discern some of the major characteritics of ideology from the foregoing summary of its Marxian critique. First, ideology gives us a 'false', mystified, pseudo-rational impression of the reality. Secondly, having no direct contact with the substructure, i.e. the material life of the people' ideology becomes abstract, speculative and non-historical. Thirdly, ideology is often supported by a particular class or a group, which has a definite interest in its pursuit. The last but not the least, ideology seeks to protect the *status quo* by supporting the continuing system of oppression, inequality and class divergence.

All through his life, Marx struggled to formulate a 'scientific' social theory that would remove most of the defects of ideologies. He and his worthy collaborator Engels were content not only to propound the theory of scientific socialism but also endeavoured to practise it. In their scientific account of society, they tried, first, to give a real, objective and praxis-oriented picture of reality. Secondly, they pointed out that the social reality was founded on the material or the economic conditions of the people. Thirdly, the Marxian theory of scientific socialism itself, which sought to promote the interests of the proletariat, was subjected to various criticisms. It has been objected that in place of bourgeois ideology Marx had tried to support the cause of proletarian ideology. Science, according to the positivistic interpretation, should be free from all ideological admixture and must be devoid of any motive or interest of whatever social class: being so, Marxian social theory was described as more ideological than scientific.

Various thinkers, in their attempts to counter those criticisms, think

that they would not call the Marxist theory an ideology (at least not in a critical or derogatory sense), presumably because the 'proletariat has no interest different from the interests of the rest of society.'[10] In fact, Marx himself maintained that the proletariat class 'has a universal suffering and which lays claim to no particular right because the wrong it suffers is not a particular wrong but wrong in general . . . .'[11] Thus the interest of the proletariat seek to be one with the universal interest, and it gradually paves the way to social unification. This brings us to another feature of scientific socialism, which, in contradistinction to ideology, emphasizes the need of social change for removing inequality and exploitation. The only way to be free from injustice and oppression, according to Marx, the humanist, is to establish a stateless and a classless society, which is the final aim of communism or of scientific socialism.

Such scientific socialism, being exempt from all the mystifying influences and sectional interests, seeks to give a non-distorted, historical account of society. A true social science, according to Marx, must be based on experienced facts and and should not merely be 'excogitated *a priori*'. Thus he stood for 'deriving science from a critical knowledge of the historical movement, a movement which itself produces the material conditions of emancipation'.[12]

A theory about society, thus, may either depict the 'domination' of a particular class or support the cause of human 'emancipation'.[13] In the former case, it becomes ideological, while in the latter it turns out to be 'critical' which lays the foundation for the science of society. But neither ideology nor science, according to Marx, can arise from a historical vacuum, they both have their genesis and development within a socio-economic context.

III

In the writings of many contemporary social thinkers, the concept of ideology has been used in contrast to scientific or empirical judgments. The distinction between science and ideology thus leads to the separation of facts from values. But such notion of ideology, as involving value judgment, was not central to Marx himself. Even the distinction between ideology and science was not too rigid, and it should not be taken in the light of the epistemological distinction between falsity and truth. If one categorizes science and ideology as truth and falsity, then such contention fails to admit 'the subtle configurations which indicate the ideological functioning of a science—the theoretical contradictions, lacunae, defects, "the level of positivity of the relations, between the rules of formation and the structure of scientificity".[14] The epistemological (or positivistic) conception of turth as being devoid of all subjective and social elements may be the *telos* of mathematics and natural sciences, but in most of the pursuits of knowledge, one has to accept that truth becomes context dependent. A similar view has been expressed in Engels' *Anti-Duhring*, where he states: ' . . ."truth and error", like all concepts which are expressed in polar opposition, have absolute validity in an extremely limited field . . . .

As soon as we apply the anti-thesis between truth and error outside of their narrow field which has been referred to above, it becomes relative.'[15]

Thus a scientific theory may contain some factual errors without being an ideology, and ideologies may also consist of some true beliefs. We may assume, that Marx was of opinion that science could be conceived of having some ideological components.[16] In fact, Marx really believed that the classical political economy and even the Hegelian philosophy contained some critical or scientific elements along with their ideological or apologetic presuppositions.

Thus it appears from the Marxian treatment that 'to make ideology as mere absence, as mere inverse of science is a mechanistic and ultimately an anti-dialectical statement'[17] and that instead of regarding ideology as the contradiction of science they may be transformed and synthesized. A proper, dialectical account of ideology should recognize not only the difference between science and ideology but also incorporate their similarities. Kathryn Russell writes in this context: ' . . . if one stresses the difference between ideology and science . . . at the expense of understanding the unity between them, one cannot account for change and progress and one fails to realise the origin and nature of class consciousness.'[18]

Besides, the distinction between science and ideology should not be taken to mean that, in the case of ideology, there is a definite class interest, which is fully absent in a scientific theory. No science of society, in the light of the Marxian interpretation, can be so devoid of any sort of interest and become totally context-free. So when Marx distinguished his 'scientific' social theory from the previous ideologies, he did not attempt to dehistoricize it or to make it purely impersonal. Rather, he wanted to stress the concrete, factual aspects of the practical life of men. 'Where speculation ends—in real life—there real positive science begins: the representation of the practical activity of the practical process of development of men.'[19]

The above analysis of Marxian concept of ideology shows that Marx was a systematic and practical humanist. In attempting to free ideology from its inadequacies, all that he wanted to do was to promote the cause of human welfare in general and ensure emancipation of the oppressed and freedom for everybody.

Notes and References

1. I. Berlin, *Karl Marx*, Oxford University Press, London, 1963. p. 268.
2. K. Marx, *The German Ideology*, Progress Publishers, Moscow, 1968, p. 30.
3. Ibid., p. 24.
4. K. Marx and F. Engels, *Selected Correspondence*, Moscow, 1965. (Engels to Mehring, 1893), p. 459.
5. *The German Ideology*, p. 37.
6. K. Marx, *The Capital*, vol. i, p. xviii; see the Preface.
7. K. Marx, *The Capital*, vol. i, Lawrence and Wishart, London, 1970-71, p. 14.

8. K. Marx, *The Capital* vol. i, George Allen & Unwin, London, 1949, p. 553,
9. M. Markovic, *The Contemporary Marx*, Spokesman Books, 1974, p. 61.
10. Ibid., p. 75.
11. K. Marx, *Early Writings* (ed. L. Colletti), Penguin Books, 1981, p. 256.
12. *Selected Correspondence* (K. Marx to J.B. Schweitzer, 1865), Moscow, 1965, p. 154.
13. According to Marx, the possibility of human emancipation lies in the formation of 'a sphere which cannot emancipate itself without emancipatiing itself from—and thereby emancipating—all the other spheres of society, which is a word, the total loss of humanity and which can therefore redeem itself only through the total redemption of humanity... The head of this emancipation is philosophy, its heart the proletariat. Philosophy cannot realize itself without the transcendenceof the proletariat, and the proletariat cannot transcend itself without the realization of philosophy.' See 'Introduction to Critique of Hegel's Philosophy of Right' in Colletti (ed.), *Early Writings*, pp. 256-57.
    [The above point has been discussed in B. Parekh's *Marx's Theory of Ideology*, Johns Hopkins, 1982.]
14. S. Raghuram's article on 'Marxian Epistemology and Philosophical and Scientific Enquiry' in V.K. Ray and R. Sarikwal (ed.), *Marxian Sociology*, vol. i, Ajanta Publications, Delhi, 1979, p. 273.
15. F. Engels, *Anti-Duhring*, p. 101.
16. It should be mentioned here that though the distinction between science and ideology was not too rigid in his writings, yet Marx possibly did not use the expression 'scientific ideology' which has subsequently been employed even regarding Marx's own view. V. Afanasyev, the Russian writer on *Marxist Philosophy*, for example maintains in this context: 'Marxist-Leninist ideology, the ideology of the working people, is scientific and true to the end, because the class interests of the working class and the objective course of history always coincide and therefore the ability of the Marxist-Leninist ideology to reflect truth is preserved at all stages of its development.' See V. Afanasyev, *Marxist Philosophy*, Moscow, 1968, p. 326.
17. Op. cit., p. 273.
18. K. Russell's article on 'Science and Ideology' in J. Mepham and David Hillel (ed.), *Issues in Marxist Philosophy*, vol. iii, Harvester Press, 1979, p. 193.
19. Marx and Engels, *The German Ideology*, Moscow, 1968, p. 38.

Epistemology with/without a knowing subject

MAHASWETA CHAUDHURY
Kashishwari Mahavidyalaya, Calcutta

> Knowledge in the objective sense is *knowledge without a knower*: it is knowledge *without a knowing subject*.—KARL R. POPPER

Objectivity of knowledge is not a novel concept in philosophy, but the disclaimer quoted above places Popper's theory in a unique position. In his fervid fear for any trace of subjectivism that might creep into epistemology, Popper declares that a truly scientific analysis of knowledge does not need a central cognitive subject. In this paper, I shall first present Popper's thesis of knowledge 'without a knowing subject', then examine a claim put forward by Susan Haack that we cannot do without a knowing subject. Finally, I shall argue that although Haack is not right about some of her observations about Popper and also about fallibilism, her main thesis nevertheless can be entrenched by reasons in addition to some of her own arguments.

I

Over a long period Popper's theory of knowledge is a sustained effort to attack the 'common sense' or traditional theory of knowledge. He calls it 'belief philosophy' in a derogatory manner. 'I wish to distinguish', he says, 'sharply between objective science on the one hand, and "our knowledge" on the other'.[1] Popper does not deny that only observation can give us 'knowledge concerning facts'. He denies justification of knowledge as justified true belief. 'I do not believe, therefore, that the question which epistemology must ask is... on what does our *knowledge* rest? ... or more exactly, how can I, having had the *experience* S, justify my description of it, and defend it against doubt?.'[2] The proper question epistemology should ask according to Popper is rather: 'How do we test scientific statements by their deductive consequences? And *what kind* of consequences can we select for this purpose if they in their turn are to be intersubjectively testable?'[3]

Although Popper used the term 'intersubjectively testable' instead of Kant's 'intersubjectively valid', the emphasis in both cases is in the similar vein, namely, upon the objective and non-psychologistic nature of knowledge. Kant and Popper alike are concerned about the epistemological status of empirical statements of science. That knowledge as a system of 'dispositions' can be linked with feelings of belief does not interest Popper. To him it is the concern of a psychologist. As a scientific methodologist, he is concerned only with the problems like 'those of the logical connections between scientific statements'[4] as genuine epistemological problems. It is important to notice

that although Popper shares Hume's intuition about non-justifiability of knowledge, he (Popper) tries his utmost to give a criterion for objectivity of knowledge. He offers that in terms of testability, it is tantamount to saying that an empirical statement can give objective knowledge if and only if it is testable in principle, i.e. if it specifies the conditions under which it will be falsified.

From a slightly different perspective, it can be said that Popper has differentiated between psychology of knowledge and logic of knowledge in somewhat Humean ways, but unlike Hume he has clearly rejected all attempts of reducing the latter to the problem of the former. In other words, he has denied[5] that objectivity of knowledge (science) needs an empirical basis which is rock-bottom and absolute. Objectivity does not need any rock-bottom foundation. Objective knowledge is not based on any infallible foundation—neither *a priori* nor *a posteriori*.

I shall leave the question of plausibility of Popper's theory of objective knowledge *till later*, and now only consider his another claim that epistemology, truly speaking, has nothing to do with questions like how do we know or 'who knows'. These problems belong to psychology of knowledge. It is not only irrelevant that knowledge is a relation between a knower (belief) and an object (a fact), but true epistemology, i.e. scientific knowledge *does not* need a knowing subject. It is in this sense that scientific knowledge is objective; no other kinds of belief are considered knowledge, because they involve reference to a knowing mind and, therefore, is subjectivist.

Let us see what he exactly means by the startling statement[6] that epistemology does not need a central cognitive agent. Popper distinguishes between problem of commonsense knowledge and that of scientific knowledge, and holds that, although scientific knowledge can be an extension or improvement of commonsense knowledge, the latter is by no means easier to analyse as the ordinary language philosophers think.[7] The problem of knowledge is not a linguistic problem to be analysed into statements starting with 'I know...' 'I see...' 'I believe...'. His only argument for denying this approach to knowledge is based on historical evidence. Most philosophers of traditional epistemology have tried not only to account for validity of knowledge but also to discuss the problem of 'growth' or advancement of knowledge. And as 'growth' is the special feature of scientific knowledge (not of statement like 'I believe...'), the latter only is the kind of knowledge any epistemology is concerned with. 'They (the ordinary language philosophers) not only leave the advancement of knowledge to the scientists; they even define philosophy in such a way that it becomes, by definition, incapable of making contribution to our knowledge of the world.'[8]

It is not very clear what Popper means by knowledge. Sometimes he identifies (objective) knowledge with science, and claims its objectivity on the basis of testability in a similar way in which Kant claims scientific statements as objective (intersubjectively valid) on the basis of their synthetic *a priori*

character. But in some places he says:[9] 'Our science is not knowledge (*episteme*): it can never claim to have attained truth or even a substitute for it, such as probability' or, 'we do not know: we can only guess.' At first glance, one may be tempted to infer from these statements that he is sceptical about the validity of knowledge or even probability of knowledge. If we do not read the texts closely (especially if one takes the positivist's contempt for metaphysical speculations and unscientific knowledge seriously), Popper may sound like one who brings back unscientific or metaphysical beliefs back to philosophy. But nothing can be more mistaken. For although imagination, conjecture, 'anticipation' (in Bacon's terminology) indeed play an important role in Popper's epistemology, these bold and imaginative conjectures are bridled with his main (if not only) criterion of objectivity, namely, testability. 'Once put forward, none of our "anticipations" are dogmatically upheld. Our method of research is not to *defend* them, in order to prove how *right* we were. On the contrary, we try to overthrow them.'[10] Secondly, when he says science is not knowledge, he has Plato's[11] account of knowledge as 'justified-true belief' in mind. None of these conditions, namely, (*i*) belief (*ii*) evidence and (*iii*) truth seem adequate to Popper. To him knowledge is not a (*i*) belief, otherwise it will be psychological, (*ii*) can never be justified by evidence, nor can (*iii*) it be known to be true even if truth is attained. It is in this sense that Popper denies knowledge, and rather calls all our attempts to know as bold conjectures in proportion to the amount of informative content it has. The more a statement says, more cognitive value it has, and more vulnerable it becomes for being falsified.

The notion of objectivity of scientific knowledge is not new in philosophic literature, nor is the notion of fallibility of knowledge. What is new and striking in Popper is his claim that 'the demand for scientific objectivity makes it inevitable that every scientific statement must remain *tentative for ever*.'[12] Demonstrable and absolutely certain knowledge is either tautology (vacuous) or impossible. We can never be 'absolutely certain', according to him, about anything except in our subjective faith. Now, let us examine this claim by analysing the statement: 'demand for *scientific objectivity* makes it *inevitable*' that knowledge (in Popper's own sense) is fallible. It is not clear on what grounds should one assume that scientific objectivity needs knowledge to be fallible. Popper does not offer any clear argument for it. Does scientific objectivity[13] really need to be fallible ('tentative for ever' in Popper's language)? First of all, there may be objective knowledge (mathematical) and logical knowledge which is not fallible. On the other hand, fallibilism seems to be consistent not only with objectivism but also with subjectivism.[14]

Popper's original account of knowledge, presented in his earlier works,[15] has not changed much in later works, but his epistemology becomes more precise and contemptuous of what he calls 'traditional epistemology'. He sharply distinguishes epistemology (i.e. the theory of scientific knowledge) from the former in having no knowing agent, while 'traditional epistemology'

needs one.[16] Apparently, it seems to be a strange claim, so it requires close scrutiny between the lines to find out his exact thesis and the plausibility of the grounds of such a claim.

In *Objective Knowledge* and *Unended Quest* Popper has distinguished between (*a*) knowledge and thought in the subjective sense. When we express such states as 'I know' or 'I believe', etc. we do it from (*b*) knowledge in the objective sense. Traditional epistemology is concerned with knowledge in the subjective sense, because it refers to knowledge as a state of mind or consciousness. Knowledge or thought in the objective sense consists of problems, theories and arguments. Knowledge in the latter sense, Popper says, is totally independent of any body ever knowing it. 'Knowledge in the objective sense is *knowledge without a knower:* it is *knowledge without a knowing subject.*'[17]

The main theme of what Popper calls his 'first thesis'[18] about epistemology is as follows: traditional epistemology has mistakenly identified the problem of knowledge in a subjectivist sense as expressed by statements in ordinary language like '*I know* that the table is brown' or '*I am thinking*...'. Knowledge in the sense of 'I know' does not belong to epistemology (which is the science of objective knowledge). It belongs to psychology and what he calls 'second world', the world of *subjects*, 'scientific knowledge belongs to the third world, to the world of *objective* theories, *objective* problems and *objective* arguments.'[19]

There are two senses of knowledge in his view.[20]

(*i*) 'Knowledge or thought' in the sense of disposition to behave or react. This refers to a knowing subject, a state of mind and, therefore, it is knowledge in the subjective sense.

(*ii*) 'Knowledge or thought' in the objective sense consists of problems, theories, arguments, proofs, etc. Knowledge in this sense is independent of anybody's claim to know, disposition or belief. Roughly speaking, (*i*) refers to knowledge as a *state* of consciousness and (*ii*) refers to knowledge as objective *content* of thought.

Traditional epistemology, Popper thinks, has conflated these two senses, and tried (unsuccessfully) in various ways to provide with a criterion for justifying knowledge. It is historically well known that these attempts to give a standard for 'justified-true belief' account have been countered with different kinds of problems.[21] Popper does not take any of these attempts seriously, nor does he think that the failures are significant for any other reasons; but that the problem of justification of knowledge (in the belief sense) cannot be solved because knowledge in this sense is subjectivist, and epistemologists should be interested in the logic of (objective) knowledge and not in psychology of belief. Knowledge in the objective sense refers to scientific knowledge, it does not need a knowing subject and its state of belief.

As I said, it is not very clear what Popper means by 'knowledge', although his account tends to be very precise, especially, if one takes his reference to dictionary meaning of knowledge into consideration.[22] One thing at least is

clear: that he uses the term 'knowledge' not in the classical empiricist's sense of 'agreement and disagreement between our ideas' nor in the traditional Platonic model of rational belief. Popper uses 'knowledge' in the sense of thought, whatever the latter may mean to him. Now, the word 'thought' is ambiguous, it may refer to Hegelian kind of Idea in an absolute sense or else it may imply Platonic type of Idea as Real. Fortunately, Popper has made it easy for us when he mentions Frege in this connection. To clarify his position about knowledge without a knowing subject, Popper cites from Frege: 'I understand by *thought* not the subjective act of thinking but its *objective* content...'.[23]

Although Popper did not say explicitly that he endorses Frege's view, one can infer from the illustration from Heyting, which immediately follows the citation from Frege, that Popper's account of objective knowledge is very close to Frege's *content* of thinking and not the *act* of it. And as an *act* only *needs* a knowing subject, the argument runs: only the subjectivist account of knowledge as the process of believing needs a subject. Knowledge as the *content* of thought does not require a central cognitive agent. Hence the famous startling thesis of 'epistemology' without 'a knowing subject'.

This conclusion is, indeed, very provocative, and tends to fly on the face of traditional epistemological theories. It is very natural that Popper's account would be countered with attacks from various corners of different philosophical colours.

II

One such attack[24] is from S. Haack which is especially worth consideration, for she herself shares many Popperian intuitions but for different reasons. One important aspect in which she agrees with him is his fallibilism, although her reasons for being a fallibilist tilts more towards pragmatic theory of truth than Popper's objective theory.[25]

Haack's main theses in the paper 'Epistemology with a Knowing Subject' are as follows:

(1) Fallibilism is a thesis about *our* liability to error, and not a thesis about the modal status (i.e. truth-falsity) of *what* we believe.

(2) If (1) is true, that means 'if fallibilism is a thesis about cognitive agents and their potentiality to error, a fallibilist epistemology needs a central knowing subject.

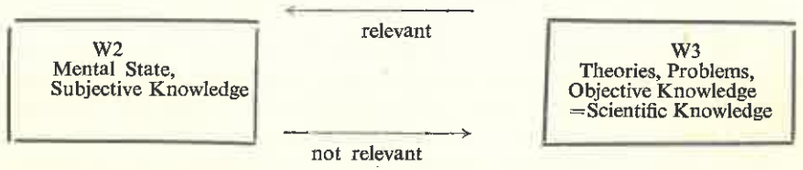
(3) Popper is mistaken about fallibilism having nothing to do with the cognitive agent: in fact, he has conflated knowledge as state or disposition and knowledge as content. A fallibilist needs knowledge as a state. Therefore, a fallibilist epistemology cannot do without a knowing subject.

(4) Popper's own philosophy (including his fallibilism) needs a knowing mind.

(5) Popper is *right* about his 'third world' being relevant for 'second world', but wrong about 'second world's being irrelevant for 'third world'.

If psychology of knowledge requires logic of knowledge as Popper thinks, then the logic of knowledge also needs psychology of knowledge.

Let us see how Haack presents Popper's 'Official Theory' as she calls it. Here is the diagrammatic representation of what she calls 'Popper's picture'.[26]



The left-hand box represents the subject matter of psychology and sociology, whereas the right-hand box stands for the concern of logic and epistemology. Thus, epistemology is not concerned with any *knowing mind*, it is independent of any subjective knowledge or belief. Haack's analysis of 'Popper's picture' presents knowledge in the objective sense to include all the contents of World 3, that is to say, scientific and mathematical theories, problems, tentative solutions, etc. Haack has rightly observed that knowledge in the objective sense includes not only true items but also items that are false or possibly false, items which are neither true nor false.

It also follows that items, which have never been thought before by anyone (or never will be), also belong to objective knowledge. This is a very unconventional account of knowledge. Popper also uses the term 'belief'[27] in a strange way, so as to connote conviction or certainty rather than more or less firmly held (depending on the rational ground or evidence) opinion. Although Popper's usage of 'knowledge' and 'belief' differs[28] from the ordinary usage, that itself cannot be important as such because philosophers may sometimes differ in their usage of terms. The really important consequence of his 'eccentric terminology' (in Haack's language) is that it leads to some substantial theses.[29] These theses can be put in this way: (*a*) if belief and its analysis are irrelevant for science because scientists are not sure of the truth of their theories (which are nothing but conjectures), then the firmness of their belief is irrelevant for the appraisal of their theory which aims at truth.

(*a*) 'Belief philosophies' (from Descartes, Locke to Russell) are said to be essentially dogmatist or justificationist.

(*b*) Sympathy with the idea that science is a sort of paradigm of successful human cognitive enterprise is supposed to support the idea that epistemology ought to be concerned with 'scientific knowledge' in Popper's sense of the term.

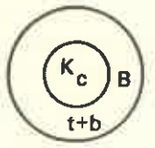
Haack does not make it clear whether she accepts these 'substantial theses'. But let us see whether she *can* accept them or not. According to her (*a*) scientists are not *sure* of their theories, but nevertheless accept them. I do not think the position is acceptable to Haack, because it was like a contradiction, she may argue, that the scientist would make two statements:

(1) 'I am not sure whether my conjecture is true (that means there is not sufficient ground for believing so), although I hope them to be so.'
(2) 'I accept the theory and *act* accordingly.'

These two statements seem to be incompatible. How can it be rational for a scientist to *accept* something and *act* accordingly, about which he does not have sufficient ground for believing? There is definitely a difference, Haack may argue, between the belief of a layman and that of a meteorologist about, say, an atmospheric depression. So problems related to belief (questions like, 'Whose belief'? 'What kind of belief?' etc.) are not irrelevant for acceptance of a theory.

The statement in (*b*) is a very sweeping generalization. There are different brands of epistemological theories, starting from Descartes' dogmatic intuitive criterion of 'clear and distinct' idea to more sceptical ones like that of Lehrer[30] with many other justification moves of various grades in between these two extremes,[31] to save knowledge from the sceptical onslaught. All these attempts cannot surely be labelled together as equally dogmatic. Haack does not say anything explicit about this point, but it is apparent that she would not approve of the way Popper brushed aside any possible reasonableness in these attempts to distinguish knowledge from any and every belief.

About (*c*), Haack is more elaborate in distinguishing between two senses of 'knowledge', 'belief' and other nouns of propositional attitudes between the *state* sense of nouns of propositional attitude (knowing that, believing that) and the *content* sense (what is known, what is believed). Within the state sense again, she distinguishes personal (x's knowing that...) from impersonal (the knowledge...) uses. Both belief and knowledge, she says,[32] have both state and content senses. Belief in the content sense (what is believed) includes knowledge in the content sense (what is known). That means what is believed includes what is known. If what is known and what is believed are propositions, then the former is a subset of the latter. It can be represented as follows:



The class or set B includes the subset with/without many other subsets. K includes *only true* beliefs, whereas there may be true beliefs outside K, and if there are any false beliefs they *must* be outside K. My above interpretation of Haack's analysis follows from her distinction between 'belief' and 'knowledge' in the 'content' sense. She also distinguishes between personal state knowledge/belief and content knowledge/belief. That distinction does not

concern us in the present context. What concerns us here is her claim that her conception about the relation between belief and knowledge in the content sense excludes the possibility of knowledge without a knower. The argument for her thesis can be construed as follows. The subset of propositions which constitutes knowledge in the content sense is the subset consisting of those propositions that *someone* knows. In other words, there are two arguments to establish Haack's thesis.

(*i*)	(1)	Knowledge → Belief	(*ii*)	(1′)	Belief → Knowing Subject
	(2)	Knowledge		(2′)	Belief (from (*i*))
	(3)	Belief 1, 2, *modus ponens*		(3′)	Knowing Subject 1′, 2′, *modus ponens*

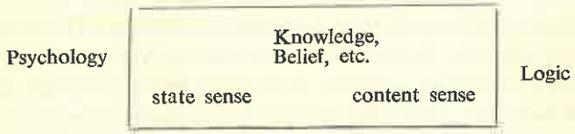
combining the result of (*i*) and (*ii*) we get

Knowledge → Knowing Subject *modus ponens*

(Because K → B and B → S ∴ K → S) 1, 1′, commutation.

The argument is simple: the derivation follows simple rules of propositional logic, if one accepts the truth of the premises. For Haack it is no problem, because she thinks that belief is a necessary (although not sufficient) condition of knowledge. But if someone like Popper does not accept the premise/premises of the argument shown above, the *modus ponens* does not work so easily as she thinks. There are various passages[33] in Popper where he explicitly says that scientific knowledge (i.e. genuine knowledge) is a human product, but it does not require the human agent after its content becomes part of objective knowledge. Once a theory is born, it becomes autonomous, just as a child is borne by its parents but transcends them once he/she is born and starts growing. Not only that, there are problems or *knowledge* which no one has ever thought about or ever will think of. Haack's argument is not adequate to establish her stand about a central cognitive agent unless supplemented by some other arguments. She has the burden to prove that her premise is *true* and Popper's premise (namely 'knowledge does not necessarily have to be *someone's* belief') *false* for arguing in favour of her thesis of 'epistemology only with a knowing subject' which apparently she has not done.

But Haack has put her finger into a very important point, namely, that any adequate epistemological theory should offer an account of the ways in which people learn from and interact with each other in a scientific community. One has to take into consideration the 'role of tradition in science'. So she offered a parallel picture which I shall call 'Haack's picture'. It is as follows:[34]



By this 'picture' she wants to emphasize her stand that epistemology is concerned with knowledge/belief in 'state' as well as 'content' senses. She criticizes Popper for not being explicit about the sense of subjective; and alleges that traditional epistemology is neither 'belief philosophy' in Popper's sense nor 'theory of subjective knowledge'. She further maintains that Popper stresses more on the process of *acquisition* of knowledge rather than its upshot. He is concerned with the growth of knowledge, the ways in which we *learn* about the world, thus it is a dynamic theory of knowledge.[35] Haack also grants Popper the claim that a better epistemic logic be concerned with *impersonal* form of epistemic verbs. But Popper does not need that favour, because he does not like epistemic verbs like 'it is *known* that P' or 'it is believed that P'. He would rather prefer 'it is conjectured that P' or 'it is learned that P'. Popper thinks that epistemic logic is misguided, not because it uses epistemic verbs but because it needs a central knowing subject. And it is precisely what Haack wants to establish. So, at this point, Haack deserts Popper, and argues that Popper cannot hold his other doctrines if he does not recognize a central knowing subject in epistemology.

Haack agrees with Popper that scientific knowledge far exceeds what is known by any individual (e.g. journals, libraries, computers).

But she disagrees with Popper in not allowing epistemology to renounce its interest in the knowing subjects that 'learn, study and refute scientific theories'. Cognitive agent is essential for any epistemology, however 'objective'. World 3 or the world of scientific knowledge cannot ignore World 2.

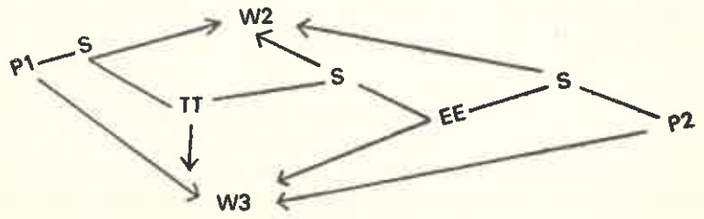
She also endorses Popper's formula:

Problem → Tentative Theory → Error Elimination → Problem 2
(P → TT → EE → P2)

which shows his concern for growth. Haack thinks that Popper's scheme resembles the dynamic theory of the pragmatists. But, in the latter theory, the cognitive agent has a vital role, which Popper tries to denounce. If growth is the characteristic feature of objective knowledge, then there should be constant feedback from the W2, otherwise W3 would be a static world. Haack rightly argues that Popper's W3 is not like Frege's Gedanken[36] where the logical relations between them exist eternally and are unchanging. Popper's W3 is a dynamic, constantly changing world, he calls it 'causally open', i.e. to be causally influenced. By what? Surely by W2 at least, if not by W1. Therefore, if knowledge is growing as Popper says, then, I think, Haack is right that Popper is mistaken about the law of transference, according to which law of logic does not require law of psychology, whereas law of psychology needs law of logic. In other words, Popper's contention 'what is true in logic is true in psychology but not vice versa' is not correct. W2 requires W3 and W3 also requires W2 (that is belief, perception, etc.) for its dynamic character. Otherwise, growth of knowledge cannot be explained. Objective knowledge is evergrowing. It is changing so because *we*, the knowing subjects,

are constantly adding to it and changing it by feedback process. W3 is not after all independent of W2, and epistemology *does* need a knowing agent if it has to allow for growth or change in the world of objective knowledge.

Problems, conjectures, etc. constitute objective knowledge. Popper's scheme of theories as conjectures to be tested and refuted also requires knowing subjects. Haack concludes from this that Popper's original scheme of P → TT → EE → P2 can be understood only in the following way:[38]



P1 is a human creation, so is tentative theory; EE also needs knower which gives rise to new problems P2. So, at each stage of growth, knowledge requires reinforcement from the W2 by a cognitive agent (S in the diagram).

She further argues that W3 contains objects which are either *our* creations or items that are discovered by *us*; so, in every possible case, it is dependent on W2, and knowing subject is essential for epistemology.

It is also not clear on what ground Popper regards logic as independent; but language, mathematics and science as our creation. Logic may not be our creation but at least the laws of logic are discovered by us, just as natural laws are not our invention but discovered by us. We can further say that Frege's realm of Gedanken (where relations among propositions do not change) is different from Popper's W3 in the sense that the latter needs a knowing subject for explaining growth or change. Moreover, the constituents of W3 are linguistic items (such as theory, proof, books or library) in Popper's objective world; and if language is our creation and if language depends on a linguistic community, so does the items of objective knowledge.

Haack points out another important difficulty in Popper's account: if W3 contains all possible logical consequences (intended and unintended), how can it grow? Furthermore, if it contains all true as well as false consequences, we cannot differentiate between valid and invalid knowledge, science and 'non-science'. To this problem Popper would perhaps respond that there is no such criterion to decide between valid and invalid knowledge on the *basis* of either truth or justification. In fact, knowledge grows in a trial and error process.

Haack's contentions so far are plausible, and I share her views more or less about the problematic character of Popper's account of objective knowledge and W3. I have also supplemented, to some extent, her arguments to defend her position against Popper. But I shall now argue that she is neither

right about some of her observations about Popper, nor about fallibilism and its relation to knowledge.

III

Haack's main criticism against Popper is twofold:

(1) Fallibilism requires a cognitive agent. Popper is a fallibilist, therefore he requires a cognitive agent in his epistemology.
(2) Popper needs the knowing subject also to account for the 'co-operative character of the scientific enterprise'.

I shall argue that (*a*) Haack's construal of fallibilism is not right, and (*b*) Popper does not need a knowing mind for explaining the corporate nature of scientific knowledge.

(*a*) According to Haack: 'Fallibilism is a predicate not of a proposition but of a *cognitive agent* who utters that proposition.'[39] Therefore, she says, fallibilism can be extended to mathematics, and nevertheless needs a 'knowing subject'. Fallibilism can resist any form of foundationalism, therefore Popper is right, Haack says, about his fallibilism which only can give an objective account of knowledge.[40] This point cannot be settled so easily, for one may argue that fallibilism and objective knowledge are not necessarily related with each other. Haack argues that (*i*) fallibilism (as she construes it) 'inextricably concerns both the *truth-status* of the contents of our beliefs and the *capacities* or incapacities of cognitive agents'.[41] Thus fallibilism needs the knowing subject. She also argues that (*ii*) we may make error not only by using the incorrect method but also by incorrect use of reliable methods. Fallibilism, thus, can be extended to logic and mathematics. About (*i*) it can be said that Haack has two different positions about fallibilism: (*a*) fallibilism concerns both the modal status of the content of our thought and also our liability to error; (*b*) fallibilism is *not* a predicate of propositions but of cognitive agent. Neither of these two positions are tenable, although (*i*) is better than (*ii*) because (*i*) at least includes the 'truth-status' of what we believe, but (*ii*) interprets fallibilism only in terms of *our* capacity to make error. This is a strange analysis of fallibilism. No philosophers, not even the 'justificationists' (in Haack's way of interpreting Popper's analysis) would say that fallibilism refers to agents and not to propositions. The classical foundationalists like Descartes or Leibnitz maintain that there are certain propositions (such as the Cogito or the Law of Identity of Indiscernibles) which are *infallible* and, therefore, *only* those propositions can give us knowledge. Their arguments may be invalid but that does not show fallibility to be a predicate not of propositions but of agents.

In contemporary literature on epistemology, knowledge is regarded as a propositional attitude such as 'I know that P' or 'I believe that P'. Twentieth-century philosophers have tried (may be in vain) hard to give a criterion for valid knowledge, but nevertheless recognize some proposition as fallible and

some others as infallible. Epistemology or logic has nothing to do with our *capacity* or *attitude* towards a true content of thought. So Haack is not right when she says: 'We are no less fallible with respect to logic than with respect to other sciences.' If I have a whole class of fools in my logic class who do not get the rules of logic correctly, that cannot affect the truth-status of the logical propositions. On the other hand, there are some propositions which are fallible, no matter *who* makes them. The classical distinction between necessary and contingent proposition cannot be so easily disregarded. These two types of propositions also have different logical consequences.

From	□ that P	we	*can*	deduce
	◇ that P			
But from	◇ that P	we	*cannot*	deduce
	□ that P			

Moreover Haack thinks that fallibilism should deny that any of our beliefs can be absolutely certain.[42] It seems that what she has in mind is that there are no statements such that believing them is sufficient to ensure their truth. 'As she says: . . .not just that there are propositions such that it follows from our believing them that they are true, not just that there are some propositions we cannot fail to believe.'[43] She does not give any instance, but it seems she has something like 'I exist' in mind. I do not want to push this point very much here, although I think she is wrong about it. At least Popper never has such strong position about fallibilism. He has never denied the infallibility of at least some propositions such as 'I exist' or 'a = a', although he regards them as trivially true and 'uninteresting' for their zero falsity-content. Fallibilism for Popper stands for anti-foundationalism, that is, however perfect our method of enquiry may be, any statement about a non-empty class (i.e. all empirical statements) is bound to be fallible. In other words, we cannot exclude the possibility that all our non-trivial statements are false, although we may have standards for prefering (by acceptance rules) some of them. Popper does not tie fallibilism with our beliefs about the world as Haack presumes. It is true that in various passages Popper gives the impression for such presumption. Passages like '*we* are searchers at best, and at any rate fallible. There is no guarantee against error'[44] 'And after all, *we* do all fail sometimes; we must never forget *our* fallibility',[45] or 'there are no authoritative sources of knowledge. . .nothing is secure, and *we* are all fallible'[46] may tempt one to infer that Popper's fallibilism is only about *our* liability to error. His usage is misleading and casual in this connection, but if one reads between the lines carefully, it is not very difficult to see that these types of statements are meant for rejecting any type of foundationalism, and that has nothing to do with *our* capacity to make mistakes.

(*b*) The next important point is Haack's claim that Popper needs a knowing subject for the co-operative nature of scientific knowledge. She did neither

make the meaning of 'co-operative' explicit nor made any specific arguments for the claim. But let me grant her for the sake of argument that she intends to mean that scientific knowledge is not an individual achievement, it is a community enterprise and so scientists have to recognize other scientists' knowledge. I do not see how can that fact affects her argument. Although Popper opposes those (like Kuhn) who think that a scientist's theory is dependent on the dominant framework he works under, Popper never denies the corporate nature of scientific knowledge. His evolutionary approach recognizes that knowledge is progressive, and that it gains from its predecessors. In that sense, he says that our children and theories 'transcend' us. Objective knowledge grows by trial and error. Knowledge is co-operative, in the sense, that once a theory is made, it becomes impersonal and part of objective knowledge—part of what Popper calls W3. He does not require any knowing subject to account for corporate character of knowledge.

Apart from these two main criticisms, Haack also differs from Popper in saying that 'the central concern of epistemology is a cluster of concepts like belief, *learning*, etc. They involve both a cognitive agent and a proposition.'[47] Her kind of view is not committed to a relational view of knowledge or at least she claims so. She needs only a cognitive agent and a proposition like 'X knows that P' where X is a variable for a name and P stands for a sentential variable. According to Popper, this analysis would be subjectivist. Her next comment confirms that even more when she says epistemology should investigate not only concepts like 'belief' and 'learning' but also the *nature and scope of knowledge*. The position, I fear, is conflating epistemology with psychology, especially when she includes 'learning' also within the scope of epistemology. 'Learning' is clearly not an epistemic term, neither is truth. An epistemologist's concern would be only in epistemic items like belief, evidence, etc. Even those, who do not share Popper's view of objective knowledge, would concede that. I cannot belabour this point any more here for brevity, but it is evident that Haack is trying[48] here to replace epistemology with cognitive psychology. She thinks that Popper's fear of subjectivism (if he recognizes knowing subject) is ungrounded, because it is possible for one to recognize the relevance of psychology to epistemology and to remain nonetheless committed to fallibilism.

Haack's criticisms should like Stroud's objections to Quine's 'naturalized epistemology'[49] as she herself admits. But Popper's position is furthest from any kind of naturalized epistemology.[50] His concern for human mind and its active role in knowledge is almost comparable to Kantian epistemic framework, although he does not share Kant's 'synthetic *a priori*' account of valid knowledge. Moreover, Haack's claim that there is no contradiction between fallibilism and the recognition of an active knowing subject, even if true, does not establish that fallibilism needs an active agent.

Possible misconceptions about Popper's need for a knowing mind may arise by his expressions like 'critical mind', 'critical attitude' towards one's

theory. The suspicion grows stronger when we take his 'requirement of sincerity' into account. It can be argued that 'despite their psychological flavour, such remarks can and should be interpreted in a non-psychological way.[51] Attitude can be understood, as Musgrave argues,[52] to mean 'policy' or method. So 'critical attitude' accordingly refers to the method of exposing a theory to possible refutation, whereas 'dogmatic attitude' means the attitude to 'defend a system against criticism', and to 'defend a system involves more than getting oneself into a certain frame of *mind*' towards it. It also involves carrying out a certain argumentative functions, certain tests which are intersubjectively repeatable. This interpretation seems to be correct, if we consider Popper's remark such as[53] 'manner of dealing with scientific systems' is not only by a critical attitude *per se*, but a critical *policy* or *method*. Indeed, Popper is not very discreet about usage of words, but then he is not an ordinary language philosopher. The following remark sounds discordant with his general theme and leads to perplexity: 'The dogmatic attitude of sticking to a theory as long as possible is of considerable significance. Without it we could never find out what is in a theory—we should not give it up before we had a real opportunity of finding out its strength.'[54]

Apparently, the above statement seems to be inconsistent with Popper's repeated emphasis on critical attitude in knowledge. But a close scrutiny will lead to an analysis which, I think, will establish Popper's theory of objective knowledge on stronger ground. The classical distinction between 'rational' and 'irrational' belief (as has been first propounded by Hume[55] needs some attention in this context. According to this distinction, some of our beliefs (say, about the external world) are justified, and some of them are not, or more or less so depending on the 'basis' of such belief. If I read Popper rightly, he would reject any such distinction as irrelevant for objectivity of knowledge. Rationality of our belief and rationality of a theory are two different things. We may be very dogmatic/sceptical about our *belief* but the theory can nevertheless be true; or else we may be very sure about a certain belief but may very well be wrong. We may not have enough reasons to believe in a theory but that fact is irrelevant for the rationality or truth of the theory. The old saying, 'improbable but true', is not an impossibility. Popper's remark that 'being dogmatic may sometime help' can make sense, if we understand his notion of rationality as having nothing to do with available data but is based on one's theoretical reasons in the face of poor inductive support.

Although Haack's allegations against Popper are either misdirected or inadequate, there are some serious problems which are revealed by her approach. I shall mention only two in the present context, i.e. in connection with Popper's claim that epistemological questions can be discussed without reference to a central knowing subject. Let me take the satiric way in which he attacks traditional epistemology and its analysis of knowledge in the form 'S knows that P'. Traditional epistemology tries to analyse knowledge in the following form:

(D) 'S knows that P if and only if....

The right-hand side can be filled in by the conditions like':

(1) S *believes* that P
(2) S is *justified* in believing that P
(3) P is *true*

'S' stands for a knowing subject and 'P' for a sentential variable. It is obvious that Popper takes this kind of analysis as adequate only for subjective knowledge. His own position can be construed as follows:

(D1) S *guesses* that P
(D2) S *conjectures* that P
(D3) S *doubts* that P
and so on

He denounces epistemic logic because it regards knowledge as a relation between a knowing subject and a state of affair.[56] Popper regards analysis like (D) as irrelevant for scientific knowledge. Why? 'For the scientist, I will call him 'S', neither knows nor believes. What does he do? I'll give a very brief list:

*D*1* 'S tries to *understand* P'
*D*2* 'S tries to think of alternatives of P'...'[57]

and he goes on in the list with similar formula, the last on being 'S *criticises* his latest solution of the problem X'. He thinks that the list is far removed in character from 'S believes that P' and 'S knows that P', because one may *know* or even *doubt* without criticizing. Even if we grant that he is right, doesn't his analysis *also* need a reference to S? (D) is different from (D1) (D2) or (D1*) (D2*) in what S (i.e. his scientist) does. That means he simply replaces 'believes' and 'knows' by 'doubts', 'conjecutres', 'tries to undertsand' or 'criticizes', etc. But does it make much difference regarding the role of knowing subject in epistemology? I don't think so. 'Conjecturing' S or 'criticizing' S are at least needed for his type of an analysis. Therefore, his dislike for terms like 'believing' and 'knowing' cannot shake the dreaded 'knowing subject' off his shoulder. It comes back at least as 'unknowing subject' or 'criticizing subject' if he detests the word *knowing* subject.

My other point regarding the role of 'knowing subject' concerns the distinction Popper made between W2 and W3. The latter is the world of objective knowledge that grows. How does it grow? His answer is: by constant feedback from the W2, that is by criticism and elimination of error or false theories. In fact, criticism is vital for his W3 and its objectivity. Proofs and theories may be autonomous once they are made a linguistic item. But criticism *also*, according to Popper, is a constituent of W3, and there cannot be any criticism without *an active agent* because criticism at least needs arguments and understanding of language. His schema

P1 →TT →EE →P2

is the schema of growth of objective knowledge through *rational* criticism. The last item is precisely the demarcation point between animal struggle for existence and rational discourse for knowledge.

Criticism is, indeed, a human pursuit, and without that knowledge cannot be objective. So Popper needs, in his own terms, a central knowing being for reinforcing his World 3 for its progressive nature.

Notes and References

1. K. Popper, (1959), *Logic of Scientific Discovery*, p. 98.
2. *Ibid.*, p. 98, cited from Carnap, *Scheinprobleme inder Philosophie*, (1929), p. 15.
3. *Ibid.*, p. 98.
4. *Ibid.*, p. 99.
5. First in *Logic of Scientific Discovery*, see pp. 10-11, then in *Objective Knowledge*.
6. Especially in 'Epistemology without a Knowing Subject' in *Objective Knowledge* (1972).
7. *Objective Knowledge*, chap. 3.
8. *Ibid.*, p. 19.
9. *Ibid.*, pp. 278-79.
10. *Ibid.*, p. 279 (italics ours). Popper's anti-Baconianism is legendary. He rejects Bacon's obsession for purging mind from all (unjustified beliefs) 'anticipations'. See my 'Prejudice, Imagination and Scientific Knowledge' in *Indian Philosophical Quarterly*, July 1980.
11. As expounded in *Theatetus*.
12. *Ibid.*, p. 280.
13. *Ibid.*, p. 280.
14. As has been argued by B. Carr in 'Popper's Third World' in *Philosophical Quarterly*, July 1977.
15. First in *Logic of Scientific Discovery* (1959) and then in *Conjectures and Refutations* (1962).
16. In 'Epistemology without a Knowing Subject' in *Objective Knowledge* (1972).
17. *Ibid.*, p. 109.
18. *Ibid.*, p. 108.
19. *Ibid.*, the last three italics ours.
20. *Ibid.*
21. Apart from Gettier's famous counter example to the JTB analysis, many other post-Gettier accounts can be found in Pappas and Swain (eds.), *Essays on Justification and Knowledge*, 1979.
22. *Objective Knowledge*, p. 110.
23. Cited from Frege in *Objective Knowledge*, p. 109.
24. Susan Haack, 'Epistemology with a Knowing Subject' in *Review of Metaphysics*, December 1979.
25. See her 'Two Fallibilists in Search of Truth in Peirce and Popper' in *Proceedings of the Aristotelian Society*, 51(1977) Supplement.
26. 'Epistemology with a Knowing Subject' in *Review of Metaphysics*, December 1979, p. 310.
27. *Objective Knowledge*, pp. 3-6, pp. 23-26, particularly p. 25 where he says: 'I do not believe in *beliefs*', pp. 69, 98, 100-101, p. 122n.
28. *Op. cit.*, Haack, p. 311.
29. *Op. cit.*, Haack, p. 317-25.
30. In *Knowledge*, 1976, Lehrer has presented a coherentist view of the justification problem, according to what our system of beliefs is ultimately circular. He ends up in a sceptical vein that in this system there is no ultimate justifiers (beliefs) which is more basic than the others. We add and drop beliefs continuously within the epistemic framework and cannot refer outside it.
31. For various attempts to answer the sceptics, see Pappas and Swain (eds.), *Essays on Justification and Knowledge*.
32. *Ibid.*, pp. 311-13.
33. *Objective Knowledge*, pp. 114-18; *Unended Quest, The Open Universe*, pp. 118-22.
34. 'Epistemology with a Knowing Subject' in *Review of Metaphysics*, December 1979, p. 313.
35. With her pragmatic leaning, Haack seems to find such dynamic theory of Popper as very close to that of Peirce. See her 'Two Fallibilists in Search of Truth', *op.cit.* in this connection.
36. Frege, *Der Gedanke*, 1918.
37. *The Open Universe*, pp. 118-22.
38. *Ibid.*
39. *Op.cit.*, pp. 327-28.
40. B. Carr in 'Popper Third World' in *Philosophical Quarterly*, July 1977, has argued that subjectivism is also compatible with fallibilism.
41. *Op.cit.*, p. 328 (italics ours).
42. S. Haack, 'Fallibilism and Necessity' in *Synthese*, 41, 1979.
43. *Ibid.*, p. 52.
44. *Objective Knowledge*, p. 41.
45. *Ibid.*, p. 64.
46. *Ibid.*, p. 134 (italics ours).
47. 'Epistemology with a Knowing Subject' in *Review of Metaphysics*, December 1979 (italics ours).
48. Lehrer, *Knowledge*, 1976; see the chapter on 'Truth'.
49. *Op.cit.*, p. 333.
50. See B. Stroud, 'The Significance of Naturalized Epistemology' in *Mid West Studies in Philosophy*, vol. vi, 1981.
51. Alan Musgrave, 'Objectivism of Popper's Epistemology' in P.A. Schilpp (ed.), *Philosophy of Karl Popper*, pp. 577-81.
52. *Ibid.*
53. *Logic of Scientific Discovery*.
54. *Conjectures and Refutations*.
55. David Hume, *Treatise*; see under 'belief', pp. 678-79 (Selby-Bigge, second edition, also 'scepticism' part iv, sec. I, reprint, 1981).
56. *Objective Knowledge*, p. 140.
57. *Ibid.*, pp. 140-01 (underline and the naming D, D1...D2* are ours).

Realism-relativism: two views concerning human knowledge*

CHHANDA GUPTA
Jadavpur University, Calcutta and
Indian Council of Philosophical Research, New Delhi

Philosophers often get embroiled in global warfare. They are not interested in carving out zones of influence that can peacefully co-exist. A defeat in one domain compensated by a victory elsewhere is not what would satisfy. The combatants wish to have a decisive and straightforward answer to the question 'who vanquished whom?' For the war they wage is fought with the intent of bringing *every* area of concern within the gambit of a single theory they subscribe to. The issue between Realism and Relativism typically illustrates such polarization. I want to advance a point of view that hopes to bring about a ceasefire if not a permanent peace.

I. Realism or Relativism

Realism in general is committed to the thesis that (*i*) there exists a mind-independent real world; and (*ii*) human knowledge worthy of the name reveals more and more truths about the way the world *actually is*. So construed the thesis seems to be in the grip of the old idea that there is an *uniquely structured* real world, and an *uniquely correct* and *complete* account of the same, and knowledge reveals more and more truths about this world in the sense that it approximates this uniquely correct account. In the context of scientific knowledge, (with which I would be primarily concerned,) this kind of realism maintains that science has succeeded in this mission despite the vicissitudes that its theories encounter. It is converging towards the unique best description of the world. There is a more *moderate kind of Scientific Realism*, however, which does not share this optimism. It does not accept 'the image of scientific theory as Mirror of Nature'[1] which the optimist view enshrines. Nor does it believe that convergence is to be interpreted as approximation towards the one uniquely correct world-view which 'mirrors Nature.' It does believe that different theories are converging towards a stable description of the world, but the notion of 'convergence' is construed differently.

Relativists join the moderate realists in denouncing the 'mirror image' of knowledge. The world-as-such is beyond our reach. There is no escape it

*This paper was written during the Fall Semester (1985-86) in the Department of Philosophy, Harvard University, under the supervision of Professor Hilary Putnam, my Faculty Associate at Harvard. I gratefully acknowledge my indebtedness to Professor Putnam for his invaluable guidance and to the Council for International Exchange of Scholars for providing me with this opportunity by awarding a Fulbright research grant.

seems, from Kant's predicament or Quine's. There is a real world, but we can only describe it from within our own conceptual scheme. It is otiose to strive after the unique description of the world-as-such, and measure 'convergence' in terms of approximation towards that description which is never available. But from this the Relativists draw a conclusion which few moderate Realists would accede to. From the fact that the world is relative to our understanding, the Relativists infer that with changes in our understanding the world itself becomes different. To put it differently, emergence of a new conceptual scheme would imply the extinction of the world that was relative to the old scheme and creation of a new one, for extreme Relativism regards the object of knowledge as a product of understanding and the world as a product of a world-view. Moreover, so different are the world views, that science cannot be portrayed, it is argued, as a cumulative enterprise converging gradually towards a stable description. And since different world-views create different worlds, science cannot be viewed as a progressive unfoldment of the *one* real world either. Further, this one real world (even if there was one) could not be the ultimate tribunal for adjudicating the truth-claim of different scientific theories. The Relativists change the very notion of truth and also that of the criterion of truth. Truth is no more considered to be apprehension of or correspondence to real 'goings on' in the *mind-independent* world. The Relativists think that the notion makes sense only within a context. There is no all-purpose device for deciding whether a given statement is true regardless of the frame of reference in which it is made. The statement 'S is true' should be expanded into the statement 'S is true relative to criterion C,' and the criterion too is internal to a shared culture or form of life.

Moderate Realists take the middle course. They try to build a syncretic collage pooling insights from both sides. The following comprise the major strands of their composite viewpoint ranged against both the perspectives: the old Realist and the new Relativist.

1. We confront and survey the world from within our conceptual scheme. But belief in or dependence on the scheme or on the knowing mind is not to collapse into a subjectivism that makes the world a product of a world-view, entailing 'different worlds' created by different worldviews.
2. Belief in a real world need not commit one to the belief in a world that has an *uniquely determined fixed* structure. If there is only *one* way the world actually is, and if truth be correspondence to the way the world is, then knowledge can possess, or at least approximate truth only insofar as it represents *that* way. Faith in a world with its *own unique* structure, though unproblematic and convincing at first blush, is prone to revive the 'one true theory' account of the world which no contemporary version of Realism is ready to incorporate. As Putnam observes citing Goodman's view—'there are *many* ways the world is'.[2]

3. Changes and developments in science make the 'one true theory' account untenable. 'Convergence' therefore should not be interpreted in terms of a notion which itself is untenable. But this need not lead to the drastic 'no convergence' view of scientific advancement, which the Relativists preach. One cannot make sense of advancement if there was no convergence at all.
4. Truth ascriptions to specific statements can be made only within the context in which they are asserted. But this does not equate truth with *what the cultural peers preach and profess* within that context. Truth claiming assertions are *criticizable*.

I would try to build a case in defence of Moderate Realism. I have concentrated primarily on Thomas Kuhn's 'different worlds' thesis since his is one of the major views that has stimulated debate between Realism and anti-Realism in recent times. Explicitly Kuhn's thesis seemed to have drifted towards an ultra-idealistic 'different worlds' account, and an accompanying intellectual relativism, which Karl Popper described as 'the main philosophical malady of our time'.[3] Implicitly vestiges of old-style epistemology was often retained and stood in the way of a straightforward answer to the question: 'who vanquished whom?' To me the sharing of the fruits of victory seems inescapable. It seems to be needed by the distinctive complexion of Popperian philosophy of science, built upon a very complex image of scientific knowledge where pessimism and optimism curiously combine. Popper announced at one breath: 'Our science is not knowledge (episteme): it can never claim to have attained truth, or even a substitute for it, such as probability. Yet...the striving for knowledge and the search for truth are still the strongest motives of scientific discovery'.[4]

The optimist 'mirror' view of knowledge has been on the wane ever since Kant undid the notion of an object-in-itself, untouched by the role the subject plays in knowing it. The view loses its grip the more we move away from what was to be *found* or *discovered*, to what *we ourselves bring to the search* in our dealings with the world by way of concepts, presuppositions, values, methods, etc. When these concepts and values are themselves found to be plunged in the flux of an ever changing socio-historical milieu from which they evolved, the rift between the old Realist and the new Relativist views becomes a gaping chasm. Knowledge viewed from the Relativist perspective seems to forfeit its claim not only to discovery or description of the object in itself, but to universality as well. It can no longer derive objectivity and universality from the way all humans are (supposedly) uniformly constituted. Given the plethora of conceptual schemes in lieu of a single core categorial framework, and the received wisdom that 'understanding maketh nature,' one seems to confront an unadjustable choice: Realism or Relativism? Does knowledge represent the real-as-such placed outside of the context in which the knower himself is socio-historically situated? Or, is the object of knowl-

edge a product of viewpoints—values—attitudes adopted by different schools —generations or cultures, having a place only within such culture-frame? An answer in the affirmative to the first question perpetuates the ancient dogma of knowledge representing reality in-itself. Such a concept dehistorises human knowledge. Consummated attainment of truth characterize divine omniscience—not the growing knowledge of the fallible anthropos. But an unqualified 'yes' to the second question is a trendy intellectual affectation that views science as a mere product of society, its theories merely reflecting the needs, beliefs and attitudes of its dominant sections.

Section II focuses on Popper—Kuhn controversy. Popper no doubt was the avant-garde to augur the perspective that hastened the break with traditional epistemology. Yet he did represent the legacy which Kuhn revolutionized.

II. Two Views Concerning Human Knowledge

The view of knowledge representing the real-as-such had once enthused realists with a foundationalist bias. There were certain 'non-doxastic' beliefs, they thought, which did not stand in need of justification by any other belief. These were taken as 'ultimate justifiers' insofar as they were supposed to derive justifiability from basic experiences, allegedly revealing real states of affair.

Foundationalism has gone with the wind of positivist programmes of reduction and with the controversy about the status of basic or foundational propositions themselves. Not only was observation deprived of its role as 'ultimate justifier'; its claim to being a decisive falsifier was also questioned. If we cannot ever establish conclusively the truth of any statement, our effort to establish falsity conclusively, fares no better. The startling thesis of *The Logic of Scientific Discovery*, that basic statements are accepted as a result of *decision* or *agreement*, deprives us of the means of showing conclusively that any statement is false. We cannot assert unconditionally that it must be rejected once and for all as false, by accepting certain experimental results as true. Different schools of inquiry might each have its own convention as to which 'basic statements' to accept as true, and accordingly...reach different conclusions about whether a given theory should, or should not, be deemed false'.[5] Popper's conventionalism with respect to 'basic statements' would thus adumbrate the full-blown doctrine of 'theory-laden observation,' that supplants crucial falsifying tests, by sociological factors like: 'authority,' 'consensus' and 'opinion of reference groups.' It would make theory-choice turn on social criteria in lieu of neutral 'epistemic reasons' constituted by objective experimental findings. Per force he would have to accede to the relativist demand that in the absence of any independent standard, we are all free to set our own norms.

To be obsessed with such an unrestricted fallibilism however is a kind of neurosis. 'To question seriously the truth of a statement solely on the ground

of a logical possibility of error, i.e., on the ground that no matter how carefully we observe or count or calculate...it is still logically possible that we have mis-observed, mis-counted, mis-calculated...'is like a 'compulsive handwashing.' It does not seem that Popper implied that 'we should become neurotic...or let ourselves be paralyzed by, the logical possibility of error'.[6] On the contrary, he refused to live under the shadow of pessimism, and notwithstanding his denial of an incorrigible rock-bottom empirical base for knowledge, stood close to the mainstream of the realist view, that believes in the possibility of *a unique best description* of the world. True, the description is not available as a finished product via ultimate *verifiers*. Popper disputed the authority of facts as ultimate *justifiers* but he maintained fervently the decisive role they play as potential and actual *falsifiers*.

Many fail to see this decisiveness, and question the alleged asymmetry between verifiers and falsifiers, which they argue, is not consistent with his conventionalism. A radical skepticism vitiates this conventionalism, they fear, which carried to an extreme would threaten the whole foundation of his belief in scientific progress. This is a misreading drawing on the false presumption that an observed fact forfeits its claim to decisiveness and cruciality as a falsifier, simply because it cannot falsify by laying bare infallibly what is the truth about the world. No experience can yield final results—verifying or falsifying. The world retains a right to return a 'no' to anything which we now decide to accept as a 'yes' or a 'no' to our conjectures. But the very fact that it may thus be negated or falsified brings out the decisiveness and compulsiveness of facts, showing that these are *in-spite-of us*. It is this compulsiveness that constitutes cruciality of tests, not the alleged ability to return a *final* 'yes' or 'no' via a mystical presentation of the real-as-such to rational intuition, or to direct sensuous experiences. Cruciality is to be understood with reference to a whole series of tests to which our conjectures are endlessly subjected. Experimental control does not come in the form of an instant finalistic result issued by a single test. The fact that our conjectures can always be revised and rejected, shows that we are not to cling on to the conventions we have decided to adopt. These adoptions are not arbitrary and cannot be retained in the face of refutation. When we decide in favour of a theory we put forward the claim that it is a purported true description of the world. 'That it is about something real is best understood when, in the course of testing it turns out to be false; when we realize that...there was a reality—something with which it could clash. Our falsifications...indicate the points where we have touched reality as it were'.[7] Popper never allowed his 'conventionalism' to slip into any kind of strategy for defending adhoc devices, which relativists would hail as our freedom to set our own norms. The route from Popper to Lakatos to Kuhn is after all not one of a smooth transition; it presents, rather, a picture of decisive transformation of fundamental differences erecting a wall between the old realist and the new relativist conceptions of knowledge.

Thus, (*i*) while Popper reaffirms the realist demand of checking beliefs against facts, and tirelessly emphasizes the need of subjecting even our most reputed theories to a series of controlled, varied and severe tests, Kuhn denies the very possibility of neutral observations. Popper, to be sure, was not a naive falsificationist. To discard a theory after a single failure would indeed amount to intellectual nihilism. In general, however, he deplores the effort to immunize theories against criticism and advocates a bold commitment to falsifiable predictions. It is tempting to construe the controversy as a dichotomy: either concede a strong or naive realist position and maintain that nature via observed facts determine and control theorization by revealing what really is the case; or grant 'theory-ladenness' and therefore relativism enjoining that facts do not constrain because they do not picture or represent the real as such. But to say that the given is not presented in its abstract purity and in isolation is not to say that the perception we have can jeopardize the *givenness* of what we perceive. It is for this compulsiveness that observation cannot be turned into a captive constrained by us to conform to whatever we may bring to it by way of interpretation. Observation controls when it baffles our expectation and shows that something has come about contrary to our wish—expectation and advocacy. It is on this inalienable givenness that Popper lays the greatest stress when he speaks of cruciality. To deny this is to render the whole idea of test otiose and abortive. To insist, on pain of indecisiveness that the falsifying 'no' is issued by *us*, is to leave open the possibility of its being turned into a 'yes' at *our will*. It leaves open, in other words, the road from relativism to the strategic ploy of safeguarding ad hoc conventions and then eventually to dogmatic conformism and totalitarianism, exposing problems inherent in the relativist's position. Still the new wave is not Popper's falsifiability but Kuhn's 'paradigm'.

Kuhn abandons the stereotype of falsification by neutral observational data. The reason why such data cannot exercise independent control over our theorizing is that we ourselves are to a very great extent the authors of such data. Perception for Kuhn is not the perceiver's solo encounter with raw data allegedly revealing what is really the case. His perception goes much beyond the stimulus and is largely affected by shared values—needs—concepts which are the common possession of the prevalent scientific community. Even at the observation level, knowledge is not an episode in a vacuum, but is open to an essential penetration of socio-historical processes. It is not the result of the presentation of the object-in-itself to an individual immune to situational influences. The object presents itself in many different refractions for change of values and concepts alters perception of facts. Popper condemned 'the source view of knowledge'—the view that 'truth is manifest' in some kind of basic experience from which knowledge is supposedly derived. But for him, this carries no anti-realist implication that theory-choice cannot be affected by a neutral set of facts. For Kuhn, 'theory-ladenness' of facts is the watchword of anti-realism. To grant theory-ladenness is to rob facts of

neutrality, and therefore of its power to adjudicate the knowledge-claim of conflicting theories.

(*ii*) Popper renounced the idea that knowledge is 'possession of truth.' He found no satisfactory answer to the question 'what could the correspondence of a statement to the facts be?' This, coupled with the difficulty that 'there is no general criterion of truth for scientific theories,' led some to attribute to him the view that 'Truth itself is just an illusion.' In point of fact he never renounced the ideal of truth, nor the optimism of getting at more and more of truth with advancement of knowledge. The importance and legitimacy of the notion of truth is in no way impaired by the fact that there exists no general criterion of its applicability in specific cases.[8] But even if it cannot be directly applied, it can nevertheless play the role of a regulative ideal. Rival hypotheses are indeed powerless to make 'truth manifest' once and for all. The notion of truth may still regulate our quest for it, by submitting them to severe tests, and by trying to bring about their refutation. If some of them prove their mettle, we accept them as true (though provisionally), or as 'truthlike.' Their truthliness is computed in terms of the number of severe tests they are able to withstand.

Kuhn refuses to believe in any such metric of 'verisimilitude.' There are no neutral common observations supposedly revealing things as they 'really are,' by being checked against which we could find out how well our knowledge represented reality, or to what extent it was 'corroborated' and 'truthlike.' The data that were supposed to pronounce one theory to be more true than another, are themselves metamorphosed with changes in theory. He, therefore, does not think that a better theory is 'a better representation of what nature is really like.' Its knowledge-claim is not secured by resorting to an alleged match 'between the entities with which the theory populates nature and what is really there.' One cannot conceive this match in a theory-independent way.[9]

(*iii*) With this, Kuhn brings about a drastic change of view of scientific rationality. The choice of a theory is no longer deemed rational if its truth-content is shown to exceed that of its rivals, i.e., when it is borne out by a greater number of severe tests. Truth would be omitted from Kuhn's new account of rationality, if severe tests are believed to be its guarantor by producing a match between theory and so-called hard facts. The cognitive worth of 'justified true beliefs' or of 'corroborated conjectures' cannot be assessed from a trans-social perspective by universal objective standards. The new locus of rationality is found in the convictions and unanimous judgement of a group of trained specialists. Knowledge thus is turned into an unflinchingly (though temporarily) held *opinion* of a group. It is not a cumulative process that advances from a less true to a more true picture of the universe with increments in corroboration of its most impressive theories. Nor, is it in a state of 'permanent revolution' as the image of science as a continuous history of 'conjectures and refutations' may misleadingly suggest. It is instead

marked by long periods of steady refinement safeguarded by practitioners of a given community, interrupted only when difference of opinion ensues. But such differences cannot be settled within a common frame of raw perceptual data. The transition from one theory to another is effected on the contrary through techniques of mass persuasion...including force.[10]

When the role of deliberations—arguments—tests is thus undermined, and the relevance of social factors exalted, in settling debates about paradigm choice, Kuhn's account is quite naturally construed as a vindication of irrationalism. It is taken to censure the very notions of truth, objectivity and rationality. Kuhn himself has candidly admitted that his earlier description of scientific revolutions suffered from rhetorical exaggeration. Paradigm changes do not imply total incomprehension and absolute discontinuity between competing theories. His main objective was to underline the fact that the arguments advanced to support a new paradigm always contain ideological elements that go beyond logical proof. What is distinctive is his emphasis on the role of values in scientific judgements and on sociological factors like authority, hierarchy, reference groups as determinants of scientific behavior.[11] Despite these refinements, it is not clear, however, whether his new account of rationality or a new approach to the question of truth and objectivity, can explain the sense in which he is 'a convinced believer in scientific progress.'

Suppose we do not pay heed to Popper's precept that the absence of a criterion of truth cannot be used as an argument against the logical legitimacy of the notion of truth. A concept that has no specific application should be supplanted by a more viable notion according to many thinkers. Lakatos finds in *progressiveness* of 'scientific research programme' a surrogate for 'truth' as understood traditionally. Putnam's stricture against the metaphysical realist notion of truth as 'correspondence to facts' is well-known. 'Truth in the only sense in which we have a vital and working notion of it is *rational acceptability*...under sufficiently good epistemic conditions...' he writes, 'which conditions are epistemically better or worse is relative to the type of discourse in just the way rational acceptability itself is'. Still Putnam's real intent was not the conflation of the two concepts. This becomes evident when he observes: 'talk of what is right and wrong in any area only makes sense against the background of an inherited tradition; but traditions themselves can be *criticized*.' 'On the one hand there is no notion of reasonableness at all without cultures, practices...on the other hand *the cultures, practices, procedures, we inherit* are not an algorithm to be slavishly followed.'[12] He exposes what comes of an effort to identify 'truth' with right assertibility by the standards of one's cultural peers. A methodological solipsist cannot consistently take a transcendental stance and say, just as *my* body is a construction out of *my* experiences, *your* body is a construction of *your* experiences. It too is a construction out of my experiences. Similarly, Putnam points out, a relativist would be caught in the same plight. A relativist can indeed say 'when

I say something is *true*, I mean that it is correct according to the norms of *my* culture.' But if he takes a transcendental stance and says: 'when Karl says "Schnee ist weiss, what Karl means...is that snow is white *as determined* by the norms of Karl's culture,' i.e. German culture, he is guilty of inconsistency exactly in the way the methodological solipsist is. For if every utterance the relativist uses is relativized to the norms of his *own* culture, say American culture, then the utterance 'snow is white as determined by the norms of German culture' is relativized to the norms of American culture. A relativist must understand his own hermaneutical utterances as logical constructions out of the practices of his *own* culture. A consistent relativist is thus driven to 'incommensurability,' i.e., he has no comprehension of others' cultures, just as a methodological solipsist has to retreat to real solipsism. Truth and reason are for Putnam 'both immanent (not to be found outside of concrete language games and institutions) and transcendent (a regulative idea that we use to criticize the conduct of all activities and institutions)'[13] But, if 'truth' is defined as 'right assertibility,' and 'right assertibility' in its turn is given a 'consensus definition' then this petrifies so-called relativist norms held by 'cultural peers' into cryptoabsolutist ones according to Putnam. Relativism carried to this length is obviously self-defeating.

One may give up the idea that the only way to secure rational acceptability for a hypothesis was to display its match with nature via observed data in a crucial experiment. Kuhn pointed out that within the bounds of normal research, experimentation—instrumentation was to be subordinated to *ideas* and *concepts* within the ruling paradigm. The match with observation in this context is intended to articulate the predictive potential of the paradigm—to *vindicate* the *ideas* that are central to it, not to *represent* what nature is *really* like. Disciplined submission to the authority vested in the paradigm may ensure smooth functioning of normal research and may therefore be considered a mark of progress in this particular area.

But this leaves unexplained the progressiveness of scientific revolutions that demand a break with tradition—with conformism to old ideas. The role of observation *here* is not to show how nature fits the box provided by the paradigm, deliberately ignoring the recalcitrant facts that would not fit. If it were, we couldn't understand why there should be a period of crisis or of anomaly. There are suggestions that even the recognition of anomaly presupposes the new perspective of the new revolutionary science so that here too experimentation and observation are subordinated to ideas. But this runs counter to the view that anomalies serve as a 'prelude' to paradigm shift. If the new perspective of a new revolutionary science is a prerequisite for recognizing the anomaly, then it is the perspective which is prior to any recognition of anomaly. The anomaly in such a case cannot be dubbed as a 'prelude' to paradigm-shift. Anomalous experience is anomalous in that it brings something about that is contrary to the ideas hitherto defended. It is at this point that some sort of automony has to be restored to experimentation. Other-

wise one succumbs to crass irrationalism. Kuhn thus has to appeal to certain over-arching criteria or 'paramount abstract values' of which the old criterion of 'accuracy' or 'data-theory match' is a preponderant factor. To internalize all standards would be to block evaluation across the frontiers of rival paradigms. The new community of scientists is more like a 'body of lawyers' than a 'revolutionary mob' and is guided by such abstract values as 'unanimity as such' and not unanimity of any *one particular* group to whose internal standards one has to hold on, come what may.[14] But 'unanimity as such' and 'accuracy' are a-social methodological canons—the usual objective standards of evaluation that blur Kuhn's original conception of 'living laws' governing actual concrete research traditions. Ridden by dilemma, he wants both to make room for tradition and to break with it. Ultimately however what will prevail are *decisional* factors,—*personal qualities* of individual scientists. We are therefore saddled with a relativism that licenses everyone 'to construct his own little paradigm, his own little practice, his own little language game and then crawl into it'.[15]

These 'little paradigms' produce worlds sealed off from each other. Parties to revolutionary conflicts dwell in these different worlds and do not see the same things. 'What were ducks in the scientists' world before the revolution are rabbits afterwards.' For to accept one paradigm in lieu of another is to force radical change in what is observed. Kuhn thus contends that 'it is...as if the professional community had been suddenly transported to another planet...and made to see the world...differently. *In so far as their only recourse to that world is through what they see and do*,...after a revolution scientist are responding to a different world'.[16] Despite the disclaimer that 'there is no geographical transplantation,' the idealist strain of the concluding lines of the citation suggest that 'different world' is more than a metaphor. The realists' one independent world is blasted into bits by changing and warring world-views.

III. The 'Different Worlds' Thesis

Kuhn's 'different world' thesis is a confluence of two viewpoints: one historical, the other conceptual.

History unveils the community structure of science. Practitioners of a scientific speciality who have received the same professional training, the same set of values, pursue shared goals, submit unwaveringly to the authority of that community. A 'paradigm' in the sociological sense of the term, is a common possession of that group. Unanimity among the practitioners is the product of allegiance to the ruling paradigm. In the event of a conflict of values, differences may often have to be settled ultimately by 'features of individual personality.' If the acceptance of world-views is merely contingent upon allegiances to changing paradigms and upon features of individual personalities, one loses the realist's 'one world.' A world where astronomers saw a star for a century, for example, will fade out to make

room for a new world with one more planet discovered by Lexell. History chronicles how the one world appears through fundamentally different orientations to differently situated generations of scientists. So different are the perspectives that their relationship cannot be simply stated to be one between an earlier incomplete and later more complete period of knowledge about the *same* world.

History seems to teach this lesson which Kuhn also draws from his analysis of experiential data. The thesis of 'data incommensurability,' as it is often called, lies at the heart of his 'different worlds' account.

Given the same sensory inputs, the objects observed may be very different. Looking at swinging stones, Aristotle saw constrained fall while Galileo looked at a pendulum. You and I may both see the lines of the same figure but you see a bird and I an antelope. The lines being the same in each case cannot account for the switch from bird to antelope. It is only when the requisite new category is made available to the experiencing subject that he sees an antelope while having the same retinal impressions. The revolutionary transformation of the scientists' vision is similarly attributed to a changed set of values and concepts. In the long route from stimulus to sensation, the different visions that emerge lose touch with the common genesis.

They lose touch for they cannot be compared by tracing them back to any more basic data, like lines in the Gestalt figure for instance, which you see *as* a bird and I see *as* an antelope. Kuhn's thesis of data-incommensurability is more radical than what the analogy to 'Gestalt switch' suggests. The subject of a Gestalt experiment can direct his attention not to the figure, i.e bird or antelope, but on the lines of the paper. But the scientist who sees a pendulum in place of a swinging stone has 'no experience...more elementary than seeing a pendulum'.[17] He does not see any fixed datum which he sees *as* something else. Even if he did, that sense of seeing would be a far cry from the sense of scientific observation. He simply sees what he sees and sees it through a paradigm.

Just as there is nothing in the common sensory input to account for the vision change, so also there is nothing in it to suggest that one vision is true on the plea that there is a better match between it and the data given. The data fit both the visions and thereby leave us without a common criterion of choice.

For Kuhn, different 'paradigms' quite literally transform observation and experience. Hanson, Toulmin and Feyerabend concur with him and maintain: 'we see the world through our fundamental concepts of science...to such an extent that we forget what it would look like without them.' None of them would want to say that Aristotle and Galileo both saw pendulums, and that they only *interpreted* their observations differently. Thus Tycho and Kepler do not see in the neutral sense of the term 'see'. Practicing in the essentially different universes—the geocentric and the heliocentric, the two scientists see different things when they look from the same point in the same

direction. Tycho sees X_0, the sun which is mobile, circling a fixed earth, while Kepler sees X_1, the sun which is essentially static.[18] Apparently, one has to refrain from assessing the competing knowledge-claims. The statement 'Tycho sees X_0' would be true in one system, false in another. Or, since that which is mobile is surely not static, $X_0 \neq X_1$, Tycho and Kepler cannot be said to see the same thing. The statements: 'Tycho sees a mobile sun' and 'Kepler sees a sun which is not mobile,' though *prima faciae* mutually inconsistent, would both be true. This is bound to be the case in the absence of paradigm-neutral external standards by which a paradigm's internal standards can be non-relativistically evaluated.

Not all commentations however see Kuhn's 'different worlds' thesis as leading to such total relativism. Gerald Doppelt for instance denies there is an 'absolute epistemological break between mutually 'incommensurable' paradigms...which blocks the possibility of any coherent debate or comparison between them'.[19] But Kuhn's own works seem to favour a stronger reading of his thesis, notwithstanding the contrary impression one may gather from certain passages in the Postscript of the second edition of his celebrated book, and in 'Objectivity, Value Judgement and Theory Choice' in *The Essential Tension.*

His position vis-a-vis science is 'far from *mere* relativism,' he declares; and in so far as 'the demonstrated ability to set up and to solve puzzles presented by nature...is recognized as the dominant criterion in theory-choice',[20] Kuhn seems to have restored to observation the decisive place it had enjoyed in traditional epistemology.

Still, this is not a retreat to tradition. It is not because:

(*a*) The so-called match between facts and predictions of a paradigm is a foregone affair. Puzzle solving by achieving this match in normal science is like forcing nature to fit the box supplied by the paradigm in question. It is achieving the expected.

(*b*) Even when in the course of experimentation the expected does not come about, observation has no decisive role. When Roentgen's screen glowed for instance when it should not, the anomaly is only taken to be the 'prelude to discovery.' If the glowing screen by itself held the clue to new discovery, X-rays would have been noticed by all who experimented with cathode rays.

(*c*) Discovering a new phenomenon involves recognizing both *that* something is and *what* it is. Surely, when Priestly observed the gas released by heated red oxide of mercury he did not discover *what* it really was—a nitrous oxide or dephlogisticated air. The datum itself revealed nothing as to *what* really was the case, to him or to Lavoisier any more than the bright yellow disc at dawn suggested whether it was static or mobile. If the gas or the disc could be construed as stable data of which the different visions were interpretations, one could secure, it seems, a common platform for communication and a criterion for theory choice. Kuhn's comment in the *Structure* that '...the scientist is still looking at the *same* world' would then seemingly secure the referential stability which his critics, particularly Scheffler, were so eager to establish. Despite this ambivalence there is unmistakably a turning away from the socalled 'same world' of raw data. In his 'Second Thoughts on Paradigms' he writes: 'I would now want to say that members of different communities are presented with different data by the *same stimuli.* Notice however, that the change does not make phrases like "a different world" inappropriate. The given world, whether everyday or scientific, is not a world of *stimuli*'.[21]

Kuhn thus renounces a viewpoint that guided western epistemology for centuries, namely the view that theories are interpretations of given data. What Priestly and Lavoisier saw were not different interpretations of 'observations that themselves are fixed once and for all by the nature of the environment and of the perceptual apparatus'.[22]

The upshot is that strong version of 'different worlds' thesis which is responsible for the cries of outrage against a view that makes 'Reality itself ...relative to a scheme.' Even when Kuhn reiterates his commitment to the binding 'abstract paramount values' like 'accuracy,' 'consistency' and 'simplicity,' the misgivings about theory-choice being degraded into a matter of 'mass persuasion' cannot be allayed. For Kuhn denegrades 'accuracy', in so far as it cannot be taken to ensure unequivocal choice. When one theory matches experience better in one area, while the other in another, what prevails in the end is the decision of the scientist as to which was the area where accuracy was more significant.[23] This is a long stride in the direction of socialization of science that seems to abort chances of reconciliation between the realist and the relativist.

IV. The Third View

One dominant idea which fascinated almost every philosopher before Kant, seems to lie at the heart of the controversy that precludes chances of reconciliation. It is the idea that there is a world out there with its *own unique* structure, and what we say or think is 'true' only when it gets it *just* the way it is. Few contemporary versions of Realism today find this latter idea even worthy of debate. 'Metaphysical Realists should drop all pretext of being separated from their opponents...' writes Hartry Field, 'by some issue about the existence of a uniquely correct theory of the world.' He holds steadfastly however to the idea of 'a unique mind-independent world'.[24] But this coupled with the 'correspondence' view of truth, which many modern realists do subscribe to, would revive just the idea, that is sought to be ruled out, namely the idea that there is exactly one uniquely correct theory about the world. As long as the world is believed to have its *own* fixed structure independently of the mind, and as long as truth is believed to be correspondence to that structure (which the world has independently of the mind),

it is hard to give up the 'one true theory' account. Popper's fallibilist epistemology dealt a deathblow to the old idea that human knowledge can ever attain a correct and complete description of reality. Strangely, he himself held on to the view that the world has a structure of its *own*, and there is a unique best description of the world, and the degrees of 'truthlikeness' of different theories are indexes of how closely they approximate such a description. Even if the description which is never available is construed as a 'regulative ideal,' the sense in which it guides our quest for knowledge is that our theories should be put to severe tests to qualify as purported true descriptions of the world. They should not be regarded as entirely our own creations. It cannot regulate however in the sense that we can somehow discern the extent to which there is an one-to-one match between a theory and the unique description, which is requisite for a black and white appraisal of the degree of its 'truthlikeness.' The over-ambition and the despair at the same time provided the relativist with an effective argument to announce the demise of Realism. When the world-in-itself with its own unique structure is sharply set against the structure *we impose* on it, the latter is very likely to be construed as a shifting scene—an *appearance* and even as a *distortion*. The olden day dualism of 'appearance and reality' and its modern variant, namely the dualism of 'scheme and content,' seem to leave two irreconcilable courses open: (*i*) dogmatism insisting that the scheme somehow reaches out to, or at least approximates, the content; or (*ii*) extreme relativism contending that the content is a creation of the scheme, and there are as many contents as there are schemes with nothing to serve as a link between them.

There is a third course, however, which the two contending parties might avail themselves of, and then achieve a truce. If the scheme and content could be somehow meshed, if reality itself assumed different dimensions in relation to minds that know it, there need not be any mystery or miracle about the scheme reaching out to the content. Nor would scheme or appearance be liable to be viewed as something which is *essentially different* from the real, and as such, as a distortion or as something which is entirely our own creation. This is the new perspective envisaged by Putnam in his 'Internal Realism.' A reality external to mind and independent in the sense of having a structure by itself bearing no impress of the mind that knows it, leads to the hiatus landing up either in dogmatism or in scepticism. To say that the 'real' is internal to a scheme or is partly made by it, though not wholly a subjective creation, is to hold like Goodman that 'there are many ways the world actually is.' The many versions are not miraculous representations of the ways the world is *by itself*, unrelated to the mind. Nor are they distortions that we force upon the world.

A defence of the third view however should solve problems posed by the following questions:

1. Can the different ways depicted in different 'versions' be the ways in which the world is, even if such ways involve *contradiction*? Can we say for instance of two events that they are both 'simultaneous' and not 'simultaneous' and claim *correctness* for both the assertions?
2. Can the different versions be said to be stories about the *same* world or are there 'different worlds' corresponding to different versions?
3. Are the different versions 'commensurable' so that we could speak of different versions of the same story? If not, can we make sense of 'convergence' of scientific theories that would ensure progress and advancement of knowledge?

The section that follows is addressed to the problem posed by the first question. Questions 2 and 3 raise issues that demand an elaborate treatment. I would deal with these issues in a separate paper.

V. Are There Many Ways the World Is?

The problem posed by the first question is apparently a major hurdle for the pluralist thesis that 'there are many ways the world actually is.' How can the same sun be both mobile and static? How can anything be both a star and a planet? Can an electron both have and have not a trajectory?

The usual way to counter this point is to turn to the ground-level of *common observations* and to shift duality to the level of interpretation. Did not Tycho, Kepler or anyone keyed to the same stimulation intersubjectively, see the same bright yellow disc? Notwithstanding the duck-rabbit duality, the lines of the Gestalt drawing seem to constitute the stable object of our shared experience. The common perceptual object to which all allegedly had access, could be seized upon as the privileged and preferred version of the way the world *actually* is. In point of fact the problem cannot be resolved along this line.

First, any such preferred version supposedly disclosing the way the world *really* is, would be like the mythical 'mirror' of the old 'one true theory' of Metaphysical Realism.

Secondly, as Kuhn forcefully argues, the same sensory inputs may produce very different observations. Quine's celebrated example about the native asserting 'gavagai' in the presence of a rabbit, imparts the same lesson. No matter how many times we observe him being prompted to assert the expression by the same stimulation, we cannot find out by simple ostension, what he is referring to—'rabbit,' 'rabbit stage' or 'undetached rabbit parts'.

Thirdly, even if we could avail ourselves of common observations, that could not provide a criterion for assessing the *correctness* of any of the conflicting versions. The correctness of actual statement was believed at one time to hinge on the range of its confirming experiences. Putnam applauds Reichenbach for having shown that the degree of verification is not directly proportional to the observational evidence at hand. If the former was a function of the latter, then the two statements in Reichenbach's example, namely: 'there are birds outside the cube' and 'there are shadows (of birds)

seen inside the cube' would be verified to the same degree. For, the observable evidence available to the imaginary observers in the example, living within a large translucent cube, was exactly the same, on the basis of which they asserted the two statements mentioned. Still, the probability assigned to the latter sentence by the evidence is virtually one, while that assigned to the former on the basis of the same evidence is *less than one. Same observational evidence* therefore does not imply that two or more statements asserted on its basis would have the *same degree of verification.*[25] And if degree of verification confers correctness on the statements in question, common observation hardly plays a crucial role in the matter. It cannot determine the degree to which they are verified, and consequently cannot pronounce which of them is, or both are correct and to what extent.

Fourthly, is there anything in the nature of the observational input that sets limit to alternativity of responses, and thereby furnish a clue for transcending the contradiction we encounter initially in the conflicting responses? For example, the object commonly experienced to have an unusually bigger size could help resolve the contradictory accounts of its being a 'star' or a 'planet,' by securing ready acceptance for what Lexell proclaimed, namely, that it was a planet. The answer presumably is 'no'. Cases abound where even very simple organisms cannot be restricted in their varied responses by something in the nature of the stimulus.

These arguments indicate the collapse of a neat isomorphic relation between stimulus and response. In its absence we cannot have a shared neutral experience to fall back upon, to solve the problem arising out of contradictory accounts of the same object. And since the 'one' object cannot consistently be said to have 'many' *contradictory* facades, the best way to resolve the riddle would seem to lie in supplanting the 'one' by the 'many'. The same world cannot both have and have not an additional planet. But the problem would seem to evaporate if we say there are 'different worlds' *constituted* by different world-views. So it may be urged that instead of an *one-many* relationship we should rather have a *many to many* relationship. Still, there is a way to stall the proliferation of 'different worlds' notwithstanding the difference in world-views. Contradiction ensues only when the many properties that are attributed to the one world are understood in an *absolute* sense. To say of two events X and Y namely, an explosion on the moon and an explosion on Mars, for instance, that they happened *simultaneously*, and also that X and Y are *successive* is indeed flatly contradictory. But to qualify the predication and say that X and Y are *successive in relation* to observers in B—say a rocket ship moving at one quarter the speed of light relative to the earth A, and *simultaneous in relation* to observers in A, i.e., the earth, is not contradictory.[26] The same events can acquire different properties—have different dimensions, if the properties are *relational.*

This kind of *relationism* however, was seen to have other attendant problems. That things look different to different viewers, or acquire properties *in relation to them*, had inspired philosophers from very ancient times to preach the *duality* of *reality* and *appearance*. The systems which accommodate both, fail to resolve the mystery of their liaison. Alternatively we are left with 'appearances' and the 'real' is knocked out. Or again, among the 'appearances' given by different 'versions' produced by different viewers, *one* may be supposed to be truly representative, and have a metaphysical privilege over the rest. The scientist's 'version' for instance could be said to have an edge over that of the others. Goodman and Putnam rightly argue against any such special metaphysical claim made on behalf of the sciences. That version lays no special claim to correctness any more than neutral observation. To say that it does is to give way to the *externalist* realist view that there is *only one* way the world *really* is, which the privileged version approximates. Indeed, even minus this thick metaphysical picture, the 'one preferred version' account sounds implausible. 'Institutionalized deference to experts' may surely be the chosen norm of rationality vis-a-vis scientific knowledge. Clarity, austerity are highly prized values in that context. But as Putnam contends, 'institutionalized criterial rationality' has no *neutral* means of establishing which one of the different versions is more reasonable or correct than the others.[27]

'Internal Realism' has very often been misread as an ontology that has room only for '*appearances*,' especially since its author claims to have demythologised Kant by denouncing the myth of the 'thing-in-itself.' True, Putnam does write: "We cut up the world into objects when we introduce one or another scheme of description." Yet this is not a drift towards anti-realism and does not blur the line between 'Internal Realism' and 'Subjectivism' which the 'Different Worlds' thesis espouses. He has not accepted any interpretation that tends to make 'Internal Realism' collapse into 'Subjectivism'.[28] Slicing the world is not *wholly* an arbitrary imposition. There may not be anything in the nature of the so-called 'thing-in-itself' to restrict the variety of ways in which it appears. There may not be any nature it *intrinsically* possesses. (If it does, it would still be for God's perspective, or if this resonate with Berkeleyan theology, it would still be *one of the ways* the world is, *not* the *only way* it actually is.) Still it is the *real itself* which has the different properties in relation to different perspectives. The modern variant of 'empirical realism' does not turn the 'appearance' into an *arbitrary subjective* creation. Karl Mannheim argued long ago: "just as the fact that every measurement in space hinges upon the nature of light does not mean that our measurements are arbitrary, but merely that they are only valid in relation to light, so in the same way..." relationism does not involve arbitrariness.[29] That it does not involve subjectivism, can be explained by Putnam's celebrated 'Brains in a vat' argument. The following is a very brief account of one aspect of his argument against total scepticism.[30]

An evil scientist is imagined to have removed the brains of all humans (or of all sentient beings) to be placed in a vat of nutrients. The nerve endings are

imagined to be connected to a super-scientific computer which causes these beings to have a collective hallucination of any external situation or object, in the same way the normal persons experience them. This is reminiscent of the Cartesian 'demon' who may have condemned all of us to a collective hallucination, inspiring philosophers to preach scepticism with respect to the external world. But the skeptics can have a warrant for denying the external world only in case we really are brains in a vat. It must be ensured that we are *not hallucinating* when we say 'we are brains in a vat.' For if we hallucinate, we cannot truthfully say 'we are brains in a vat.' And this is precisely what we cannot do according to Putnam. For just as a brain in a vat can only experience a tree *in the image* and not a real tree, it can only experience that it is a brain in a *vat image*, and not a real vat. All that the 'brains in a vat' are entitled to mean by saying 'we are brains in a vat' is that 'we are brains in a vat *in the image*!' Surely this cannot secure truth for the assertion 'we are brains in a vat.' In other words the assertion is false. If subjectivism hinges on the truth of this assertion, subjectivism too is false. The notion of being 'internal to a scheme' does not coincide with the notion of being 'mental' in 'Internal Realism.'

I consider this notion of being 'internal to a scheme' extremely important in dealing with the problem posed interrogatively at the beginning of this section. No contradiction ensues if the same object assumes different (even conflicting) 'ways' in relation to different perspectives under different conditions. But does this notion create more problems than it solves?

(*a*) For example, when Bohr found out in 1934 that an electron never has a trajectory, can it still be said that the way it appeared to be in 1930 to Bohr, is really a property the electron had in relation to the erstwhile theory (scheme)? The answer obviously is 'no.'

(*b*) Further, the negative answer may seem to compel the Internal Realist to drift towards subjectivism. For although the falsity of one description provided by one scheme, does not imply the falsity of all other descriptions, still, hypothetically such a situation may arise. So the ways in which the objects appear may all be branded as distorted versions or subjective impositions.

But the 'Brains in a vat' argument can and has been deployed to expose the untenability of such a view, which condemns us all to mass hallucination. It shows that total scepticism is in fact incoherent.

Moreover, the subjectivist interpretation of 'appearance' draws on a dubious assumption, namely the assumption that every change in the 'intension' of the term implies a change of extension. To grant this is to contend like Kuhn, that the people who believed a term to have an intension different from the one we believe it to have, 'lived in a different world'. In a separate paper I would explore means of holding out against this 'different worlds' thesis. I would try to preserve reference across 'revolutionary' changes in intension, by drawing on the new theory of reference espoused by Putnam, Donnellan and Kripke, and show how different 'versions' given by different world-views

are stories about the same world. I would also defend a view of 'convergence' envisaged by Putnam and Boyd which brings to light the sense in which different world-views can be said to be versions of the same story.

Notes and References

1. R. Rorty, *Philosophy and the Mirror of Nature*, Princeton, Princeton University Press, 1980, p. 333.
2. H. Putnam, *Realism and Reason, Philosophical Papers*, Vol. 3, Cambridge, Cambridge University Press, 1983, p. 176.
3. K.R. Popper, Addendum to the fourth edition of *The Open Society and Its Enemies*, quoted by T.E. Burke, *The Philosophy of Popper*, Manchester, Manchester University Press, 1983, p. 82.
4. K.R. Popper, *The Logic of Scientific Discovery*, London, Hutchinson and Co. Ltd. 1959, p. 278.
5. Burke, (1983), p. 104.
6. Ibid., pp. 106, 107.
7. K.R. Popper, 'Three Views Concerning Human Knowledge' in *Conjectures and Refutations*, London, Routledge and Kegan Paul, 1963, p. 116.
8. K.R. Popper, *Objective Knowledge*, Oxford, Clarendon Press, 1972, pp. 320, 321.
9. T.S. Kuhn, *The Structure of Scientific Revolutions*, Second edition, Chicago, The University of Chicago Press, 1962, p. 206.
10. Ibid., p. 150-52.
11. See Mark Blaug, 'Kuhn versus Lakatos, or Paradigms versus Research Programmes in the History of Economics', (ed.) Gary Gutting, Notre Dame, University of Notre Dame Press, 1980.
12. H. Putnam, 'Why Reason Can't be Naturalized' in *Synthese*, Vol. 52, No. 1, July 1982, pp. 5 and 8.
13. Ibid., pp. 11, 12.
14. M.D. King, 'Reason, Tradition, and the Progressiveness in Science' in G. Gutting (ed.) (1980) p. 113.
15. Rorty (1977). p. 317.
16. Kuhn (1962) p. 111, (italics mine).
17. Ibid., pp. 114, 128.
18. See Carl Kordig, *The Justification of Scientific Change*, Synthese Library, Vol. 36, Dordrecht, Holland, D. Reidel Publishing Company, 1971, pp. 2, 5.
19. See Discussions: Harvey Siegel, 'Epistemological Relativism in Its Latest Form' in *Inquiry*, An Interdisciplinary Journal of Philosophy and the Social Sciences, Vol. 23, No. 1, March 1980, pp. 108-110.
20. See Kuhn (1962), p. 205 and his 'Objectivity Value-judgement and Theory Choice' in *The Essential Tension*, Chicago, The University of Chicago Press, 1977, p. 321.
21. See Kuhn, (1962), p. 129 and Kuhn (1977), p. 309, footnote 18, (italics mine).
22. Kuhn, (1962), pp. 120, 121.
23. Kuhn, (1977), p. 323.
24. Hartry Field, 'Realism and Relativism' presented at an APA Symposium on Hilary Putnam's *Reason Truth and History*, published in *The Journal of Philosophy*, 1982.
25. 'Equivalence' in Putnam, (1983), pp. 28, 29.
26. Ibid., p. 34.
27. 'Philosophers and Human Understanding' in Putnam, (1983), p. 190.

28. Putnam emphatically denied such suggestions in a course he gave on Philosophy of Language in the Fall Semester 1985-86, at Harvard, and during discussions I had with him.
29. Karl Mannheim, *Ideology and Utopia*, London, Routledge and Kegan Paul, 1936, p. 254.
30. This is a very truncated account of one aspect of the 'Brains in a vat argument'. I have not discussed the nuances of the very complex and sophisticated argument, for want of space. See Putnam's *Reason, Truth and History*, chapter 1.

Rationality of an optimum aim for science*

G.L. PANDIT
Freie Universität Berlin

In recent years, the rationality of science has come under severe attack by resort to strategies that evoke memories of our first lessons in Humean scepticism. What has added to the underlying confusions worst confounded are several attempts to stretch the rationality concept to the point of trivialization of the whole subject itself. John Watkins's book (1984) marks an important development in the philosophy of science of our time in so far as it is an attempt not only to overcome Humean scepticism, probability-scepticism and rationality-scepticism in that order, but to provide an improved account of scientific rationality by remedying the shortcomings in the one already provided by the classical treatment of Karl R. Popper.[1]

It has two parts. Part One—chapters 1-3—is mainly concerned with the problem posed by Humean scepticism and probabilism. Part Two—chapters 4-9—is constructive in that it seeks a fresh answer to Humean scepticism within the framework of "a neo-Popperian" conjecturalist theory of human knowledge, and especially scientific knowledge. Thus a detailed discussion and a critical review of Humean scepticism, and of the several alternative anti-sceptical strategies in Part One (pp. 4-117) are of strategic importance to what Watkins aims at in Part Two. His strategy here resembles that of Descartes: "to submit our knowledge of the external world to an ordeal by scepticism and then, with the help of the little that survives, to explain how scientific rationality is still possible" (p. xi).

But why is it that everytime a serious attempt is made to produce a satisfactory account of scientific rationality it must grapple, if only as a first step, with the challenge of Humean scepticism? If, as Watkins puts it, "Answering Hume has become a philosophical industry" (p. 13), it must be so because of the lack of a really satisfactory answer to him. But is that really so? Watkins thinks that among all the various anti-sceptical strategies it is only the *one* conceivable under conjecturalism (in Popper's sense) and yet amenable to enrichment along suitable methodological lines (such as proposed by Watkins in Part Two) that survives critical scrutiny (see p. 13). Notable among the antisceptical strategies of various philosophical persuations that Watkins discusses only to find them all equally unsatisfactory are those of the a priorist Kant, probabilist Keynes, Jeffreys, Carnap et al. and phenomenalists Ernst Mach, Russell and early Carnap.

*Review of J. Watkins, (1984): *Science and Scepticism*, Hutchinson: London, xvii + 387 pp., Cloth, £ 25.00, written during the tenure of an Alexander von Humboldt-Stiftungs Fellowship at Freie Universität Berlin in 1986.

But, one might ask, how does Humean scepticism itself arise? As Watkins looks at it, and I think one can agree with his lucid restatement here, it is entailed by the conjunction of the propositions I-III as follows (see p. 3):

(I) there are no synthetic a priori truths about the external world;
(II) any genuine knowledge we have of the external world must ultimately be derived from perceptual experiences;
(III) only deductive derivations are valid.

With the underlying argument restated thus, what Humean scepticism denies is the possibility of our progressing by logical reasoning—only deductive derivations being admitted by Hume as valid/rational—from perceptual experience to any genuine knowledge of an external world (see p. 3).

If conjecturalism in a suitably strengthened form is to succeed where its original Popperian version fails, one major aim of the book under review is, as one might put it, to defeat rationality-scepticism. But how? What is rationality-scepticism? I believe that rationality-scepticism is one version or one consequence of what one might call methodological conventionalism. Given any two rival theories T_1 and T_2 in their field, *it says* or *implies* that there is no good reason to prefer T_2 to T_1, since each may be good and acceptable on one set of methodological conventions concerning science (and what it aims at) but unacceptable on another such set.

There may, of course, be various alternative ways of combating rationality-scepticism, depending on how one looks at it or how deep-rooted it is. Watkins, who traces it to Popper, chooses to fight it by resolving "the problem posed by the possibility of alternative aims for science" (see p. 353). "If we are to defeat rationality-scepticism", argues Watkins, "we need a non-arbitrary aim for science, an aim to which all members of the republic of science could subscribe" (p. 123). The problem posed by the possibility of alternative aims for science—by methodological conventionalism in my sense—is thus sought to be resolved by setting forth a number of *adequacy requirements* with a view to seeking out what Watkins describes as the *optimum aim* for science. With Watkins one may, therefore, ask questions as fundamental as these: How high could science raise its aim? Does science have an optimum aim? And does what science aims at fulfil all the relevant adequacy-requirements? (see p. 124.)

I completely agree with Watkins on both the two points here: (i) with his diagnosis of the problem; and (ii) with his proposal as to how to defeat rationality-scepticism. The novel possibility being explored in the Part Two of the work under review has then this to commend itself: that it is possible to develop a satisfactory account of scientific rationality within the framework of conjecturalism and scientific realism but *without* the Popperian ingredients of verisimilitude-estimates or those of methodological conventionalism creeping into it. Watkins's version of scientific realism is then all

the more commendable and remarkable in so far as it takes the problem of the optimum aim for science more seriously than other thinkers concerned with rationality have done so far.

Let us then ask with Watkins: What should be the optimum aim for science? His own proposal is that science should aim at theories that have the following properties in an ever-increasing order such that a given theory may pass through a phase of critical comparative appraisal before it is adopted for scientific purposes: (i) theoretical or explanatory depth; (ii) theoretical unity; (iii) predictive power/testable content; (iv) exactitude and (v) possible truth (see pp. 166-221). Watkins's proposal may be taken essentially as an *explanation-theorist's* proposal about the *type* of theories that science should aim at. Thus it demands that science should always aim at explanatory theories that are ever (i) deeper, (ii) more unified, (iii) more predictively powerful, (iv) more exact and (v) possibly true. And if a theory T_2 as against its rival T_1 has all these properties, then T_2 "should be accepted as the best theory in its field *provided* that no positive reason has been found for supposing" T_2 to be false (p. 159). The significance of this last consideration is seen by Watkins to lie in the fact that it "leads to the conclusion that the best theory in its field is the one that is best corroborated rather than the one that is most corroborable" (p. 164).

The problem of the optimum aim for science is posed, as we have just seen, essentially as a problem of a non-arbitrary aim for all science—an aim about which scientists and philosophers do not quarrel or disagree (see p. 125). But how do we know or decide that a proposed aim for science is such a non-arbitrary aim? Watkins thinks that all that we need here are the criteria of adequacy for a proposed aim to qualify as the optimum aim for science. Thus as many as *five* adequacy-requirements are laid down by Watkins as follows (p. 124):

1. the requirement of coherence;
2. the requirement of feasibility;
3. the capacity of a proposed aim to serve as a guide in choices between rival theories or hypotheses;
4. the requirement of impartiality;
5. the requirement that a proposed aim involves the idea of truth.

In so far as these might be said to represent our minimal constraints on a proposed aim for science, it is quite reasonable to explore their role in judging the non-arbitrary character of a proposed aim. What is philosophically more important is Watkins's claim that a proposed aim for science could be called its optimum aim, if and only if it satisfied all his five adequacy-requirements above jointly. Now if each one of these is examined in greater detail, it will turn out, I am afraid, that it is debatable as to what should and what should not be included under such criteria. Consider, e.g., the criterion of

feasibility. When is an aim feasible? An aim is "infeasible", says Watkins, "if we know that it cannot be fulfilled" (p. 124). In so far as it is typical of science to aim at "*progress in a certain direction* without having an ultimate goal that one is progressing towards", its aim is, declares Watkins, feasible (see p. 124). Two things need to be noted here. First, serious disagreement on the nature of the aim of science even in this sense is possible. Secondly, feasibility or otherwise of a proposed aim is, I believe, inseparably linked with the nature of scientific method, and deeply with the structural identify of science. Thus if the non-arbitrariness of a proposed aim for science is subject to scrutiny in terms of the criteria of adequacy, it is at the arbitrary price of some reference or other to some aspect or other of scientific method itself. This is why I am inclined to think that while it may make sense to speak of an aim as being non-arbitrary, it does not seem possible to speak of the corresponding criteria of adequacy as being non-arbitrary at least in the same sense. (I also find Watkins's resort to an example of incoherence in Bentham's moral philosophy in order to explain and illustrate the idea of an aim for science that is incoherent unsatisfactory).

There is no doubt, from a scientific realistic point of view, that aim and method must always go together hand-in-hand. Thus it is quite reasonable to suggest, as Watkins does, that the best corroborated hypothesis is the one that best satisfies the optimum aim for science (see p. 279). This is, in other words, to endorse Popper's well-known falsificationist methodology of the evaluation of the explanatory power of a set of theories $= T_{EP}$ (T_1, T_2, T_3... T_n)—evaluation, for short. That is, this is how a Popperian would answer not just the question "why do corroborations matter?" but the question "why do corroborations within the falsificationist methodological framework matter?" However, Watkins goes a step beyond Popper by letting the following important, though largely implicit, assumption inform his whole approach to problems of corroboration: That any theory of scientific method, i.e. any theory of confirmation as a theory of scientific appraisals must itself satisfy the overall constraints antecedently built into the optimum aim for science. It is important, I think, that a scientific realist sets his priorities in some such order. Not surprisingly, this, in turn, leads to an important thesis of Watkins which one might endorse in so far as it takes us beyond Popper: "That Popper's theory of corroboration", urges Watkins, "should *not* be geared to the aim of increasing verisimilitude, and that this aim fails to satisfy our third adequacy requirement, namely, that a proposed aim for science should *serve as a guide* in the making of choices between competing hypotheses" (p. 280).

What is of greater importance in this context is the kind of approach to method that results from this, in which Popperian verisimilitude-estimates play no role at all. Watkins argues for a theory of corroboration-estimates without verisimilitude-estimates, persuaded as he is by the recent criticisms of Popper's explication of 'verisimilitude'. "Thus corroborations do matter"

from the point of view of the optimum aim for science. They are held to be of decisive importance in the sense that the best corroborated theory is the one that best satisfies the optimum aim for science (cf. pp. 304-306). If T_1 and T_2 happen to be two rival theories in their field, we are entitled to make the appraisal, C_0 (T_2)$>C_0$ (T_1)—T_2 is at present better corroborated than T_1—if the following two conditions are fulfilled: (i) T_1 is unrefuted, and (ii) T_2's corroborations dominate those of T_1 in that "no test result is less favourable, and at least one test result is more favourable", to T_2 than to T_1 (see p. 304). Now when can one say of a test result that it is more favourable to T_2 than to T_1? Well, according to Watkins, if either it refutes T_1 but not T_2 or it corroborates T_2 but not T_1 (see p. 304).

How do we now assess Watkins's most important methodological claim which I would like to restate in three steps as follows: (1) that the best theory in its field at any given time is the one that happens to be the best corroborated theory; (2) that the best corroborated theory in its field at any given time is the one that best satisfies the optimum aim for science; and (3) that, therefore, a realistically oriented *sound* methodology of theory-appraisal is one which is always sensitive not just to the *best corrobarable* theory but to the best-corroborated one. As we have just seen, such a methodology will issue in corroboration estimates of a kind that dispense with the Popperian versimilitude-estimates.[2] Interestingly enough, the methodology proposed by Watkins remains impregnated by the regulative idea of truth that Popper himself considers important for his realistic epistemology. And this is how it should be if method and aim in Watkins's sense are to be constrained, one by the other, in a manner envisaged by him. Thus, even if Watkins may be right in dispensing with Popper's concept of verisimilitude, his account simply borrows the regulative idea of truth from Popper, if only to let it be built into the optimum aim for science.

With so many versions of scientific realism nowadays demanding our attention, a clarification of this very concept by Watkins would have greatly enriched his account. On the other hand, however, the philosophical implications of his approach could be better brought out by considering the question of a possible strong rival to it. What would such a rival look like? What about a methodology of verisimilitude-estimates without corroboration-estimates of any kind whatever? I think that some such methodology involving considerable mathematical sophistication of the concept of verisimilitude is being developed by the philosopher of science Ilkka Ninniluoto.[3] Among other aspects of the work under review, then, the one just considered deserves a careful attention.

But I find Watkins's entire approach beset with a serious difficulty. His attempt to relate method in science with its aim in the manner we have considered above is undermined, I think, by the fact that his criteria of adequacy for an optimum aim for science must already involve reference to, and be impregnated by, his idea of the method and structural identity of science.

What I am claiming is that the underlying reasoning is circular if not vicious or threatened with an infinite regress if we argue with Watkins as follows: A sound methodology of scientific appraisal, in order to be non-arbitrary and non-dogmatic, must be grounded in, or governed by, an optimum aim for science. In order to guarantee scientific rationality against scepticism in this sense, the optimum aim must itself be non-arbitrary and non-dogmatic. It must therefore satisfy appropriate criteria of adequacy. But this is possible only if these criteria, in their turn, are not only non-arbitrary in some non-trivially important sense but deeply impregnated by our idea of the method and the structural identity of science.

Now if there were really such non-arbitrary criteria to pick up, uniquely, just one out of several alternative conceptions of the optimum aim for science, one would be rationally justified in adopting the same as the optimum aim for science. Moreover one could then speak of the criteria of adequacy as yielding what might be called a strategy of instant justification of adopting a certain aim as the optimum aim for science. Watkins's approach has, I think, quite unnecessarily come in the trap of this strategy.

I think the only way out of this trap is to face consequences of scientific realism a little more boldly. Instead of talking of the optimum aim for science as non-arbitrary and yet subjecting it at the same time to the strategy of instant justification by resort to (I am afraid) arbitrary or quasi-arbitrary criteria[4] of adequacy, it might be better to pose the whole problem still more seriously as a problem of *theoretical universals*[5] as follows: What is the detailed nature of those principles/properties of *theories* and *problems* in science that must stay invariant if the processes of scientific variance in the individual sciences are to make sense when subjected to critical methodological appraisal? For even if it might make sense to demand that a proposed aim for science must fulfil certain adequacy-requirements in order to be, as far as possible, non-arbitrary, it would make little or no sense in insistence, at the same time, on a particular set of adequacy-requirements as being itself non-arbitrary or free from circularity. Certainly, principles as fundamental as theoretical universals (suggested by me elsewhere) are needed if we wish to have non-arbitrariness generated at this higher level as well as at the other levels.

For reasons such as this, I find Watkins's re-casting of Albert Einstein's question, in the last page of the Epilogue, very significant. Thus, it is noteworthy, the question is *not* whether science is goal-directed, but whether it is aim-oriented. Science is, we are told, an aim-oriented enterprise. Why? "For the aim of science has been taken to be", observes Watkins, "not to reach a given goal, but to journey along a road with no known end." Watkins's conception of the optimum aim for science (loaded as it is with his adequacy criteria) seems to me, therefore, a variation on the simple but important idea that science aims at *ever-growing* systems of objective knowledge always constrained by and cast in the framework of theoretical universals. And it is this, nothing short of this, which, I believe, guided Einstein's own unended

quest for a better physical theory (=his still most sought-after unified field theory) and his approach to the whole question of what a good physical theory could, at any time, achieve, his phrasing of his general *query* concerning science in terms of a possible "goal" for it (now rephrased by Watkins) notwithstanding.

As to the other important contributions—including those on the difficult problems of an empirical basis, of theory-hood, of a comparative measure of testable content of a theory and of a deductivist theory of corroboration as against probabilist theories of confirmation—I shall limit myself only to Watkins's distinction between a core Theory ($=T_H$) and a fleshed out theory ($=T_H \wedge A$), (see pp. 324-327). Since this distinction is drawn in the context of Popper's essentially unqualified falsifiability principle as applicable to individual theories/hypothesis, how does it help Watkins in developing a neo-Popperian theory of scientific knowledge? One has also to take this, with Watkins, in the dual context of (a) Popper-Lakatos debate, with the latter advocating the view that all good scientific theories are irrefutable, on the one hand, and (b) the debate between Popper *and* Freudians as well as philosophers of science such as Adolf Grünbaum, on the other. For example, against Popper, Grünbaum has been advocating the view that Freud's psychoanalytic theory of paranoia is *scientific* in character because it is falsifiable. Watkins's distinction, which I believe derives essentially from those characteristic of Lakatos's relatively more liberal methodology of scientific research programmes, is therefore designed as a methodological means of accommodation in this context. A theory at its core—a core theory T_H—is not and need not be falsifiable by itself in order to be scientific. But its fleshed out version ($=T_H \wedge A$) must be. In this way the advantages seem so maximized that each contestent in the debate is reassured (of course if we make this distinction with Watkins) that he is after all essentially right in his own place (see pp. 324-327).

Let me conclude by asking, with Watkins, a question as fundamental as this: what does then a methodology of scientific appraisal actually appraise? His approach here is, I think, not really different from the typical explanation-theorist's one-dimensional approach[6], his appeal to the multiple aim built into his conception of the optimum aim for science notwithstanding. Since this is true of Watkins as much as it is of Popper, one may seriously doubt whether the challenge of a possible multi-dimensional approach is fully met by his very brief attempt to resolve this issue in the concluding portion of chapter 8 (see pp. 335-36).

Notes and References

1. K.R. Popper (1934), *Logik der Forschung*, Springer, Vienna; (1968), *Logic of Scientific Discovery*, Hutchinson, London; (1982), *Conjectures and Refutations*, 4th ed., Routledge and Kegan Paul, London.
2. See K.R. Popper (1972: pp. 233-235).

3. My assessment here is, of course, prompted by my impressions of Ilkka Ninniluoto's recent lecture "Fallibilism, Realism and Truthlikeness" at Freie Universität Berlin.
4. One is reminded here of Popper's well-known attack on all criteria-philosophies.
5. See G.L. Pandit (1983), *The Structure and Growth of Scientific Knowledge*, D. Reidel Publishing Company: Dordrecht, Holland, pp. 141, 162-63, 178, 182, 201.
6. I say, explanation-theorist's one-dimensional approach because it amounts to the same dominant methodological tradition of seeking T_{EP}-evaluations of our candidate-scientific theories. For a critical discussion of this approach see G.L. Pandit (1983).

Notes and discussions

THE ORALITY-LITERACY CONTRAST: ITS SIGNIFICANCE TO COMMUNICATION AND EDUCATION IN INDIA*

Background

Communication is an essential component of agentive behaviour. It is one of the characteristics that distinguishes agents from objects, and hence behavioural phenomena from physical phenomena. Although communication acquires its major significance in the context of group or social behaviour, it is of fundamental importance even to individual agents in isolation. For communication is a means of self-expression—expression of the internal agentive states, e.g. motivation and affect. Articulated self-expression plays a crucial role in complex programming of one's behaviour.

The communication capability of human beings differs from that of all other animals qualitatively. Language behaviour seems to be a capability available only to human beings. Although speech is the normal medium of language behaviour, it is not indispensable to this mode of behaviour as demonstrated convincingly by the fluent and expressive use of sign language behaviour by the deaf. One can, therefore, ask what the distinguishing characteristics of human language behaviour are, and how communication among human beings using language behaviour differs from other animal communication. I have discussed this question at some length elsewhere [Narasimhan, 1981] and do not want to repeat those arguments here. My interest today is to concentrate on human communication and ask what qualitative changes have come about in it after the invention, use, and interiorization of writing. In other words, what are the distinguishing characteristics of orality and literacy?

The study of the orality-literacy contrast is of intrinsic theoretical interest. All of us are born oral creatures. We acquire our speech and language behaviour in the oral mode as a matter of course without any explicit tuition. But all of us have to struggle hard to become literate. Literacy—the capacity to communicate through writing—is far from being an attribute of humankind to this day. It requires explicit, sustained tuition and much drill. Why is this so? What does this basic difference in the manner of acquisition of these two modes of behaviour tell us about human beings as information-processing systems?

But aside from this theoretical issue at the systemic level, on a more functional level the orality-literacy contrast has much significance to us in India.

*Keynote talk given at the National Seminar on Human Communication, IIT, Kanpur, 7-9 February 1985.

All traditional societies are oral societies, and India is no exception. Vast numbers of people in India still continue to live and function in the oral mode, i.e. live in a state of functional orality. Major efforts are being made to bring about mass literacy. The underlying belief is that literacy is a prerequisite to modernizing a society—or, at least, that it is an enabler of modernization. Is this belief well founded? And if so, what are the bases of this belief? Can our understanding of the analogy between orality-literacy and the traditional-modern contrasts provide us with some clues to the educational process that is involved in, or needed for, moving from the one polarized state to the other: orality→literacy and traditional→modern?

Elsewhere these and related issues have been raised and studied widely by humanists, anthropologists, sociologists, psychologists, and educationists. But I have not come across discussions of these issues as they apply to the Indian context. I have personally beeome deeply interested in this area during the last few years, and have been trying to study the accessible literature dealing with these basic issues. What I would like to do in this talk is to present some of the background material, and try to relate it to the Indian situation. As we shall see, in the Indian context, there remain many open questions. Some of these are of great theoretical interest to one who is interested in the study of human beings as information-processing systems. I hope at least some of the questions discussed would have a direct bearing on the issues about human communication that would be considered by other speakers in this seminar.

Writing is a Technology

Most of us are unconscious of the fact that writing is a technological skill. Because, in a literate culture, we have interiorized writing so completely and made it so much a part of our everyday behaviour that it has come to assume, like speech, the semblance of a genetic endowment. It is difficult for us to believe that writing is a technology in the same way that printing and using computers are.

Yet, writing is a relatively recent invention. The earliest scripts known to us are only about 5000 years old. The early scripts were difficult to learn and cumbersome to write. The tools available to write these scripts and the surfaces which had to be specially prepared to write them on were such that writing and also reading were craft skills confined to a small number of trained individuals. It was only with the invention of a fully articulated alphabetic writing system in Greece in the eighth or seventh century B.C. that reading skills could become widespread.

However, the physical properties of early writing materials encouraged the continuance of a scribal culture well into the early middle ages. Early writing materials and writing implements were such that special mechanical and manipulatory skills were needed to write. For instance, writing on wet clay bricks, animal skins (parchment, vellum), barks of trees, papyrus, dried leaves, waxed wooden tablets, stone surfaces, and so on, needed specially trained craftsmen. Writing was a trade practised by these craftsmen whom others hired as one would hire a mason or a carpenter [Ong, 1982].

Paper, manufactured in China probably in the second century B.C. and diffused to the West by Arabs, was started to be made in Europe only in the twelfth century A.D. In India, the use of paper for writing seems to have been introduced by the Portuguese. This is somewhat surprising since paper seems to have been used by the Chinese travellers who came to India several centuries earlier. Improvements in the technology of paper production, and also in the production of writing tools like pen, pencil, etc. and writing materials such as ink, paint, etc. have been continuous and steady through the last several centuries. Innovations are still continuing. It is worth noting that writing competence became widespread (near universal in the literate Western societies) only when all the technological underpinnings of writing became well human-engineered.

Concerning any technology one could make the following assertions:

(1) Technology interiorized alters one's psyche;
(2) Technology alters one's relationship with the world;
(3) Technology is an enabler of social change;
(4) Technology provokes resistance to its deployment.

Writing, as a technology, and later printing had their detractors. Plato was critical of writing by claiming that 'writing destroys memory; it weakens the mind'. Fifteenth century objections to printing argued that 'abundance of books makes men less studious, destroys memory, enfeebles the mind and downgrades wise men and women.' [Ong, 1982.]

But, on the more positive side, what have been the socio-psychological effects of widespread literacy? We have to proceed in two stages to answer this question. First, we must understand the nature of a strictly oral society. What are the characteristics and constraints of primary orality? Then, when writing is introduced, we can ask what new things become possible—new uses of writing? What are the effects of these on individuals at a psychological and cognitive level and on society at socio-political and economic levels?

Functioning in the Oral Mode

What are the characterizing features of a strictly oral culture? Consider a primary oral group—one with no knowledge whatever of writing, or even that it is possible. Oral cultures in this extreme form probably exist now, if at all, only in conditions of exceptional isolation. Most communities, even if they are functionally strictly oral, at least are aware of the existence of writing.

Let us then consider a social group that is functionally strictly oral. Even in India there must be many such groups. In such a group all social transactions are by word of mouth, and hence occur face-to-face. Two determining factors of the cognitive life-style in such a group are these: (*i*) instruction is exclusively in the oral mode and, hence, training is through actual demonstration and apprenticeship; (*ii*) archiving, retrieval and dissemination of knowledge and information about past experience are wholly dependent on remembering and recall using the memory capabilities of individuals.

Memorizing as a learning strategy and *memorizability* as a necessary attribute of anything that needs to be preserved and handed down assume central importance. So, the knowledge which can be put to use is that which can be packaged in a memorizable form, e.g. as proverbs, aphorisms, clichés, etc. Long narratives—stories, historical accounts—can be remembered and preserved only if they are supported by mnemonic aids of various sorts, e.g. rhetorical prosodic devices like alliteration, assonance, rhyming. Verse forms are to be preferred to prose forms. Singing with an accompanying instrument, which provides cues to metre and rhythm, is to be preferred to plain reciting. Singing with instruments, accompanied by body movements (dancing), is to be preferred to plain singing. Actions in each modality provide schematizations to assist in memorizing and recalling the verbal content.

Havelock has argued this thesis in great elaboration. He summarizes it thus:

> The psychological principles governing this elaborate procedure are simple but fundamental. First, all spoken speech is obviously created by physical movements performed in the throat and mouth. Second, in an oral culture, all preserved speech has likewise to be created in this way. Third, it can be preserved only as it is remembered and repeated. Fourth, to ensure ease of repetition, and hence of remembrance, the physical motions of mouth and throat must be organized in a special way. Fifth, this organization consists in setting up patterns of movements which are highly economical (that is, rhythmic). Sixth, these patterns then become automatic reflexes. Seventh, automatic behaviour in one part of the body (the voice organs) is then strengthened by parallel behaviour in other parts of the body (ear and limbs). The entire nervous system, in short is geared to the task of memorization. [Havelock, 1963.]

This necessity to be memorizable determines a variety of characteristics of thought and expression in a strictly oral culture. Ong [1982] has considered these aspects in detail and has written about them. In an oral milieu, both thought and expression tend to be aggregative rather than analytic; and concrete (context-determined) rather than abstract (context-independent). In a series of experiments with peasants living in an oral culture, Luria [1967] discovered that they lacked the capacity for abstract categorization. Their

tendency was to base classification on concrete behaviour, i.e. on pragmatics rather than on abstract concepts. As Ong [1982] notes:

> In the absence of elaborate analytic categories that depend on writing to structure knowledge at a distance from lived experience, oral cultures must conceptualize and verbalize all their knowledge with more or less close reference to the human life world, assimilating the alien, objective world to the more immediate, familiar interactions of human beings.

Traditional societies are oral societies and tend to be conservative and closed about their beliefs rather than critical and open. Goody's comments on the reasons for this are perceptive:

> Members of oral societies find it difficult to develop a line of sceptical thinking about, say, the nature of matter or man's relation to God simply because a continuing critical tradition can hardly exist when sceptical thoughts are *not* written down, *not* communicated across time and space, *not* made available for men to contemplate in privacy as well as to hear in performances.

He further notes that 'traditional societies are marked not so much by the absence of reflective thinking as by the absence of the proper tools for constructive rumination'. [Goody, 1977.] A comparative and critical approach to situations, issues and problems, which is the essence of the literate mode of behaviour, cannot exist in the absence of writing and widespread literacy.

What Writing Makes Possible

Alphabetic writing existed before the Greeks; but those writing systems were not fully articulated. For example, vowels were not represented through explicit symbolization. The Greeks were the first to introduce a fully worked out and complete phonemic alphabet. The availability of a complete phonemic writing system makes it possible to go from written text to its spoken version in a rule-determined objective way. In fact, for the first time such a writing system makes it possible to read a written text without necessarily understanding it, and hence to transliterate utterances spoken in unfamiliar languages.

Havelock [1982] traces the foundation of the Greek analytic tradition to their invention of a complete phonemic alphabet. He traces the Greek democratic tradition also to this same source. The Greek alphabet was democratizing in the sense it was easy for everyone to learn. Havelock goes on to argue that alphabetic literacy among the Greeks (from around Plato's time on) allowed myth to be differentiated from history. For, when Homeric epics were written down and critically studied, it was possible to see internal dis-

crepancies and contradictions. While orality, as we saw earlier, favours narration in verse, with the popularization of alphabetic writing prose increasingly becomes the dominant medium of expression.

Writing, by definition, is a distanced form of communication. One writes for an audience that is not present at the time of writing. And, conversely, the writer is not present when the written text is read by some other person. This means that the written text must contain within itself all the contextual and supportive props needed to decipher its meaning. What would otherwise have been supplied in a face-to-face oral interaction by gestures, prosodic features, repetitions, paraphrases, should all now be embedded in the text A written text, therefore, tends to be structured through the use of sub-. ordinate and co-ordinate clauses linked by connectives like *when*, *then*, *while*, *because*, *thus*, *therefore*, and so forth. A written text also tends to be more compact and cohesive than an oral rendering. This clausal structuring enables the building up of a framework which can support logically self-consistent discourse. All the paraphernalia of Aristotelian logic such as syllogisms, taxonomic classification schemes, explanation of terms through definitions rather than examples, and so on, are all, thus, ultimately to be traced to the introduction of a phonemic alphabetic writing system by the Greeks. [Havelock, 1982.]

In a wide-ranging essay, Olson [1977] has carried this line of argument further with the claim that 'the invention of the alphabetic writing system gave to Western culture many of its predominant features including an altered conception of rational man ... In a word, these effects resulted from putting the meaning into the text.' Olson's view is that prose as a vehicle for disseminating new ideas and promoting new ways of analysis and talking about the situations of the world—both the physical world and the behavioural one—became more influential with the invention of printing. Printing technology encouraged more people to express their views in writing, and simultaneously enlarged tremendously the reading audience for such written texts. There was, thus, an increasing pressure to evolve a perspicuous prose style—a style of great clarity and expressive power in the hands of the British essayists from Bacon and Locke onwards. 'The process of formulating statements, deriving their implications, and using the results to revise or generalize from the original statement characterized not only empiricist philosophy but also the development of deductive empirical science'. [Olson 1977.]

Such essayist techniques, however, date back only to a few centuries. But when scripts were first invented a few millenia back, what were they used for? As we saw earlier, for a long time both writing and reading were confined to a few specially trained in this craft. The very earliest writings were either public notices—commemorations, dedications, proclamations—or lists for account keeping of inventories, sales, purchases, etc. Later, writing was used to produce exegetical and religious texts. But, for a long period, the written style closely mirrored the oral modes of thinking, speaking and arguing. Forms of writing most favoured were dialogues or questions and answers.

It was after the invention of alphabetic writing systems that the uses of writing multiplied in variety (see Table 1). It is of significance to note that traditionally many of these uses of writing are not to be found in India, for example, in history, geography, psychology and technology. It should be worthwhile to analyse systematically the reasons for this.

TABLE I

USES OF WRITING

Administration	Public Notices, Commemoration, Dedication, ... Accounting
Religion	Scriptures, Ritual Texts, Hymns, Moral Stories, ...
Exegesis	Grammars, Commentaries, Treatises, ...
Education	Notes, Lessons, Text-books, ...
Literature	Plays, Poems, Novels, ...
History	Archival Records, Memoirs, Biographies, ...
Geography	Travel Accounts, Gazetteers, ...
Psychology	Confessions, Diaries, ...
Technology	Manuals, Work-books, Encyclopaedias, ...

COGNITIVE IMPLICATIONS OF THE ORALITY-LITERACY CONTRAST

We saw earlier that in a functionally oral culture 'memory' and 'memorizability' are over valued. Education is through direct apprenticeship, and training is based on learning by observing and imitating with minimal analysis and verbal articulation. Discourse in an oral culture tends to be verbose and cliché-ridden; it is formulaic and built out of a restricted variety of prefabricated templates or skeletons (schemata). Thought and expression in an oral culture are not noted for analytic precision. As we discussed in the last section, all these aspects were transformed after alphabetic writing came to be interiorized. Thought and expression became more articulate, analytical and precise in a literate culture.

Do these observations imply any necessary limitations to cognitive functioning in the strictly oral mode? What implications do these observations have to the educational process? Are there intrinsic limitations to the informal education process that oral cultures practise?

Comparing the performances of unschooled and schooled populations in specific problem-solving situations, psychologists [Scribner and Cole, 1973] have found some noticeable differences as outlined below.

Unschooled	*Schooled*
1. Solve each individual problem singly, *ab initio*, as a new problem. In a series of problems of a similar kind to be solved, there is no improvement in performance over time.	1. Deal with individual problems as instantiations of a class that could be solved by application of general rules. Later problems in a series of similar problems are solved more readily, demonstrating a grasp of the underlying solution rules.
2. Poor development of the ability to use language to articulate the actions engaged in, e.g. in a problem-solving context to verbalize how the problem is being attacked.	2. Better developed capability to articulate verbally the problem-solving attempts being made.

I suggest that what these performance differences show is that observation learning, which oral cultures foster and which gives rise to commonsense knowledge, concerns itself primarily with object-level characterizations of real-world situations and of action-sequences applicable in these situations. In computer parlance, we can say that observation learning and commonsense knowledge are concerned with contextual characterization of real-world situations at the object-level and learning specific programmes, which can be run in (i.e. applied to) these situations. Behaviour, in such a framework, can be generalized and extrapolated through analogy to the extent to which both the contextual descriptions and the programmes are schematizable. But the schematizations, in any case, are rudimentary and loosely structured and poorly integrated.

In contrast, schooling emphasizes instruction-based learning through the articulate use of language. Teaching and learning occur 'out of context', i.e. not in the presence of the very physical or behavioural situation that instruction relates to but in a setting removed from this situation. The situation is *talked about* in the instructional setting and not *directly experienced* (as in the case with observation learning). This, then, encourages, and sometimes necessitates, the explicit characterization of the situational details and their interconnections in order to relate them to the instructions (or programmes). In other words, instead of learning by acting on the real world, schooling teaches how to act on a *modelled* world. The model is a *symbolic* model, either through verbalization in natural language or through the explicit use of formal notational systems of varying power. School learning, then, is learning of conceptualizations, techniques and instrumental skills *within a symbolic domain* delinked from the real-world situations modelled by such a symbolic domain.

The primary strength of knowledge, obtained through schooling, derives from the fact that it is *articulated* knowledge; in addition, such knowledge has a wide scope of applicability because of its analyticity, precision, and

abstraction. Also, the various facts constituting the knowledge-base can be more readily linked and related to make clear the internal coherence of the knowledge-base. However, the weakness of the schooling process consists in the danger that the students may not be able to move easily from the model to the modelled world and vice-versa. In fact, this most often turns out to be the major problem with schooling. Students most often do not know how to apply what they have learned in schools to real-life situations. What is important here—and what schools often fail to teach—is the *modelling process*. Given a real-world situation and a task to be performed (a problem to be solved, a goal to be achieved), how does one go about constructing an abstraction of the situation *relevant to the task on hand*?

In schooling, then, the desideratum is not so much providing information at the object-level (even if this is done with reference to a modelled world rather than the real world) but dealing with learning at the metalevel, i.e. to teach students *how to learn*: how to make relevant abstractions of a real-world situation, and how to use such abstractions to arrive at plausible solutions. As we have seen, to teach such metalevel skills, symbolization and notations are indispensable. Complex situations and complex problems require comparably complex notational systems to model them or solve them. Writing is a prerequisite to the invention and use of such complex notational systems.

However, as we noted earlier, simple situations can be modelled through verbal descriptions in a natural language. Such descriptions tend to lack rigour but may be tolerable for ordinary tasks. Some level of analyticity and abstraction is inherent in verbal descriptions. Additionally, such verbal descriptions can be combined with pictorial or graphical representations to enlarge the scope the model one is constructing. These possibilities would seem to imply that teaching metalevel skills—up to a point—should be possible even in oral cultures (of course, through the addition of sketches and similar pictorial aids). In other words, it should be possible to provide such metalevel training (i.e. training on how-to-learn) even in a real-world context. Some examples of such training possibilities are these:

(1) Looking at a situation from another's point of view;
(2) Providing instructions to act or to plan action in a situation looked at from another's viewpoint; for example:
  (*i*) giving instructions to find one's way around to reach a specific place (i.e. creating a map for another's use);
  (*ii*) giving instructions to use an equipment (literate equivalent: producing an instruction manual);
  (*iii*) giving instructions to choose an object from a set of similar-looking or closely related objects.

Some Unique Aspects of the Indian Context

The sacred and the ritual literature of India (the Vedas, early commentaries on them including the earliest grammars) were all products of an oral milieu. They were all meant to be memorized and recited. They were handed down from generation to generation through oral teaching and training. It is a moot point whether the entire corpus was actually composed without having any recourse to writing at any stage. Did Pāṇini make use of writing in composing his grammar? We do not know. But what is certain is that the whole of this corpus of sacred and ritual literature (including grammars) was intended to be recited and was in fact preserved through memorization.

The remarkable and, perhaps, unique characteristic of this oral corpus is that from the very beginning there seems to have been an awareness of the *metalanguage* supports needed for two purposes: (*a*) on the one side, to facilitate the memorizing of the long complex compositions and to guarantee their syllable-perfect rendering during recitations; (*b*) on the other side, to enable texts which are commentaries and grammars to serve their intended purpose.

Staal [1975], in an interesting and detailed paper, has discussed this awareness in India from the very beginning of the need for metalevel props in texts that deal with other texts. To quote him:

> ... a metalinguistic outlook pervades the Ṛgveda because it is much concerned with its own origin and composition; ... large numbers of metalinguistic terms are introduced in the Śrauta-Sūtras because they refer repeatedly to specific recitations, chants, and formulas. With grammar proper we enter a domain which requires a metalanguage by definition: for it is the task of grammar to evolve a language which has the object-language for its object.

Apart from the use of specially coined technical terms to function as names of texts, parts of texts, etc. oral equivalents of delimiters, quotation marks, emphasizers (italics, underlining) and so forth were devised to cope with the tasks which commentaries and grammars had to perform [see in this context also Faddegon, 1929]. Thus, mnemonic techniques and 'notations' for use in the oral mode were developed and brought to a high level of perfection from very early on in India. In other words, in India forms of articulation that are normally available only in the literate mode (through the explicit use of writing) were devised and perfected *using purely oral techniques*. These technical practices later became part of a continuing tradition in teaching in the oral mode, especially teaching the grammatically highly developed performing arts. 'Oral' notational techniques were developed for practical use in teaching to play instruments, for example, *Tabla*, *Mridangam*, and some of the string instruments. Analogous techniques were devised to deal with pure *nṛtta* sequences in dancing.

Through the clever invention and use of such mnemonic and notational techniques in the oral mode, art forms of great complexity and performance techniques of considerable sophistication have been built up, and preserved in India over a period of a couple of thousand years. Through the use of similar techniques in training in the oral mode craft 'literacy' of a complex order has also been built up, and handed down from generation to generation, e.g. in textile weaving, use of cultural geometric patterns like *kolam*, *rangoli*, etc.

Unfortunately, we do not have an articulated awareness in India of the metalevel underpinnings of our oral traditions, either in rituals, or in art forms or in the crafts. Systematic studies of the 'literate' props to our orality should be of value from two points of view: first, in understanding and preserving what are culturally valuable in our tradition; and, secondly, in understanding the memory mechanisms that facilitate 'complex' behaviour in the oral mode. Such studies should enable us to characterize the oral and literate modes of behaviour more systematically. And, as we saw earlier, a deeper understanding of the orality-literacy contrast should allow us to make our educational and training practices more effective, both in the oral and in the literate mode.

References

1. B. Faddegon (1929), 'The Mnemotechnics of Pāṇini's Grammar I: The Śiva-Sūtra' reprinted in F. Staal (ed.), *A Reader on Sanskrit Grammarians*, MIT Press, 1982, pp. 275-86.
2. J. Goody (1977), *The Domestication of the Savage Mind*, Cambridge University Press.
3. E.A. Havelock (1963), *Preface to Plato*, Harvard University Press.
4. E.A. Havelock (1982), *The Literate Revolution in Greece and Its Cultural Consequences*, Princeton University Press.
5. A.R. Luria (1976), *Cognitive Development: Its Cultural and Social Foundations* (ed. M. Cole), Harvard University Press.
6. R. Narasimhan (1981), *Modelling Language Behaviour*, Springer-Verlag, Heidelberg.
7. D.R. Olson (1977), 'From Utterance to Text: the Bias of Language in Speech and Writing' in *Harvard Educational Review*, p. 47.
8. W.J. Ong (1982), *Orality and Literacy*, Methuen, London.
9. S. Scribner and M. Cole (1973), 'Cognitive Consequences of Formal and Informal Education' in *Science*, 182, pp. 553-59.
10. F. Staal (1975), 'The Concept of Metalanguage and Its Indian Background' in *Journal of Indian Philosophy*, 3, pp. 315-54.

Tata Institute of Fundamental Research, Bombay R. Narasimhan

THE CONCEPT OF EPISTEMIC PRIVACY

The examination and criticism of the view that sensations are private is obviously one of the major concerns of Wittgenstein in the *Philosophical Investigations*.[1] He distinguishes between two senses in which sensations are called private: one is epistemic privacy and the other is privacy of ownership. The first sense of privacy has to do with knowledge, and the second sense has to do with possession. It is only with the epistemic sense of privacy that we shall be concerned in this paper.

Wittgenstein characterizes the doctrine of epistemic privacy as follows: 'Only I can know whether I am really in pain: another person can only surmise it' (*PI*, 246); or 'I can only *believe* that someone else is in pain, but I *know* it if I am' (*PI*, 303). What these expressions presuppose is that there is a genuine use of the verb 'to know' as an expression of certainty with first-person present-tense psychological statements. This presupposition forms the foundation of the doctrine of epistemic privacy, for it states that no one can know, in the same sense of 'know' appropriate to psychological statements, what sensations another person is having. I know of the occurrence of my own sensations with a certainty, but the knowledge others have of my sensations lacks the certainty of my own knowledge. In my own case, I know 'directly' that I am experiencing a sensation S, just by experiencing S. But for others it is only my behaviour that is available to them which gives only 'indirect' access to my inner states. The most that others can achieve with regard to my inner states is belief.

Having characterized the doctrine of epistemic privacy thus, Wittgenstein attacks it by arguing in the following way: the use of 'I know' as an expression of certainty makes sense only in those cases where, in the first place, it also makes sense of doubt and uncertainty, and in the second place, it also makes sense to speak of learning or finding out (*PI*, II, p. 221). But these conditions necessary for 'I know' do not hold for 'I am in pain'. As he says: '...it makes sense to say about other people that they doubt whether I am in pain; but not to say it about myself' (*PI*, 246). For other people the expression of doubt with respect to my pain makes sense, since they learn of my being in pain from my behaviour. But in my own case 'doubt is logically excluded' (*PI*, II, p. 221), for 'I cannot be said to learn of them. I *have* them' (*PI*, 246). Hence the alleged use of 'I know' as an expression of certainty is a spurious one and no sense of the word 'know' at all. The thesis that 'I know that I am in pain' is, therefore, a senseless one.

We shall now examine Wittgenstein's arguments against the doctrine of epistemic privacy. He argues: 'One says "I know" where one can also say "I believe" or "I suspect"; where one can find out' (*PI*, II, p. 221). There are two ways of challenging this theory: (*a*) a general way is to deny that we can speak of knowledge only when it makes sense to speak of doubt and uncertainty; and (*b*) a more specific way, admitting the truth of the general

theory, is to deny that doubt is senseless or logically excluded in the case of knowing one's own mental states or private experiences. We shall follow the second way here.

The concept of epistemic privacy has its origin in the theory that we know our own current mental states and experiences in a *special* way in which no one else can know them. The problem that we raise here is how to determine the speciality of this (special) way of knowing our inner states and experiences. Wittgenstein claims that this speciality consists in this that there is, *in principle*, no room for doubt or error in knowing one's own inner states and experiences. The senselessness of doubt about inner states is again mixed up with the senselessness of having a *procedure* of 'learning' or 'finding out' one's own inner states. The doctrine of epistemic privacy, on the other hand, claims that the senselessness of doubt implies (*a*) absolute certainty and (*b*) incorrigibility of our *knowledge* of our private experiences. We distinguish here between these three questions: (*i*) is any talk of a procedure of 'finding out' our private experiences devoid of sense? (*ii*) is our awareness of our private experiences absolutely certain? (*iii*) is such awareness incorrigible? We begin with the first question.

Usually introspection is regarded as the method of knowing private experiences. This method of introspection, of turning our attention upon ourselves, is not the same as self-consciousness which is the essence of human consciousness. Introspection is not continuously practised, but only at times when we think it necessary. Self-consciousness differs from introspective knowledge in being dim, unclear, indistinct. Every inner occurrence is self-intimating, but this self-intimation falls short of clear and distinct knowledge which requires a good deal of attention to whatever is known.

As introspection is knowledge, conditions of the subject conducive to knowledge are necessary for it.

(*a*) If, for example, the subject is under stress or strain, or under a violent emotion, whatever he knows about his current inner states should be subjected to further tests.
(*b*) Because of self-love, and other biases towards one's own self, an uncritical awareness of one's own current mental states is likely to be vitiated.
(*c*) If a mental occurrence has a very short duration, it may not be possible to study it properly, and so on.

As an example, we may cite the analysis of perception, not merely in philosophy, but also in psychology. Psychologists claim that perception is presentative-representative, involving interpretation of what is 'given' to the mind in sensation. But it is not possible to detect in introspection what goes on in my mind when, for example, I perceive a table. I open my eyes and see a table, the complex process of perception is completed at once. So factual

mistakes about one's own current mental states are not impossible, even though they are 'immediately' given. The immediacy or the givenness is a mode of presentation of *what* is known, but, for right knowledge, the *subjective conditions* also have to be conducive to knowing. Thus hasty, biased, careless observation is likely to involve errors, in the case of external objects just as much as, and for exactly the same reason as, in the case of one's own inner states. Self-correction of introspective awareness is also possible. If, for example, by being adequately vigilant, one can eliminate the factor of self-love and other biases about oneself, then the deliverances of introspection will become more reliable.

The importance of the correct subjective attitude for introspective evidence is stressed by the phenomenologists in their doctrine of *phenomenological reduction* of consciousness, which involves, at least, a change in the 'naturalistic attitude' of the subject. To get fool-proof evidence, what is *given* must be given *to* 'the phenomenologically reduced consciousness'. That is, the mere givenness of the object, though necessary, is not sufficient for the truth of introspective judgment; the subject, too, has to be 'phenomenologically reduced'. Thus, phenomenological reduction of the subject is a methodological necessity for the truth of phenomenological description of the given.

It is, of course, not necessary to be a phenomenologist, and accept the methodology of phenomenological reduction, to appreciate the element of truth involved in this type of theory. The point to be emphasized here is that for acquiring knowledge the subject of knowledge is as important as the manner of presentation of the object, that the subject has to be ready, be in a fit state, or be prepared, for acquiring knowledge whether of external objects or of inner states. To say that inner states are 'immediately given' to the subject does not imply that the subject is in a fit or proper state for acquiring knowledge. This is specially so, if the inner states are of the nature of feeling, emotion, desire, etc. states which *involve the subject, move him, make him worried, unbalanced, elated* or *ruffled*. The inner states are not merely objects of knowledge, they are *modes* or *modifications* of the subject who suffers or enjoys them. Unless the subject learns by practice to keep himself *aloof* from his own mental states, deliverances of introspection are liable to be mistaken.

Professor H.D. Lewis, however, gives a different interpretation of epistemic privacy. He says:

> All that the assertion of 'private access' (if that is the proper term) implies is that we know our own experiences *at the time in having them*. We may misdescribe our experiences, or fail to account adequately for their causes (as when I say I have a toothache when in fact the pain is a 'referred' one having its source elsewhere). But I cannot fail to be aware of the sort of experience I have *at the time of* having it. I may also be mistaken about my dispositions or general traits of character, as when I seem to myself to be more generous or brave than I actually am. But this does not affect my apprehension of what I do or feel at a particular time, but only what I am liable to do or feel on other occasions. The dualist does not have to claim 'direct access' to dispositions; we discover these, in one's own case, in the same way as we learn about the characters of other people from fallible deductions from what we observe from time to time.[2]

Thus, according to Lewis, the special feature of epistemic privacy consists in the fact that inner experiences are known *at the time of having them*, and not in their *immediacy as we have understood it*. Lewis would, perhaps, explain immediacy as *simultaneity* of the knowledge and the experience known. This would, again, imply that these experiences are temporal, that they have a moment of origination, duration and cessation. But, strangely enough, Lewis denies that mental occurrences, specially acts, can have any temporal character *of this sort*. He says:

> A mistake which is often made by opponents of dualism is to suppose that our mental acts are isolated atomic episodes. Thus Professor Gilbert Ryle asks 'How many acts of will did you perform before breakfast?' or 'When did the boy perform the act of will in diving off the bowed?' The answer to this travesty is that our *mental life* is continuous, we are *intending continuously to do all that we do at any moment* in our sustained conduct. I do not will to move my arm and then leave it to the arm to make the complete intended movement. *I will all the changes all the time*.[3]

Now Lewis here speaks not merely of acts of willing, but also of 'mental life' in general. But, then, it will be extremely awkward if this view implies that we have *all the pain-experiences all the time* (!). Moreover, if 'I will all the changes all the time', then how can I come to *know* that I am *voluntarily lifting* my arm now after so many days? This knowledge, according to Lewis, has to *be simultaneous* with the act of intending to lift. But if I have been intending this particular action *all the time*, how can my knowledge, which I certainly did not have all the time, be *simultaneous with* the act of intending? The absence of any temporal gap between the knowledge and the experience will not make sense on his theory.

The plausibility of Wittgenstein's theory that it is nonsense to talk of inner experiences as being found out rests on the very general nature of his examples. To say 'I am in pain', perhaps no special attention, no special self-discipline, no special apititude are necessary; only self-consciousness which is the same as human consciousness suffices; hence the theory that no inner state can remain unnoticed. An unobserved pain is almost the same as unfelt pain which is a contradiction in terms. But if we want to know what P.M.S. Hacker calls the 'phenomenological features' of pain, such as aching, throbbing, stabbing, searing, pricking and so on,[4] we have to attend carefully to the pain which is not an easy process. Thus, it will make perfect sense to tell someone: 'Please *find out* if your pain fluctuates in intensity.'

It has often been argued, rather too easily, that in introspection there is no criterion to distinguish between what is actually there and what is merely imagined to be there. Thus, while attending to a feeling of pain, if we merely imagine that it is fluctuating in intensity, then we shall 'know' it to be so. But this argument runs counter to obvious facts. All our mental states are, in a sense, *dependent on us*, perhaps, casually determined by the nature and structure of our personality; but from this it does not follow that, therefore, all our mental states are dependent on *our will* or *imagination*, or on the way we know them. Although I suffer in a particular situation, because, and only because, I have the type of mind that I have, still my suffering is not dependent on my *will* or my *imagination* or the way I know it. Everyone, when sick, imagines and daydreams that he is well; but this wishing (imagining, dreaming) does *not cure* him. When one suffers pain, one is *not free* to know it as pleasure, one *cannot choose to call* it 'pleasure', one *cannot choose to call* it the 'same' pain if it is *not felt* as such. We cannot for example, wish a pain away, much less imagine it away. If it is there, its presence has got to be acknowledged; it forces itself, specially when it is intense, on our attention very much like a stone when we stumble against it. Mental states do not vanish, or even get modified *as a rule*, by wishing or imagining their absence. Willing, and not mere wishing, has a very small influence only for persons who are extraordinarily susceptible to suggestion, specially auto-suggestion which is a method of *cure*, not of *imagining the absence of pain.* But even though mental states, by their intensity, may attract our attention, it does not mean that we are, therefore, in a fit state to observe them with adequate care. The more intense the pain, the less are we able to study it, although we suffer it intensely and cannot wish it away.

If what we have said above is essentially correct, then answers to the questions (*ii*) and (*iii*) must be in the negative. If there is objectivity of subjective mental states and experiences, as indeed there is, there is necessarily an independent criterion for judging about them, though perhaps not independent of the structure of the mental make-up of the person. Mental states are *objects* of knowledge, although they are *states of* the mind, and as objects they are as independent of knowledge as public objects are. Hence a distinction between the *subject as knower* and *what is known* can, and must, be made even in introspective knowledge also. Verdicts of introspection are not, and need not be, more reliable than verdicts of external observation; and by repeated efforts we may correct the errors of the deliverances of introspection. The subjective conditions conducive to knowing the deliverances of introspection may always provide room for being factually mistaken about them. Doubt is, then, not senseless or logically excluded in case of knowing one's own private experiences. Thus, by 'epistemic privacy' we can only mean 'immediacy' which guarantees neither absolute certainty nor incorrigibility of our knowledge of our private experiences. Our mental states are 'inner', i.e. nearest to us, without any curtain between them and us, as they

constitute our own selves. So others cannot 'see' our mental states 'face to face', but only through the veil of bodily expressions.

References

1. Translated by G.E.M. Anscombe, Basil Blackwell, Oxford, 1968. Hereafter to be abbreviated as *PI*. References to Part I are to section numbers and references to Part II are to the page numbers.
2. H.D. Lewis, 'Mind and Body', *Journal of the Department of Philosophy*, University of Calcutta, ii, 1976-77, p. 4; italics ours.
3. Ibid., p. 5; italics ours.
4. P.M.S. Hacker, *Insight and Illusion*, Clarendon Press, Oxford, 1972, p. 267.

University of Burdwan, Burdwan AMINUL HAQUE

Book reviews

K. SATCHIDANANDA MURTY: *Philosophy in India: Traditions, Teaching and Research*, Indian Council of Philosophical Research, New Delhi, in association with Motilal Banarsidass, Delhi, 1985, 237 pages, Rs. 90.

The present work from the pen of one of our most eminent philosophers and educationists is a veritable gem. Within a short compass it succeeds not only in lucidly presenting Indian philosophy, past and present, but also discusses at the same time some of the urgent problems agitating Indian philosophers today. One could justly say of it: *Alpākṣaram asandigdham sāravad viśvatomukham.* It is brief, unambiguous, quintessential, and comprehensive, a tribute to the author's vast and accurate scholarship, critical judgment and catholic taste.

The author begins by mentioning in the Preface three different conceptions of philosophy current in India, viz. as *Ānvīkṣikī*, as *Darśana*, and as popular philosophy. In his presentation he considers all the three relevant. The first chapter discusses the meaning and role of philosophy in Indian culture. In the Vedic age, philosophy was conceived as *Ātmavidyā*, *Brahmavidyā* or *Parāvidyā*. Early Buddhist texts speak of *Dṛṣṭi* or 'speculative view'. Kautilya described *Ānvīkṣikī* as one of the four *vidyās* but basic to all of them, *Pradīpaḥ sarvavidyānām*. Later on, the word *darśana* came to be used and became popular. The diversity of philosophical opinions came to be noted early, and from time to time attempts were made to think of them as somehow unified.

The second chapter gives the history of philosophical thinking in classical India. Even within the restricted space available, the author has managed to present a lively account which has several original features. It emphasizes the role of early Buddhist schools and the *Mahāyāna sūtras* and includes brief references to the philosophical views of the grammarians as well as the Kāśmīra Śaivas. An interesting appendix to the chapter is on the histories of Indian philosophy. In the last chapter, again, the author expresses some views of his (pp. 179-81) on the nature and value of the history of philosophy. 'A right sort of history of philosophy is indeed philosophy.' 'Histories of philosophy can be written from different points of view.... Histories less dogmatically committed and more inclusive and comprehensive would be the better.' Indeed, the historiography of Indian philosophy needs much attention.

The third chapter presents the history of philosophical thinking in late classical and medieval times. It mentions the birth of *Bhakti* in South India

in the hymns of the *Ālvārs* and *Nāyanārs*, and traces its cosmopolitanism to the Tamil spirit of the *Sangam* age. It notices the significance of the Siddhas and the Nāthas and mentions the mystical, humanistic and egalitarian thought of the medieval *Sants* and *Bhaktas* in the different regions of the country. Sikha and Indo-Muslim philosophy receive due attention.

The fourth chapter describes the development of philosophy in modern India. It begins with the *Mahānirvāna Tantra*, and mentions the great reformers and savants from Rammohun Roy to Sri Aurobindo and Iqbal. Coming to systematic and academic philosophers, it comments on nine of them in particular, viz. Sri Aurobindo, S. Radhakrishnan, K.C. Bhattacharyya, S.N. Dasgupta, N.V. Banerjee, T.R.V. Murti, P.T. Raju, Kalidas Bhattacharyya and T.M.P. Mahadevan. It goes on to describe the work of Muslim, Indian Christian and Parsi philosophers in modern India. The chapter ends by mentioning several different schemes of classifying contemporary Indian philosophers and their work, but points out the enormity of the task of a complete survey of all the relevant material. A valubale appendix to the chapter gives a brief glimpse of philosophical writings in Indian languages. This is most welcome and one only wishes that more university philosophers in India were aware of the non-English world which surrounds them.

The fifth chapter seeks to summarize the present philosophical situation on the basis of regional status reports from several universities, and ends by summarizing the *Poona Report* of Bokil and Barlingay.

The sixth chapter discusses the problems of the philosophical profession in India. Why are not more and better students available for philosophy? And why is not increased financial support available to it? Why are jobs scarce for philosophy graduates? The author rightly answers these questions in terms of the unfavourable common social valuation of philosophical studies in the universities. He deprecates this unfavourable view but does not despair. He recommends that philosophers in India should be more self-critical, and give greater weight to socially relevant philosophizing.

On the question of the rectification of philosophy in India, he mentions a note by Prof. Kalidas Bhattacharyya and another by Dr Suresh Chandra. In the appendix, he reports K.C. Bhattacharyya's famous lectures on '*Svaraj* in Ideas'. Prof, Murty is inclined to disagree with the notes of pessimism in such writings. He also rightly disputes the view that the gap between Indian and Western cultures creates an impassable barrier for mutual understanding. However, though the possibility of cross-cultural understanding cannot be disputed, it remains a fact that beyond the realms of positive knowledge and technology cross-cultural understanding is not always easy. If philosophy were purely formal and all its value simply logical, philosophical systems could be like mathematical systems. Actually, however, most philosophies aim at expressing truths which cannot be reduced to tautologies, and in this they cannot but appeal to intuition or experience of some kind which is often socially structured. Socio-cultural differences of origin, orientation and language,

thus, tend to hamper the universal intelligibility of particular philosophies as they do of poetry, music and the arts or of religious and moral systems. Doubtless, specially trained minds can cut across these barriers; and in India, where we have had more than a century of English education, it is natural for us to feel that we have ample access to the understanding of Western culture and philosophy. However, the colonial background of our education has tended to create a deracinating distortion in our psyche. The springs of originality lie in the depths of our own experience, not in the obscure shadows cast by borrowed concepts. This does not mean that we have to turn our back to the Western or any other world to be ourselves. Prof. Murty is right in emphasizing the fruitfulness of cross-cultural contacts in philosophy. But this fruitfulness presupposes the meeting of independent minds, alive to their own social experience. It also presupposes that special efforts are made to overcome the difficulties inherent in the task of understanding a communication from another age or society.

The last chapter deals with the problems of teaching philosophy and reaching a consensus about what would be the right direction for its development. Prof. Murty affirms: 'There can be no *one* modern and Indian philosophy, nor can any *single* philosophy with an "independent Indian identity" emerge' (p. 173). He regrets, however, that most teachers of philosophy in India have 'not concerned themselves in their academic work with the larger issue of civilization and human progress, of poverty and social reconstruction, or of war and peace'. He mentions diverse current opinions on what constitutes philosophy and whither it should move.

Prof. Murty's book covers a vast range with enviable erudition and lucidity to match. Its documentation is admirable and adds to the effectiveness of the necessarily compressed presentation. Prof. Murty's conception of philosophy is catholic and broad-based, and his humanism suffuses the whole work. In the old tradition, which is still alive in practice, *paṇḍita* and *doṣajña* were regarded as synonymous, but happily Prof. Murty has the exceptional quality of sympathetic appreciation. He has a robust optimism in the future of philosophy in India, and one fervently hopes that he is right. In any case, there could be nothing better than this book of his to illumine the philosophical scene in India, and prepare the ground for further discussion. He deserves the gratitude of all those, who are interested in seeking to secure the future of philosophical studies in Indian universities.

Allahabad University, Allahabad G.C. PANDE

S. JAYASREE: *Nītidviṣaṣṭikā of Sundarapāṇḍya* (A Compendium of 120 Moral Maxims), critically edited with introduction, translation and concordance of verses, The Adyar Library Series No. 113, The Adyar Library and Research Centre, Madras, 1984, xxv+87 pages, Rs. 20.

Among the important branches of classical Sanskrit literature, the *subhāṣitas* (anthologies and collections of didactic verses) are, indeed, unique. The study of the *subhāṣitas* helps men to lead a life of peace and happiness, to understand the society in its true light, and to adjust themselves to all environments.

This compendium of moral maxims, the *Nītidviṣaṣṭikā*, is said to be the work of a pre-Śaṅkara philosopher, known as Sundarapāṇḍya. The moral maxims numbering 120 contained herein are of high intrinsic merit. Regarding the identity and date of the author Sundarapāṇḍya, as the editor Dr S. Jayasree rightly declares: 'There is no positive evidence against identifying him...with the ancient philosopher of that name. However...we have to be satisfied with fixing the lower and upper limits of the date of the poet Sundarapāṇḍya as the sixth and thirteenth centuries A.D., respectively' (p. xviii). Other titles of this work are *Sundarapāṇḍyaśataka* and *Āryāvalī*, the latter indicating that all the verses are in *Āryā* metre.

The didactic elements contained in the 120 maxims may be outlined as: (*i*) useful advice on many aspects of human behaviour to make the life of human beings meaningful and worthy from the individual as well as social points of view; (*ii*) importance of polite speech marked with brevity, truthfulness and sweetness; (*iii*) avoiding bad speech especially hurting the feelings of others (harsh speech is to be shunned); (*iv*) friendship with the good; (*v*) association with the wicked; (*vi*) poverty; (*vii*) charity; (*viii*) wealth; (*ix*) common sense; (*x*) character (*śīla*); and (*xi*) noble birth (*kulīnatā*).

The parallelisms (pp. xxi-xxiv) pointed out by the editor are, indeed, quite appropriate. They are briefly extracted below for they highlight the unique value of this didactic lyric.

The verse '*kanyāratnamiya...*' (22) reminds one of Kālidāsa's line: *artho hi kanyā parakīya eva* (*Abhijñāna-Śākuntalam*, IV. 21).

Again, the verse '*prītyaiya...*' (107) may be compared with the lines:

eko hi doṣo guṇasannipāte
nimajjatīndoḥ kiraṇeṣvivāṅkaḥ

of Kālidāsa's *Kumārasambhava* (I.3).

The popular Tamil classic, the *Tirukkuraḷ* (X, 10) of St. Tiruvalluvar, says:

iṉiya uḷavāka iṉṉāta kūṟal
kaṉiyiruppak-kāy kavarntaṯṟu.

Indulging in offensive words and avoiding sweet ones is like preferring a raw fruit to a ripe one. The poet Sundarapāṇḍya makes a similar observation in the verse '*svādhīne...*' (6).

The verse '*murkhā na draṣṭavyā...* (19) resembles the following Tamil verse from the *Mūturai* (9):

tīyaraik-kāṇpatuvum tītē tiruvaṯṟa
tīyarcol kēṭpatuvum tītē, tīyar
kuṇaṅkaḷuraippatuvum tītē, avaro-
ṭiṇaṅki-yiruppatuvum tītu.

'The mere sight of the wicked is bad; so also listening to their words. It is also bad to speak about their qualities and it is certainly bad to befriend them.'

The idea that the sandal wood tree, though cut, renders the blade of the axe fragrant (78) may be compared to the *Mūturai* (28):

'*cantaṉa meṉkuṟaṭu tāṉtēynta kālattum*
kantam kuṟaipaṭātu...'

'The soft sandal wood does not lose its fragrance, however much it is rubbed.'

The author Sundarapāṇḍya has not used expressions that are unbecoming or derogatory. The excellent maxims in the work expressed clearly and forcefully make it stand out in bold relief amongst a host of *subhāṣita* texts in Sanskrit literature.

The young scholar Dr Jayasree, the editor of this fine didactic work, deserves encouragement for bringing out more volumes of scientific research in Sanskrit literature. The foreword by Dr K.K. Raja, the General Editor and Director of the Adyar Library and Research Centre, adorns this compendium in no small measure.

University of Madras, Madras V.K.S.N. RAGHAVAN

Obituary notes

ANJAN SHUKLA

Dr Anjan Shukla, born on 30 November 1938, passed away on 14 July 1985. His father Bacchubhai and his mother Maitri were students at Santiniketan. It was, therefore, no accident that Anjan Shukla also came to Santiniketan for schooling. In the *Patha-bhavana* (the school), though he distinguished himself academically, many remember him for the literary pieces he had presented at the school *sahitya-sabhas*.

Although Anjan Shukla started his academic life as a student of science, he was not quite at home with chemistry and hence opted for logic and finally obtained his master's degree in mathematics from the University of Calcutta.

Anjan Shukla came to Visva-Bharati, Santiniketan to teach mathematics. After some time he got himself registered there for his doctoral degree in the department of philosophy. Later on, he joined the University of Notre Dame to complete his doctorate in mathematics. While teaching in the University of Hawaii, he took his master's degree in philosophy as well.

In 1973 Anjan Shukla came back to India as a visiting Professor in the department of philosophy, North Bengal University. He was also a visiting Fellow in the department of philosophy, Jadavpur University in 1980 and in 1984 he visited the department of pure mathematics, University of Calcutta in the same capacity. He was also invited to the department of philosophy, University of Calcutta as a visiting Professor. But at the time of his demise he was a lecturer in the department of philosophy, Visva-Bharati.

Anjan Shukla left behind a large number of students who fondly remember him for his brilliant exposition of intricate and perplex problems of mathematical logic with the grace and elegance leaving nothing unexplained.

Anjan Shukla lived in a village a little outside the Visva-Bharati campus. The reason he had for living away from the hustle and bustle of the campus was his thirst for loneliness and desire to be close to the nature. Pointing at the glorious sunset at the distant horizon, once he remarked "how can such a loveliness be witnessed except in loneliness?".

Anjan Shukla's contributions to philosophy include papers both in classical and modal logics. In the first paper on classical logic,[1] he gave a formulation of Classical Propositional Calculus (CPC) in two non-connectives: implication and converse non-implication. This problem was declared open by Church (A. Church: *Introduction to Mathematical Logic*, Vol. 1, p. 139). Having done this, Anjan Shukla found that implications and non-equivalence also form a complete set of connectives for CPC. In the second paper[2] Anjan

Shukla gave a complete axiomatization of CPC. The third paper[4] contains a proof of independence of an axiom in a separable set of axioms for CPC.

What makes Anjan Shukla very outstanding is his pioneering work in modal logic. Though his first paper[3] in modal logic was on axiomatization of certain modal systems, his next paper[5] was very important from the angle of modal logic. In this paper, while reporting the conclusions of his doctoral work, he gave a decision procedure for Lewis system S1, S2 and S4 using a series of algebraic formulations which were weaker than those of McKinsey's and yet arriving at a decision procedure. Later on, he used these algebraic formulations to prove that the systems S3, R3, S3.1, S7 and S8 have finite modal property.[6] In his next paper[7] Anjan Shukla demonstrated that the existence postulate can be proved in non-regular systems of modal logic. [This was the postulate Lewis and Langford added to their systems (C.I. Lewis and C.H. Langford: *Symbolic Logic*, pp. 178-79) so that their axioms could not be interpreted as an incomplete set for material implication.] In his subsequent papers[8], Anjan Shukla developed systems containing infinite number of consistent, independent and distinct propositions. His last paper[9] in modal logic contained a number of conjectures of Prior (A.N. Prior: *Time and Modality*, Appendix B, pp. 22-24) that in system S6 there are infinite number of distinct modalities. He also showed that the conjectures are true of his systems S10 and S11.

Anjan Shukla's work in philosophy other than logic is a review of *Zen Dust* by Isshu Mima and Ruth Fuller Saski although he had a great respect for the works of Heidegger and Jaspers.

Notes

1. 'A set of axioms for the propositional calculus with implication and converse non-implication', *Notre Dame Journal of Formal Logic*, Vol. 6, pp. 123-28.
2. 'A set of axioms to the propositional calculus with implication and non-equivalence', *Notre Dame Journal of Formal Logic*, Vol. 7, pp. 281-86.
3. 'A note on the axiomatization of certain modal systems', *Notre Dame Journal of Formal Logic*, Vol 8, pp. 118-20.
4. 'A note on the independence', *Notre Dame Journal of Formal Logic*, Vol. 10, pp. 401-11.
5. 'Decision procedure for Lewis system S1 and related modal systems', *Notre Dame Journal of Formal Logic*, Vol. 11, pp. 141-80.
6. 'Finite model property of five modal calculi in the neighbourhood of S3', *Notre Dame Journal of Formal Logic*, Vol. 12, pp. 69-74.
7. 'The existence postulate and non-regular systems of modal logics', *Notre Dame Journal of Formal Logic*, Vol. 13, pp. 369-78.
8. 'Consistent, independent and distinct propositions' *Notre Dame Journal of Formal Logic*, Vol. 13, pp. 339-406; 'Consistent, independent and distinct propositions II', *Notre Dame Journal of Formal Logic*, Vol. 17, pp. 135-36.
9. 'Consistent, independent and distinct propositions III: Modalities in S6', *Notre Dame Journal of Formal Logic*, Vol. 24, pp. 141-42.

Jadavpur University, Calcutta BIJOY MUKHERJEE

PROFESSOR GANESWAR MISRA

Dr Ganeswar Misra, who passed away at the Tata Memorial Institute of Bombay in the early hours of the 27th November 1985, was an eminent philosopher of contemporary India. More than three decades ago, when Indian philosophical circles were largely dominated by the traditional metaphysical way of thinking, Dr Misra introduced the revolutionary ideas of Analytic Philosophy with impressive clarity and fearless conviction. Very soon he became known for his unique style of philosophizing and analytic approach to Indian philosophical problems. The better known features of his philosophy were bold rationalism, and uncompromising humanism mixed with sharp intelligence, wit and humour.

Born in 1917 at Raichakradharpur in Puri district in Orissa, Dr Ganeswar Misra was the first Professor of Philosophy of Utkal University. A brilliant student all through, he never stood second in his academic career; he got his Ph.D. from the University of London under the supervision of Professor A.J. Ayer within the minimum time of two years. Author of many brilliant and thought-provoking papers in different philosophical journals in various areas of philosophy, he has thirteen important books—in English and in Oriya—to his credit. He has been particularly famous for his original analytic interpretation of the Advaita Vedānta and his account of *Śabda-pramāṇa* as the method of logico-linguistic analysis; of special interest is his striking interpretation that the Advaita Vedānta is not concerned with any transcendent reality and also his further contention that liberation in Advaita is only emancipation from wrong knowledge or *avidyā* in the sense of misunderstanding of the logic of language.

A much known figure in the Indian Philosophical Congress for more than three decades, Professor Misra was the leader of the Symposium on 'Thought and Action' at its Srinagar Session, sectional president of the 'History of Philosophy' section at its Cuttack Session, Srimant Pratap Seth lecturer on Vedānta at its Dharwar Session and finally the General President at its Hyderabad Session in 1972. Besides, he also delivered lectures on different aspects of philosophy at various universities of the country. He was the local secretary of the Cuttack Session of the Indian Philosophical Congress held in 1959.

His retirement in 1977 was not the end of his academic activities nor of his connection with the Postgraduate Department of Philosophy of Utkal University. He has been engaged in active research as the UGC awardee in this department and subsequently he was awarded the ICPR Senior Fellowship which he held till his death. Among his best known works are: *Advaita Concept of Philosophy: Its Method, Scope and Limits, Analytical Studies in Indian Philosophy* and *Vaidika Dharma-Chetana* (in Oriya).

Professor Misra had been actively associated with the Utkal University administration in his capacities as a member of the Syndicate, Senate and

Academic Council. He was the editor of the *Bharati*, the Utkal University Journal of Humanities, from 1967 till his retirement.

He was a unique scholar, a unique teacher and an unforgettable friend. His wit, intelligence and good spirit filled his surroundings with humane feelings and scintillating joy. It is indeed an irreparable loss of a great scholar, educationist and philosopher who was so much intellectually alert and active till his end.

Utkal University, Bhubaneswar G.C. NAYAK

Journal of Indian Council of Philosophical Research

Contents

Announcement

INDIAN COUNCIL OF PHILOSOPHICAL RESEARCH

has undertaken to prepare a

Who's Who

OF CONTEMPORARY SCHOLARS AND TEACHERS OF PHILOSOPHY IN INDIA

A proforma for the purpose has been sent individually to all teachers in different universities in the country. Those who have not yet received such a proforma may write to

DAYA KRISHNA
C-6 University Campus
Jaipur 302 004

Philosophy and Phenomenological Research

AN INTERNATIONAL QUARTERLY FOUNDED BY MARVIN FARBER

Editors: RODERICK M. CHISHOLM and ERNEST SOSA

in cooperation with a distinguished group of American and foreign scholars

PPR publishes articles in a wide range of areas including philosophy of mind, epistemology, ethics, metaphysics, and philosophical history of philosophy. No specific methodology or philosophical orientation is required in submissions. An abstract not exceeding 250 words and two nonreturnable copies of any manuscript submitted for publication are required.

Address All Communications to:
Philosophy and Phenomenological Research
BROWN UNIVERSITY, BOX 1947
PROVIDENCE, RHODE ISLAND 02912

Annual subscription rates: $17.00 (foreign, $18.50) for libraries and institutions $13.00 for individuals; single copies $4.25 (double issue, $8.50) and $3.25 (double issue, $6.50), respectively. There is an additional charge for postage and handling on all back issues. A circular listing the main contents of the journal and a list of available back issues will be sent upon request.

ORDER FORM

MOTILAL BANARSIDASS
Bungalow Road, Jawahar Nagar
Delhi 110 007 (India)

Please enter my/our subscription for——copy/copies of JICPR (*Journal of Indian Council of Philosophical Research*) beginning with Autumn 1983.

I/We understand that there will be two issues a year—Autumn and Spring.

I/We enclose Rs...../$.....towards annual subscription.

Signature.....Date.....

Name.....

.....

Institution.....

.....

Postal address.....

.....