

20

THE
PHILOSOPHICAL QUARTERLY

Vol. XXVI, No. 4]

JAN 1954

[January 1954

AN ORGAN

OF

THE INDIAN INSTITUTE OF PHILOSOPHY

AND

THE INDIAN PHILOSOPHICAL CONGRESS

Managing Editor :

✓ PROF. G. R. MALKANI

Editorial Board :

DR. T. M. P. MAHADEVAN

DR. B. L. ATREYA

Yearly Subscription Rs. 4

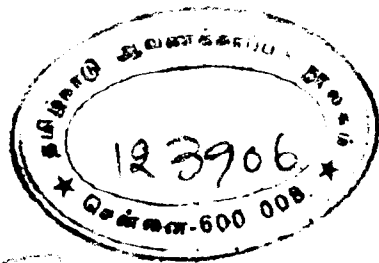
For Congress Members Rs. 3

Foreign 8 Shillings or 2 Dollars

Single copy Re. 1 or 2 Shillings

CONTENTS

Logic and Longitude: The Syllogism, East and West by Robert S. Brumbaugh ..	201
The Christian Non-dualism of Scotus Evigena by George Bosworth Burch ..	209
Faith and Philosophy by J. N. Chubb ..	215
Body: Mind-Relationship—Some Suggestions by P. R. Damle ..	223
Moral Obligation as a Clue to the Nature of God by William Henry Harris ..	227
Sense and Reason in Aristotle's Psychology of Cognition by S. G. Hulyalkar ..	233
The Conception of Reality as Dynamic by G. R. Malkani ..	239
Mind and Consciousness—A comparison of Indian and Western views by Sarasvati Chennakesavan ..	247
Can Unified Sciences Replace Logic? Ontology and Unified Science by P. S. Sastri ..	253
A Note on Thomas Aquinas by K. Satchidananda Murty ..	263
The Significance of Beauty by Srinivas Dixit ..	269



Qm 2, N25
N54.264

THE
PHILOSOPHICAL QUARTERLY

Vol. XXVI, No. 4]

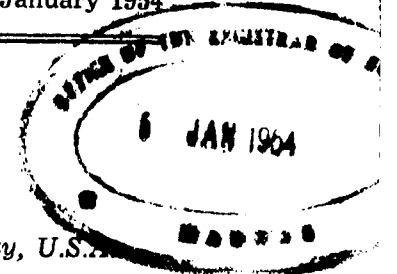
[January 1954

Logic and Longitude:
The Syllogism, East and West

by

ROBERT S. BRUMBAUGH

Assistant Professor of Philosophy, Yale University, U.S.A.



Until the past half-century, Western philosophers thought of "logic" as Aristotelian logic, oriented about the syllogism as its basic deductive form. Consequently, when they encountered a basic deductive form of the same kind in Indian logic, they used the Aristotelian syllogism as their norm for evaluating it. In view of the high stage of development Indian mathematics and science were known to have reached, it would not have seemed strange if the two "syllogisms" were the same. But they were not: and to the Western observer, two added premisses in the Indian form seemed formally unnecessary, confusing, inelegant, and bafflingly illogical. This difference in validating forms reinforced the Hegelian tendency to see "the Oriental mind" as "dream-like", in contrast to a logical, scientific "Western mind." And the myth of a confused Indian syllogism continues to be repeated.

What the Aristotelian logicians who first engaged in comparison of the two syllogisms did not realize, was that their own norms were formally inadequate. The purpose of my discussion here is to show that, when these inadequacies are corrected, the added two premisses in the Indian syllogism are seen to be functional, and a five-proposition syllogism is required in modern Western logic.

The Indian and Western syllogism rested on about the same foundation: situations were described by propositions, which in their simplest form asserted or denied one predicate of all or part of one subject. Since a given factual relation of S and P could be described in different ways, and since some such relations were incompatible with others, a simple theory of "immediate inference" was devised in both cases for relating equivalent and incompatible descriptions to each other. For example, two propositions such as "No S is P" and "No P is S" were treated as equivalent because the factual relation of S to P was the same for either description.

210

Philosophical

Quarterly



Jan 1954

JL
QMm2, N25

N54-26.4

123906

But two special cases presented peculiar formal problems. Ordinarily, if a given proposition were true, its converse (formed by exchanging subject and predicate, and if necessary, limiting quantity) was also true; so was its obverse (formed by reversing the quality of the whole proposition and substituting the complement for the predicate); so was any transformed statement resulting simply from repeated conversion and obversion. Also, if a universal proposition was true, its subaltern was treated as true. In the case of empty classes, however, one of two safeguards was required: either (a) a theory of "existential import" of judgments in which "some" did not always assert existence was needed; or (b) an added premiss that S was not empty had to be required for formally valid inference from super—to subaltern.¹ Aristotle himself had used the first of these devices, but it had been lost in the subsequent development of "Aristotelian" logic.² Modern formal logicians repaired the loss by insisting on a restriction of the second type.³ Analogously, it follows immediately from "All S is P" that "Some non-S is non-P"; and where P is a universal class, this inference too requires restrictions.⁴ The restriction may take the form

1. Otherwise, using the usual interpretations of "some" as meaning "there is at least one", inferences of the following sort might be valid:

"All unicorns drink milk; therefore, some unicorns drink milk; therefore, there exist some unicorns."

When unicorns are said to drink milk, since there are none, we have no way of contradicting the assertion; the "all" does not say that any exist, but only that if any exist, then they are milk-drinking. This is equivalent, in current interpretations, to saying "there does not exist any unicorn which is not a milk-drinking animal", and is, therefore not false.

2. In Chapters i and ii of *De Interpretatione*, Aristotle distinguished "definite" and "indefinite" subjects and predicates. The indefinite forms "referred to what does not exist as much as to what does", while the definite forms referred to existent entities. Carried through the *Organon*, this distinction means that only 8 of the 16 combinations of definite-indefinite subjects and predicates in propositions have existential import as part of their meaning. "Some", therefore, does not always assert existence: "some non-men are houses", for example, does not.

3. The restriction is inspired by the analysis of the existential import of "all" and "some" given in note 1, above. It takes the form of denying validity to inference from all to some, without an additional particular ("existential") premiss.

4. The immediate inference involved consists of three obversions and two conversions, alternately. The case where it produces trouble can be illustrated by the inference "All persons are entities; therefore, some non-persons are non-entities." Since "some" indicates existence, the conclusion here asserts that there exist non-persons which are not existent things; and this is an intolerable contradiction for any logic.

either (a) of limiting designata of "terms" to non-universal classes, or (b) requiring an explicit premiss denying the identity of V, the universal class, and P. Here, again, Aristotle himself seems to have used the first device, later Aristotelian logic to have lost it, and modern formal logic to have repaired the resulting defect by a restriction of the second type.⁵

The rectified syllogism, when it is strong enough to establish the validity of every immediate inference following from its conclusion, now becomes very similar in its Indian and modern Western form.

For example, from "All smoke comes from fire", it will follow that "Some smoke comes from fire" only if we have the added premiss "And some smoke exists", in modern formal logic. We can express this formally by the two statements:⁶

- $$\begin{aligned} (1) & \sim [(x)P(x) \supset Q(x)] \supset \\ & \quad [(\exists x)P(x) \supset Q(x)] \\ (2) & [(x)P(x) \supset Q(x)] \cdot (\exists x)P(x) \supset \\ & \quad (\exists x)P(x) \supset Q(x) \end{aligned}$$

Again, "Some non-fiery things are non-smoky", which follows by immediate inference, will hold only if some non-smoky things exist; if only smoke existed, it would fail. The formal relations involved here are:

- $$\begin{aligned} (3) & \sim [((x)P(x) \supset Q(x)) \cdot (\exists x)P(x) \supset \\ & \quad (\exists x) \sim P(x) \cdot \sim Q(x)] \\ (4) & [(x)P(x) \supset Q(x)] \\ & \quad \sim Q = V \supset [(\exists x) \sim P(x) \cdot \sim Q(x)] \end{aligned}$$

In natural language, condition (2) can be met if we add the requirement that at least one existent instance of SP must be mentioned in a premiss: for example, "a stove smokes" as premiss is

5. The formal notation is Carnap's, with the added convention (to save parenthesis) that the scope of each quantifier extends as far as it can without overlapping that of the next quantifier. Thus, $(x) P(x) \cdot Q(x)$ is written here for $(x) [P(x) \cdot Q(x)]$.

6. In the definition of "terms", Aristotle clearly holds that univocal terms are not universal in their signification. Modern formal logic seems often to have some analogous assumption about the ranges of variables of type P, Q; but explicit justification of the immediate inference from "All S is P" to "Some non-S is non-P" requires the added premiss given in the text in equation (4).

formally equivalent to the $(\exists x) P(x)$ of (2). Again, condition (4) can be stated as the requirement that at least one entity which is neither P nor S be mentioned in a premiss: "a cold stove is not smoky" as premiss is formally equivalent to (4).

How important these safeguards are felt to be depends on the philosophical context in which a logic is devised and used. In a context in which an "absolute" is important, clearly the formal peculiarities of the universal class will be recognized by the logician. But this is equally true in a context stressing complete formal rigor of validating forms. Safeguards against metaphysical or formal error appear as a part of the history of philosophy in both Indian and Western logic, in the former as safeguards using natural language, in the latter using abstract formal presentation.⁷

The conclusion to be drawn is that formally the Indian syllogism corresponds much more exactly to contemporary Western logic than it did to the syllogistic "Aristotelian" logic of the nineteenth century, and this correspondence requires a Western revision of the myth of "Oriental illogicality."

I will conclude by illustrating this point with two proofs presented in traditional Aristotelian, contemporary lower functional calculus, natural language Indian and schematized Indian syllogistic form. The reader will note that the proof of equivalence from two implications, given as the second case, has the same premisses in Indian and contemporary logic; in Aristotelian logic, the proof of equivalence is not usually given as a full syllogism, but may take that form. The Indian syllogism with which most Western readers are familiar, about smoke and fire, has its first and third premisses equivalent to a validating form in Western logic, though their equivalence to a typical Aristotelian syllogism is less clear, since a different relation of subject to predicate is being proven.

The present paper is rather a suggestion than a final proof of the formal identity of the logics of two cultures. The final "simplicity" of the doctrine of immediate inference, for example, can result only after complex relations of fact and judgment have been analysed and explored. The concept of "existence" as it applies to different schemata of inference needs further clarification, and some

7. Historically, the speculative interest in the null class and the universal class has been different in India and in the West; this has, presumably, influenced the relative attention given to the formal properties of the classes.

comparison of the "flexibility" and "suggestiveness" of the two logical forms should be made.

Here are two demonstrations, one that all men are mortal, two that smoke exists if and only if there is a fire, in alternative forms.

I. Aristotle's logic

All men are animals

All animals are mortal.

All men are mortal; and, by immediate inference:

Some men are mortal

Some non-men are non-mortal

Here the major would be used by Aristotle with the meaning that there do exist some men, and that neither human nor mortal is a universal class; but these qualifications do not appear explicitly in the demonstration.

II. Functional calculus:

$(x)M(x) \supset A(x)$

$(\exists x)M(x)$

$(x)A(x) \supset Mo(x)$

$(\exists x) \sim Mo(x)$

$(x)M(x) \supset Mo(x) \cdot (\exists x)M(x) \cdot Mo(x) \cdot$

$(\exists x) \sim M(x) \cdot \sim Mo(x)$

III. Indian version—natural language:

All animal are mortal

For instance, fish are mortal animals

All men are animals

Stones are neither men nor mortal

Hence, All men are mortal; Some men are mortal; Some non-mortal beings are non-men.

IV. Indian version, schematized:

All S is M

Some S exists

All M is P

Some non-S and some non-P exists

All S is P; Some S is P; Some non-P is non-S

Here IV is formally identical with III and II.

Second example: it is a fact that smoke and fire coexist

I. Aristotle's logic:⁸

All fire is the cause of smoke;
All smoke is caused by fire fed by wet fuel.

Hence, there is never fire fed by wet fuel without smoke, nor smoke without fire fed by wet fuel; and there are some fires that cause smoke, and some smoke is caused by fires, and some non-smoky things are non-fiery.

II. Functional calculus:

$$\begin{aligned} (x)F(x) &\supset S(x) \\ (\exists x)F(x) & \\ (x) \sim S(x) &\supset \sim F(x) \\ (\exists x) \sim S(x) & \\ (x)F(x) &\equiv S(x). \quad (\exists x)F(x). \quad S(x) \\ (\exists x) \sim F(x) &\sim S(x) \end{aligned}$$

III. Indian version:

Where there is fire fed by wet fuel, there is smoke
For instance, a burning stove
Where there is not smoke, there is not fire fed by wet fuel.
For instance, a cold stove

Where there is smoke, there is fire fed by wet fuel; where there is fire fed by wet fuel, there is smoke; and, further, there are some fires which smoke, and also there are some non-fires which do not smoke.

IV. Indian version, schematized:

All F is S
Some F exists

8. The exact equivalent in this form should perhaps be taken from Aristotle's treatment of "commensurate universality" of subject and predicate as the basis for the strongest demonstration. This relation implies "simple conversion" of an A proposition, but is more restrictive. If we try to translate "equivalence" or "complication" into the terms of the *Posterior Analytics*, "P is a property [in the strict sense of the term] of S" seems the best translation. The fire-smoke argument now translates this way:

P is a property of S when all S is P, and no non-P is non-S. In the example, all fire fed by wet fuel causes smoke, and no smoke exists without such fire. Hence, smoke is a property of fire fed by wet fuel; and, further [since the minor premiss in this case carries existential import] some fires fed by wet fuel exist and cause smoke, and some non-smoky things are non-fires-fed-by-wet-fuel.

No S is non-F
Some non-F and non-S exists

Hence, F is equivalent to S (all F is S and all S is F), and some S is F, some F is S, some non-F is non-S.

The two premisses, All F is S and No S is non-F, together establish the equivalence of F and S, a stronger connection than simple implication or inclusion of one by the other. The added premisses insure that the full scheme of immediate inference will apply, by showing that the truth of this equivalence is neither due to emptiness of F nor to universality of S.

There is nothing to prevent the first form from being used to establish a relation of implication where the full equivalence relation will not apply.

The Christian Non-dualism of Scotus Erigena

by

GEORGE BOSWORTH BURCH

Professor of Philosophy, Tufts College, Mass., U.S.A.

1. *Scotus Erigena's Great Synthesis*

Scotus Erigena is one of the most interesting of the Christian philosophers. He was born in Ireland and lived in France, where he was a leading figure in the intellectual life of the early Middle Ages. He was a contemporary of Śaṅkara, and his philosophy is very much like that of Śaṅkara. It is a sort of Christian non-dualism, in which the rational structure of non-dualist metaphysics is developed in traditional Christian concepts.

His philosophical system is outstanding both for its profundity and for its vast scope. His book *The Division of Nature* is a great synthesis in which the insights of the ancient Western philosophers, both Greek and Latin, both pagan and Christian, both Platonic and Aristotelian, all find their places in one harmonious system of rational thought. He teaches that we are able to comprehend nature by reason because nature is itself rational. Logic can discover the world because logic generates the world, and when we think rationally our thought reproduces the process by which the world is formed. This rational process is set forth in great detail in Erigena's book. This paper will summarize it briefly.

2. *The Rational Process of Nature*

Dialectic, which is both the rational process of thought and the rational process of nature, has two aspects. One is the process of division, by which essence is divided into genera, genera into species, species into individuals, and individuals into parts. The other is the process of resolution, by which parts are combined or resolved into individuals, individuals into species, species into genera, and genera into essence. These are not two processes but opposite aspects of the same process, and the beginning of one is the end of the other. The law of dialectic, which is also the law of nature, is

that all things are resolved into the same unity from which they are derived. Nature is not static but dynamic, a process—though not a process in time, for all time is included within one part of it. It is eternally dynamic, moving by the dialectical process of division and resolution.

The unity from which all division begins is called God. We do not know what God is because he is not anything. He transcends both being and non-being, and his superbeing is the being of all things which are. Considered not in himself, however, but as the source of the world, which is orderly and dynamic, God is said to be wise, and to be living. His being is his essence (what he is—to use the word is figuratively), his wisdom is his power (what he can do), and his life is his operation (what he does). Essence, power, and operation, inseparable aspects of God's indivisible unity, are called Father, Son, and Holy Ghost.

Not only God but also all things derived from God are trinities of essence, power, and operation. The essence is the being of the thing, which is unknowable. The power is its specific character, which is intelligible. The operation is its particular movement, which is perceptible. The essence, power, and operation of things are created by God's essence, power, and operation respectively, and thus there are three stages in the division of nature. Nature is divided into superessence and essence; essence is divided into genera and species; and species are divided into individuals. These divisions are accomplished by the three persons of the Trinity: the Father wills, the Son makes, and the Holy Ghost perfects. To say the Father wills means that God in his infinite goodness eternally wills all things, and this willing is the creative act by which things pass from non-being into being. To say the Son makes means that God in his infinite wisdom eternally divides essence into the various ideas or forms, and this making is the logical distinction by which the eternal ideas exist together in the mind of God. To say the Holy Ghost perfects means that God in his infinite activity produces the particular things which participate in the ideas, and this perfecting is the generation of the world of things which become and change and pass away in time. These include both substances and accidents. A certain quality plus a certain quantity makes matter, and matter joined to a certain form at a certain time makes a physical body. A body, therefore, is an accidental combination of accidents, the least substantial entity in nature.

Every thing exists temporally as a particular individual and also eternally as a universal idea and also ineffably as a divine volition. These are not three things but three aspects of the same thing. All things are theophanies or appearances of God, who alone is real. In appearance things are many, but in God they are one. Strictly speaking, therefore, God is both creator and creature, for the making of things is God's manifestation of himself, and when he creates he creates himself and nothing else.

This process of division by which all things are created is only half of the dialectic of nature. The other half is the same process viewed in the opposite way, the process of resolution by which all things return to God. All things have a natural motion the end of which is the same as its beginning, and always seek the source from which they are derived. Bodies are resolved into the formless matter of which they are composed. Matter is resolved into qualities and quantities, and so ceases to exist as matter—not annihilated but transformed into something more real. Things are resolved into the eternal ideas in which they participate, and so cease to exist temporally—not annihilated but perfected, according to their natural tendency. The ideas are resolved into the Word of God, becoming divine. Just as all things are derived from God by various intermediate steps, so all things are resolved into God through the same intermediate steps. Thus God is the beginning, the middle, and the end of all things. God as source of all things is supreme goodness, and God as end of all things is supreme love. The first cause and final end are the same, and the fact that they are identical is the fundamental law of nature.

Among the creatures existing ineffably in God and eternally as idea and temporally as a manifold of individuals, is man. Man, like everything else, is derived from God and tends to return to God. But man holds a unique place in the system of nature, and the cosmic process cannot be understood apart from him. Man consists of soul and body. The soul's essence is the intellect, its power is the reason, and its operation is the inner sense. The body also has three aspects: the outer sense, the life, and the body itself—that is, the spiritual body, not the mortal material body, which is not part of human nature but a consequence of sin. By these all-inclusive faculties man knows all things—individuals by sense, ideas by reason, and God by intellect (by which Erigena means mystical contemplation). Consequently, since the essence of any thing is its being known, all things exist essentially in man.

Just as God's knowledge of things is their essence, so man's knowledge of the same things is also their essence. Not that a thing has two essences, but the same essence may be considered either as God's knowledge of the thing in its eternal cause or as man's knowledge of the thing in its phenomenal effects. Man naturally tends to return to his source by the resolution of body into soul, sense into reason, reason into intellect, and intellect into God. But since all things exist in man, the resolution of man into God carries with it the resolution of all things whatsoever, in man, into God. The whole dialectical process of nature, both division and resolution, takes place in man.

3. *The Irrational Factor in Nature*

The resolution of all things into God is a rational process—but there is an irrational factor in the universe. The irrational factor is not matter, for matter occupies a necessary place, though a humble one, in the rational system of the world. It is not plurality, for the division of the one into the many is just as rational and necessary as the resolution of the many into the one. The irrational factor in the universe is sin.

The possibility of sin lies in the complexity of human nature with its consequent free choice between two kinds of knowledge—contemplative knowledge of the divine unity and sensual knowledge of the phenomenal plurality. Even sensual knowledge is good when its manifold objects are understood in their dialectical relationships, but it is fatal when they are desired carnally. The fall of man into sin is not a temporal event in history but an eternal fact of universal human nature. Before proceeding into individual men, humanity (called "Adam" in the Biblical allegory) eternally chooses the fatal knowledge of sensible things, seduced by its outer sense (called "Eve"), which is dominated by a carnal delight in these things (called "the serpent"). Thus man abandons the contemplative knowledge of God of which he is also capable. This sin is the act of a perverse will, inexplicable because free, without any cause or reason, and not a part of the rational process of nature.

Sin has radical consequences for humanity, including the creation of the material body as a necessary instrument in the state into which its choice of sensual knowledge has brought it, and the division into two sexes as a method of multiplication in this body. But the consequences of sin extend beyond humanity as such. Since

all things exist in man, the fall of man is the fall of all things. The essence of things is man's knowledge of them. Sin means that things exist in man not as eternal ideas but only as temporal individuals. The rational *division* of the one into the many, which is the work of the Holy Ghost, must be distinguished from the irrational *separation* of the many from the one, which is the consequence of sin. In sinful man the individual aspect of things is separated from the universal aspect, and so the process of resolution is stopped, contrary to reason. Man by his fall into sin divides things without reuniting them, and so segregates the corporeal from the ideal. But things cannot exist in this schismatic way. Individuals cannot exist apart from the universals in which they participate, as Plato showed. Universals cannot exist apart from the individuals which they inform, as Aristotle showed. If sin were unopposed, it would cause not only the frustration of the rational process of nature but the utter annihilation of the whole universe.

Just as the rational process of division is reversed by the rational process of resolution, so the irrational fact of sin is undone by a counterfact equally inexplicable. This is the incarnation. By sin man remains separated from God, and all things remain in man separated from their source in God. In order to restore man and the universe existing in man to their original unity, God becomes man. Just as the fall is an eternal fact not to be confused with its historical manifestations, so the incarnation is an eternal fact not to be confused with its temporal manifestation in the historical Jesus. God and man, separated in Adam, are reunited in Christ, who is both God and man. God, the ineffable superbeing which is the being of all things, and man, the eternal subject of knowledge, are one.

Since in the incarnation God assumes human nature, and all men participate equally in human nature, all men without exception are saved in Christ and restored to the state of innocence and bliss. The material body dies, the spiritual body is transformed into the soul, and the soul is transformed into the intellect, which is contemplation of God. The carnal desires of the perverse will are now forever thwarted, and this unending frustration of the perverse will constitutes the punishment of hell—but no men are punished, only their perverse will, the men themselves being restored and perfected when their will no longer rules them.

Furthermore, since in the incarnation God assumes human nature, and human nature includes all created nature, God assumes

all created nature, and all creatures without exception are saved from the consequence of sin. Since things exist as universal ideas in the mind of God and as particular individuals in the mind of man, universal and particular are united in Christ. The rational process of resolution is reestablished. And so, when finally man, resolved into pure intellect, is transformed into God by contemplation, not only human nature, but with it and in it all nature, is perfected by returning to its source in God.

As reality, only God exists, the unity transcending being. As appearance in the sense of manifestation, all the manifoldness of nature exists, but always in dialectical relation to the unity. As appearance created by human will, the manifold exists in separation from unity. That the many should exist, not really but apparently, is a dialectical necessity, but that the many should exist separately is the fatal error from which we are saved by the incarnation. This doctrine, developed in the categories of Greek philosophy and Christian theology, has certain insights in common with non-dualism. For Erigena also, the world of common experience is an error resulting from an inexplicable perverseness of human nature. For him also, salvation is accomplished by true knowledge, and true knowledge means essentially the identity of man with God.

Faith and Philosophy

by

J. N. CHUBB

Elphinstone College, Bombay

The role of faith in Philosophy and its relation to reason has not been adequately understood. Faith is usually taken to mean one of two things. It is regarded either as something which is irrational, sub-rational or at least not adequately rational, having its source in emotion or some other non-rational factor, or it is regarded as a rival and independent source of knowledge, so that faith is set up against reason and is regarded as a superior method of knowing the real. In both cases there is a failure to understand the essence of faith. The popular belief that faith is giving assent to a proposition for which there is insufficient evidence, "believing where we cannot prove", gives only the most superficial form of faith. Even Bradley has fallen into the same error when he gives the following definition. "It is the non-logical overcoming from within of doubt as to an idea, or similar prevention of such doubts. This appears to be the general essence of faith."

The real essence of faith has been misconceived for two reasons:

Firstly, the true method of Philosophy has not been properly understood. And, secondly, the nature and value of Philosophy, as a rational body of knowledge, has also been misconceived.

As regards the first point, the philosophical method is regarded by many as an extension of the scientific method and the aims and presuppositions of scientific inquiry are surreptitiously introduced into the philosophical inquiry.

As regards the second point, that the value of Philosophy as a rational discipline is misunderstood, I refer to that the fact that Western philosophers generally regard Philosophy as a closed system. That is to say they regard Philosophy, without any qualification, as a knowledge of reality, and hold that as far as knowledge is concerned, one cannot go beyond Philosophy.

I shall first show that the method of Philosophy is essentially different from the method of Science. The difference in method will make it clear that Philosophy rests on faith. Faith is the foundation of Philosophy; it is its motive or inspiration, and if we cut off Faith from Philosophy, then our entire philosophical system collapses. Science does not require faith in the proper sense of the word, because Science takes its stand on sense experience. That is the solid ground on which knowledge in science can be erected. To the extent that science rests on pre-suppositions that are metaphysical it too ultimately has a foundation in faith, but faith here is static; it sustains the scientific system, but does not operate within it. Philosophy, however, cannot erect its structure on the foundation of sense experience. We shall see that what sense experience is to scientific knowledge, faith is to rational speculation. The philosophical method is neither inductive, because it does not result in generalizations from sense experience, nor is it deductive in the sense of drawing consequences from certain given principles and definitions. The peculiarity of the philosophical method is that it goes backwards and not forwards; that is to say, starting from any experience of a so-called fact or from a value experience it does not proceed to draw consequences from the starting point except as a partial clarification of it. That is the method of Mathematics. What Philosophy does is to work backwards from the starting point to the ultimate pre-suppositions. And hence the philosophical method may be described as a regress towards first principles or postulates.

Now, as a result of this, a very fundamental difference follows between Scientific and Philosophical methods. In Science we start with uncertainty, with ignorance, and we frame a hypothesis and then proceed to verify it. Scientific knowledge, therefore, is a movement from hypothesis which arises from a state of uncertainty, leading to verification. It would be absurd to suggest that in science we start with certainties, or with knowledge and this is quite understandable because the common assumption is valid here that we proceed from ignorance to knowledge, from doubt to certainty, from hypothesis to fact or verification.

The philosophical method is very different. In philosophy we do not start with uncertainty and move towards certainty. Paradoxically, in Philosophy we must start with certainty. That is to say philosophical conclusions are in a sense foregone conclusions. They are not arrived at as a sheer novelty, as the result of

a hazard and an adventure into the unknown. They are arrived at, because they are already there, in the sense that they are already possessed by us. This throws light on the paradoxical situation which Socrates draws our attention to viz., that we already know what we seek to know, or that in a sense we know, in a sense we do not know.

It is because Descartes ignored this that he misunderstood the method of Philosophy and identified it with that of Mathematics and thus set Philosophy off on a wild goose chase after the kind of certainty that one gets in Mathematics. Descartes felt that by philosophical reflection we can reach certainty from a state of doubt. This is the method of Science but not of Philosophy. Consider how Descartes reached certainty. He proceeded to doubt anything and everything that could be doubted. The suddenness and ease with which he reached certainty in the *Cogito* should have revealed to him that this certainty is something which the mind already possesses. Philosophical inquiry presupposes certainty and the certainty which is reached as a result of thinking is not merely the final term of a process of thinking. A philosophical argument is flanked on both sides by certainty. This becomes evident if we recall that the conclusions which Philosophy reaches are held to be necessary postulates of thought, that is to say, thought must accept them if it is to be possible at all. The recognition of a postulate cannot be the result simply of moving from doubt to certainty. The inevitability of a philosophical conclusion is a sign that the mind already possesses it before it begins its investigation. What then do we accomplish by the process of reasoning? The answer is that reasoning is an attempt to explicate, or formulate our beliefs, to clear all doubts so that the mind may attain at a different level that which it already possesses.

"Belief in God" says Cook Wilson, 'is inescapable.' The true business of Philosophy is to bring the belief to a consciousness of itself"; and that is all we can do in Philosophy. We may say that the role of Philosophy is to bring belief or faith to a consciousness of itself. This also explains the rather peculiar and seemingly paradoxical attitude which St. Augustine took when he invited his interlocutor first to believe in God, before he could be given a satisfactory proof of God's existence. What this means is that philosophical proof presupposes belief. It is not the function of a philosophical argument to create belief, for unless the belief is there, the argument loses its vitality and its motive force. What the

philosophical argument does is not to bring belief into existence, but into a clear consciousness of itself.

The conclusion, therefore, is that philosophical inquiry, or rational investigation which uses the method of doubt necessarily presupposes a state of belief. Belief is logically prior to doubt. This is recognised by Bradley though he describes the situation in the form of an epigram when he says that Philosophy is the finding of bad reasons for what we believe on instinct to be true. Philosophy then is an attempt to give a rational form to what we necessarily believe. Our reasons are good if the rational form is coherent; otherwise our reasons are bad. We now see that rational inquiry seems to rest on something given which we shall call faith. It is also clear that faith is not on the same level as reason. They are not co-ordinate. Faith is neither the result of inadequate thought, mixed with emotion; nor is it a rival to reason. Faith is the source from which reason springs. Reason at no stage is independent of faith and hence faith and reason cannot be placed side by side in order to decide whether one has to believe in the promptings of faith or in the conclusions of reason.

The relation may be stated thus with reference to the proof of God's existence:

The light of Faith does not supply the rational *argument* for God's existence, but it ensures that Philosophy remains open and that it does not close in on itself. The true philosopher philosophises in the light of pre-existent beliefs, but in the argument itself he makes no reference to dogma. The value of proof, as such, rests on its philosophical merits. He does not make any formal use of faith in his philosophical arguments. This means that faith is not to be taken as a premise in the process of reasoning, because reasoning is merely the explication of faith. It is not a deduction from faith regarded as a fixed starting point or datum. Faith, therefore, is not a rival to reason. Reasoning without faith, however, is not Philosophy at all; it is a Science, as our analysis of the philosophical method has shown.

Now this leads to a very important consequence. It reveals the mistake of those philosophers who turn Philosophy into a closed system, by unreservedly identifying Philosophy with knowledge. If Faith is on a higher level than reason, then it necessarily points to the possibility of a mode of knowledge which does not need to be sustained by thinking or reasoning. The recognition of knowledge above Faith into which

the latter has yet to be converted, turns Philosophy into an open system and assigns to the intellect its proper role and function in the search for knowledge. The intellect is in itself an instrument for giving a form or shape to a material which is supplied to it. That material comes either from the sense world below it or from something above. This does not mean that the material given to thought can be separated from the formative process and cognized independently of the latter. The cognition of the 'thing-in-itself' is possible only when we wholly transcend the level of reason and convert faith into direct knowledge. Reason however presupposes faith, in relation to which doubt or the demand for proof is in the last resort an irrelevancy.

This is, however, not the whole truth concerning the relation of reason to faith. Doubt has an important function to perform. Philosophy is not useless; the rational inquiry is not a mere impertinence. It has its place and necessity at certain level, since without it faith would remain inarticulate and could not even begin to move towards its consummation of knowledge. But once we have transcended that level of consciousness at which it is felt to be necessary, philosophy as a mode of speculation ceases to exist.

Reason, we may say, is the explication, the laying bare of the contents of faith. In this process of explicating the contents of faith, reason does not succeed in giving us knowledge of reality. All that it does is to formulate a belief, but in the process of coherently formulating the belief it does not turn belief into knowledge. A metaphysical system is only the process of expounding that which is held in faith. It is a statement of our credo which is not to be understood as a personal affair, varying from one individual to another, but as the light of Truth reflected dimly, but universally, in the intellect of man. At the end of philosophical explanation, one can say 'this is what one must necessarily believe'. Therefore, it carries the further implication that what we believe is yet to be known. Let us take the proposition that the Absolute is timeless and perfect. This merely states a faith which is inescapable and is rationally seen to be so. But, we do not as yet know the timeless and perfect nature of reality. Faith, therefore, laden as it is with the potentiality of supra-rational knowledge, is something higher than reason. If Faith were not higher than reason, then reason could not proceed from it, or presuppose it. If reason were even co-ordinate with faith, then reason would not be merely the formal faculty of ordering that which is already given. Reason

would become productive. It would be a creative force and not merely a shaping force.

This explains the familiar fact that by a process of reasoning and argument one cannot create a conviction in another. Take for example, the ontological argument. To me and perhaps to some of you, the ontological argument is convincing. Its conclusion seems to be inevitable. And, yet when it is presented to some minds, it completely fails to carry conviction. The explanation of the incapacity of some to appreciate a process of logical reasoning which strikes others as being inevitable is that unless there is first the awakening of faith in the mind a logical process of reasoning has little value. Faith is the soul of the rational process, and, if the soul is not there, then the rational system becomes merely "an un-earthly ballet dance of bloodless categories." An argument which cannot strike root in faith will not come alive in that mind which lacks it.

There is another reason why we must admit that Philosophy does not convert faith into knowledge. Philosophy, as I said, starts with certainty and ends in certainty. But if we reflect on the nature of philosophical certainty, we shall find that it is an unstable certainty. It is not a certainty which comes to rest in itself, since it refers beyond itself to an object. This is where philosophical certainty is different from mathematical certainty. If you reach a mathematical certainty, then that certainty is a demonstrated certainty, and that demonstration is the end of the process of reasoning. Philosophical certainties are not of that nature. Paradoxically, in Philosophy you reach a certainty which remains uncertain or perhaps one should say, unmaturing and you do not feel that your philosophical certainty is demonstrable in the mathematical sense of the term. Or to state the same fact from the other end, philosophy is a laboured attempt to make evident what is in itself self-evident. The self-evidencing nature of philosophical conclusions is, however, not the same as the self-luminous (Swayam prabha) character of true knowledge (Jñāna), but a reflection of it in the mirror of the intellect. The self-evident is, to use Bradley's phrase, 'intellectually incorrigible', but it necessarily points to a mode of awareness in which the self-evident becomes the self-luminous. This explains the familiar paradox that what is self-evident in philosophy need not be evident at once, nor evident to all. That is why the quarrel between philosophers is endless. The philosophical certainties are infected with a feeling of insecurity and an urge for self-transcendence.

Philosophy is the attempt to clarify what is certain, but the certainty with which philosophy starts cannot be realised or matured at the level of the intellect. We start with certainty but the philosophical conclusion does not realise that certainty, it only explicates it. And this is the point which Western Philosophers have ignored.

Faith may be said to move in two directions; first horizontally, along the life of rational clarification, and next upwards, vertically along the path of spiritual discipline leading to its final consummation in knowledge. Once reason clarifies faith, the latter is seen to be dynamic, in the sense that it demands to be transformed into knowledge and it is not by reasoning that this demand can be fulfilled. I may mention that there are different levels of faith.

Faith in the most general sense implies respect for truth and carries an implicit belief in the Infinite. Out of respect for truth, Philosophy is born. As far as I can see among those people who call themselves Philosophers, the Logical Positivists alone seem to have lost or discarded this elementary faith and thus have forfeited the claim to be called Philosophers. They have no respect for truth. Their Philosophy, as Hocking rightly describes it, is a political expediency, which lays down an arbitrary definition of meaning so as to exclude metaphysics from the realm of rational discourse. But faith in this most general sense implying intellectual integrity, though necessary, is only the outward form of faith. In essence it is an attitude of the soul which is based on "a deep perception in the personality of something that is to be more clearly known at a higher level. It is blind only in the sense that it is untroubled by the questionings of the intellect and unshaken by outward appearances." (Sri Aurobindo). The highest form of faith is that which is dynamic, and therefore rests on the active perception that truth comes in quietness, grows in calm and peace and completes itself in ecstasy.

How is faith to be converted into knowledge? Between the soul and God or the Absolute, there is a spontaneous and immediate relation. To turn towards God and to accept unconditionally His Law and His Will is the natural disposition of the soul. For this it does not require a support from the process of reasoning. Therefore, it becomes clear that if the soul's natural relationship to God is to be recovered and re-established, one must endeavour to rise above the level of argu-

mentation, dispute or controversy. Argumentation is a sign of ignorance in the soul, —a defect, which if removed, would result in a spontaneous acceptance of the Infinite in all parts of our being. Hence, if faith is to be converted into knowledge, there must be a shifting of the centre of consciousness from that level at which doubt, questioning, judging are regarded as the natural activities of the mind to the level where these are dispensed with as necessities only in the condition of ignorance.

This implies a process of discrimination and detachment. Faith has its own method of discrimination, its own criterion of distinguishing the real from the unreal, which is not that which is acknowledged as the intellectual method or criterion.

Doubt has to be dispelled. Doubt is an obstacle to God-realisation. Doubts, therefore, in the last resort are not to be solved, but dissolved, because they have no place in the soul's relationship with God. Hence discrimination consists in dissolving, eliminating doubt, in a complete catharsis of everything which disturbs the soul's natural and spontaneous turning towards God. In effect, it means that the entire psycho-physical complex must be reduced to absolute silence. Knowledge is complete in itself; it belongs to the soul as its essence, though in the state of ignorance it exists merely as faith. We already possess, but at a transcendental level yet to be realized, that which we are groping to possess at the intellectual level. Faith is the link between these two levels of consciousness, and a point of transition from the lower to the higher.

It is the recognition of the presence of faith in and above the process of reasoning that prevents thought from falling into the 'wise' but barren agnosticism of European Absolution. A closed system of ideas eventually strangles itself to death. The sudden lanche in the history of Western thought from the heights of metaphysical idealism to the depths of logical positivism will not appear such a strange phenomenon if we realize that every construction of the mind, born as it is in the sphere of relativity, tends to pass over into its opposite, unless it proves itself dynamic for a spiritual realization, and, renouncing the egoistic claim to self-sufficiency, consents to enter into a larger seeking whose goal is direct knowledge above the limitations of thought, in which process the speculative activity of the intellect is transcended and lost.

Body : Mind Relationship

SOME SUGGESTIONS

by

P. R. DAMLE,

Poona

The relation of Body and Mind has presented a philosophical problem in Western Philosophy ever since Descartes first emphasized the distinction of these two aspects of experience and fact. Western Philosophy before Descartes, and ancient Indian Philosophy, do not seem troubled by the problem. That was in a sense due to their naive approach; but it also represents the truth, now accepted both in idealistic and realistic systems, that only on the basis of a hypothesis of some kind of unity can the experienced inter-action between the two be intelligibly explained although this is not to say that any monistic theory professes either to explain the interaction precisely from stage to stage or gives any specific reason for the interaction. The purpose of this paper is to suggest that the unity which we seek as the foundation has to be much more concrete than we normally believe. Both facts of experience and theory indicate that Body and Mind (particularly in human experience) undoubtedly have all of the following relationships, namely, that they are completely different, they are parallel, they interact, they contradict and oppose each other, and in some ways the one and in some the other seems more significant and effective.

It would be useful to compare the relationship with the internal relationship between some other most important dualisms of experience. Such a comparison would throw light on both. To mention the most prominent ones—Reality and Appearance, One and Many, Subject and Object, Quality and Quantity, Necessity and Freedom—all these dualities, it seems, reveal nearly the same characteristics in their internal relationship. While the terms of these other dualities are intellectual notions, concepts or constructs, Body and Mind seem more directly taken from experience. Also, it seems possible to have more concrete evidence about the existence and character of Body and Mind and their interrelationship through suitable sciences, than it is with regard to the other dualisms mentioned.

It is important to realize that attempts to understand the unity of Body and Mind in terms of one of the two, which continue to be made either on behalf of Body or Mind, also continue to fail. Thus, for example, the fuller understanding of the mind through the study of the subconscious and the unconscious has encouraged many to suppose that in that region we are in the borderland, and that according as we interpret it in terms of the Body or the Mind, the unity between the two will be established. Actually, however, such is not the case. The unconscious is either explained physically or mentally, and the problem of the relationship remains exactly what it is in that region also,—namely how to understand these two explanation series in terms of one common series having a commensurate measure for each. Like all studies on the borderland, the region of the unconscious is particularly liable to a subjective interpretation, and sponsors of Body or Mind have accordingly claimed it with some plausibility, but never with any convincing proof of their claims. At the other extreme, advanced researches into the nature of matter, revealing its great complexity and the internal motion of its constituents, has led some to think that here after all is evidence that the so-called matter is not dead and inert but is in its own real nature active like spirit. A little reflection, however, will make it clear that matter in motion is as much matter as any other, and that no continuity is really indicated between matter and mind by the discovery that matter is much more complex than once believed. As a similar instance of fallacious reasoning one may mention the notion that spiritualistic experiments prove the existence of spirits in the sense of completely disembodied experients. All that they seem to prove directly is subtler physical existences, which like our bodies may be inferred to be accompanied by or associated with consciousness. Modern realists have suggested 'Neutral' real or reals as the ultimate stuff of which Body and Mind are specific configurations or values. They too, however, at the most state a problem and do not by any means solve it; unless they are able to show how and why these different configurations take place at all they have explained nothing. It must be remembered that when everything is once reduced to a neutral real, nothing remains outside through which differentiations can later be introduced in the real. If time and space understood as the principles of differentiation are supposed to be ultimately real, then the real is *not* neutral after all. If on the other hand it is neutral,—beyond time and space,—then there is no intelligible explanation for the separate rise of these. Like earlier attempts by Berkely or Leibnitz or Lamarck to trace both

matter and mind to *one* of the two, the later attempts also fail to explain the actual experienced differentiation on the basis of a supposed identity in terms of one of them.

Further, as said above, the experienced facts about this relationship are many-sided and complex. They suggest correspondence, interaction, and opposition and unity in various respects and from different points of view. Thus both experience and theory indicate that corresponding to every thing mental there is something physical. There is no gain-saying this. It is also nevertheless true that bodily events lead to, and are led to, and are led up to by, mental happenings. We have also in practical life convincing experience that while 'the spirit is willing the flesh is weak,' and that body and mind do on occasions tend to defeat each other. There is in addition to all these, the faith or the hypothesis that since all relation points to a basic unity, the relationship of the two also points to a kind of unity.

Let us see how adequate we can make this hypothesis of unity or identity. In doing so, one realizes that the problem raised is similar to, if not identical with, the problem one faces in trying to understand other basic dualisms in experience such as those of Reality and Appearance, One and Many, Subject and Object, Form and Matter. It appears to me that in all these ultimate questions we must revise our expectations about the character of the solution, and must be content to accept a full and precise statement of the situation as the only explanation. Indeed, even with regard to other and less ultimate matters, explanation and intelligibility do not really amount to anything more than a full and clear statement of facts. But this is more clearly so in regard to ultimates. The facts of the relationship being stated fully, the only hypothesis we may make for convenience of understanding is that Body and Mind form a concrete unity, so that there is no mind apart from the body and vice versa. It is the nature of each of these to lead to the other, and both are equally important as constituents or aspects of the real, something like the *gunas* in Indian Philosophy.

There is no other answer to the question *why* the Real should have the two aspects than the answer to a question like, why the one should be the many?, the answer being that it is the nature of the one to be many, that the *one* loses its meaning, reality and nature in the absence of *many* and vice versa. Of the accounts given in the history of philosophy about the nature of the two and the character of the relationship of the two, that of Spinoza and

that suggested by the Sāṃkhya theory about Prakṛti and Puruṣa seem to me to be less inadequate than most others. Spinoza's account has three merits (i) that it posits unity in an intelligible manner, (ii) that it accounts for experienced and anticipated correspondence between the two, (iii) and that it encourages scientific and careful study of each, particularly of the mental side, which is apt to be neglected through anthropomorphism. The Prakṛti—Puruṣa relationship combines in a peculiar way correspondence with a kind of inter-action, and while the Sāṃkhya thinkers describe in effect a unitary situation they rightly emphasize the duality inside. This points to nothing but a basic concrete unity which expresses itself in turn now more in one way and then in another, according to the exigencies of development. The basic mystery of anything bodily having a mental counterpart remains, but it is not in principle different from the mystery of the action of physical laws themselves. To the question why should matter have the properties it has we have no answer any more than to the question why matter and mind should correspond or interact. Even the mystery must however only suggest the hypothesis of a concrete real, possessing these two aspects, attributes, or facets of itself. The fact that both these are in a sense only for the understanding does not I think affect their duality in any specific or significant manner. The words Body and Mind are here used to mean matter and mind in general. Their relation in human life of course is of special interest and presents special problems, but the general considerations here suggested or discussed must nevertheless apply in the field with suitable modification in application.

Moral Obligation as a Clue to the Nature of God

by

WILLIAM HENRY HARRIS

University of Arkansas, U. S. A.

Immanuel Kant reduced all of the traditional arguments for God to instances of the ontological argument, which he considered to be invalid. The first purpose of this paper is to demonstrate that the argument from the nature of moral obligation, which Kant did believe to be valid, must also involve an idea of perfection. The second purpose of the paper is to discuss what moral obligation indicates as to the nature of God.

I

Moral obligation is a process of tension between possibility and actuality. It has both an absolute and a relative pole. WHAT we are obliged to do on each specific occasion is learned from and determined by our experience. This constitutes the actuality of each obligation. WHAT one man ought to do differs from what another man ought to do, in actuality as well as conception. At its relative pole morality differs from person to person, culture to culture, and for the same person at different times.

But recognition of the relativity of morality in no way commits us to indifferentism. A process may be as much an objective fact as a state. My ability to conceive an obligation is one, but only one, element determining its existence. There is a universal and absolute dimension to morality as well. Although WHAT I am obliged to do is relative, THAT every person is a being with the capacity to feel obligation is universal and absolute.¹ This is the first aspect of the universal dimension of morality. When I analyze still further what it means to feel obliged, I find that it always in-

1. A clear discrimination of the universal and relative dimensions of morality is made by Peter A. Bertocci in "A Reinterpretation of Moral Obligation", *Philosophy and Phenomenological Research*, December, 1945. He is in no way responsible for the extensions of the argument we make here.

volves some tension to bring an ideal possibility into actuality. What I conceive as an ideal possibility is always conceived in terms of my being as a person. I feel guilt or ease of conscience as I act in consistency or inconsistency with my conception of what I am. What I am is not only what I have been in the past, not only what it is possible for me to do now; it is also what I conceive it possible for me to become. So long as a person is a person he projects for himself an ideal selfhood which he feels identified with and a tension to being into being.² The self-conceptions differ. But the second aspect of the universal dimension of morality is for each person some Ideal of Perfect Personality (that is, a conception of a person who achieves all his ends).

Misunderstandings of moral obligation arise from an overemphasis upon one or the other of these poles. Each extreme of emphasis is a kind of perfectionism which is purchased too cheaply. The strength of naturalism is its honest effort to describe the actual. Naturalism is motivated by an idea of perfection; it seeks the coincidence between what we are and what we aim to be. Completeness, an esthetic demand for a finished whole of explanation, excites the naturalist as much as it does any idealist. Thus he seeks to telescope possibilities into the realm of the actual. He accounts for morality, as he does other dimensions of our experience, in terms of: causality, predictive uniformity, objectivity, parsimony, isolation, control, and exact measurement.³ A machine can be accounted for in such terms, and this method is useful in helping us to determine the content, the relative WHAT, of morality. However, by itself the method of the naturalist can never explain why we experience obligation in the first place, nor can it give us a standard for placing some values ahead of others.

Rigorous application of the principles of causality and predictive uniformity has led some naturalists to reduce obligation to prudence or learned response. And certainly the struggle for survival and for social status are obvious, external factors of our ex-

2. Though they in no way draw conclusions similar to these, these statements appear to be consistent with data in Prescott Lecky, *Self-Consistency, A Theory of Personality* (New York: Island Press, 1945), and Sherif and Cantril, *The Psychology of Ego Involvements* (New York: Wiley, 1947). Also cf. "the concept of the phenomenal self" in Snygg and Combs, *Individual Behaviour* (Harper, 1949).

3. Scientific method is more often invoked or damned than concisely described. This list is from Titus, *Living Issues in Philosophy*, (New York: American Book, 1946), 94-95.

perience, factors amenable to quantitative study and statement. They really do effect the way we are obliged to act. But physical existence and social approval are only one aspect of what we struggle to preserve. Too many instances can be cited of their sacrifice to something else.

This "something else" is what it is and not some other thing. Every being with capacity for obligation has a norm of norms by which his particular values are criticized. The capacity to develop such a norm is not acquired; it is the presupposition of any moral being. This nucleus of the values any person acquires is some Ideal of Perfect Personality (a conception of a person who achieves all his ends). Against the perfection-by-reduction of the naturalist, it must be asserted that a moral being is to be understood in terms of what he strives ideally to become, as well as in terms of his actualities. It is of course difficult to give such an ideal discursive articulation, for it is not a particular choice, but rather the informing assumption of all choices. Thus it is easy for the devotee of scientific method in its narrowest sense to overlook this dimension of morality. He does so because of the inherent limitation of his method.

However, emphasis upon the opposite pole of moral obligation, the pole of the absolute and of ideal possibility, may give rise to no less serious a misinterpretation. We are never obliged simply to devote ourselves to an ideal. We are always called upon to actualize it in terms of a certain place and time.

There are at least two reasons why idealistic reductionism is a bad thing. First, we are liable to conclude from it that the moral life demands much less continuously critical thought than it actually does. It is not enough for us simply to will sentimentally the realization of our personalities, nor those of others, nor is it enough to think that peace and justice are good things. To be obliged is to have a particular responsibility for bringing an ideal into being.⁴ It means seeing the present situation in the light of the kind of person we want to become. Moral obligation is always concrete, and it never stands still. It has both content and structure.

In the second place, preoccupation with the ideal may lead us to seek it through reduction of its scope so that some dimensions of reality do not count. We may withdraw from complex moral

4. Cf. Nicolai Hartmann, *Ethics* (trans. Coit, New York: Macmillan, 1932), I, 347-248.
P. 5

situations, particularly those with wide social dimension. Misinterpretation here is understandable. Growth involves not only an expansion of being, but the shedding of an old shell as well. Perfection of the self has a negative, as well as a positive, aspect. We must remove from ourselves impediments to growth. But there are those who treat asceticism as an end in itself, rather than as a discipline for the creation of values. Desire for perfection has become morbid and unhealthy if it leads us to contract our ideal to reduce its margin from our actuality. Idealistic reductionism becomes as vicious as its naturalistic counterpart. By it the most normal acts, and often those with greatest potentiality for good, are condemned as "worldly". It devotes itself to the elaborate cultivation of a narrow range of virtues, forgetting that obligation is a dynamic and concrete thing. What is virtuous in one context may become vicious when pursued in an inappropriate context. Thus moral possibilities are overlooked and real evils created under the guise of virtue.

To escape such distortions of morality we must keep in mind that it has two poles: We are obliged, and each of us is obliged to make actual an Ideal of Perfect Personality (a person who achieves all his ends). This ideal can be formulated only through introspection, but science is needed to give us techniques and the information as to how the personality is to be perfected, how the ideal is to be actualized on each specific occasion. If there is not present this tension between a norm structural to all experience and particular data to be organized, there can be no obligation. In fact, no person can exist, since persons are in their essence moral beings. As William Stern has said "Experience is life under cleavage and tension." When there are no ideal possibilities to be actualized, or no concrete situations in which the ideal may be incarnated, consciousness and life cease to exist. But this can never be, for ideal possibilities are infinite, and each actualization creates a personality more adequate to realize itself still further.

II

Moral experience is the source of our idea of perfect being. Even distorted interpretations of it spring from an idea of perfection. Since moral experience has such complexity and tension, it is necessary for us to revise our estimates of the strength of the ontological argument and the kind of God established by it.

We have failed to understand perfection because we have read into our experience of it things which are not there and drawn

conclusions from it which contradict its meaning. We should first of all be careful to remember that what we experience is not Perfect Being, but a tension to perfect an ideal by bringing it into existence. As Anselm reminded us, "It is one thing for an object to be in the understanding, and another thing to understand that the object exists [*in re*]." Kant and Hume were right in objecting that Perfect Being is never a datum of experience. The Ideal of Perfect Personality which gives structure to each consciousness is not God. It is an intuition shared by all persons, including God. It carries with it the need of which we have spoken to join idea and existence.

We conclude the existence of God from the experience of obligation by realizing that each creative matrix of possibility and actuality is a person. Obligation gives us our clearest insight into what it means to be a person. Thus the superhuman creativity we see about us expresses a Supreme Person. Its unity shows that he is one. The fact that we recognize the imperfection of the world shows that an idea of perfection is structural to it and to ourselves. The fact that the superhuman order slowly and painfully evolves toward that ideal where each person can achieve all his coherent ideals reveals a Supreme Person who guides the process.

The confusion between God and the subsistent ideal which gives structure to his being is as serious as it is common. We have seen how it vitiates the argument for his existence. It also makes his nature a tissue of self-contradictions.

If God is a person, and as a person is capable of moral experience, he could not be absolutely, existently perfect. Absolute perfection would contradict his moral goodness and his infinity, as well as his personality. If a being has completely achieved all its ends, including the central end itself (the ideal of a being which achieves all of its ends), it no longer acts in terms of obligation. It no longer acts at all. Since idea and object have merged, it is unconscious. Such a being could surely not be infinite, for no infinite being could achieve its ends in a finite span of time. To say that God is both infinite and perfect is to be baldly self-contradictory. (The contradiction becomes more obvious if we put it in other words, "unlimited and complete").

Our experience of moral freedom should give us insight into the nature of God. In so far as each ideal is perfected through existence it brings with it new visions and new possibilities. Perfection is a process and not a result. Actualization is the seed of in-

finity. We are not most free when determination is absent from our lives. A skilled pianist moves with freedom throughout the reaches of musical literature; and undisciplined amateur blunders over the keys. A machine can never be taken as an end of human endeavour, but through reducing large areas of activity to mechanization man can be freed to explore new areas of spiritual possibility. Even so, each evidence of growing order in the universe is evidence of a good God who has not yet achieved all his ends but through eternity will increasingly be able to do so.

The insight of the Vedantic philosophers who remind us of the Self each of us dimly sees within ourselves is a sound one. So is their description of the relief from tension which comes when we yield all our being in commitment to this ideal. They are mistaken when they take this relief from tension as an end in itself. It is one necessary part of the rhythmic pulsebeat of life. And each act of commitment brings new possibilities. They are also mistaken when they sometimes speak of this sharing with God in the quest for perfect selfhood as if it meant a pantheistic involvement in the being of God. We are not merged into one another because we share an awareness that two plus two equals four, or that an action is good.

The familiar distinction between Brahman and *Isvara* is helpful here. We must see that Brahman does not exist; it eternally subsists. But the subsistent Absolute in which each person shares could not subsist if there were not the eternally existent *Isvara* to know it, commit himself to it, and will it into the realm of existence. In the language of recent philosophy we can recall Whitehead's distinction between the "primordial" and the "consequent" natures of God, as well as his distinction between "eternal objects" and "actual occasions."

For myself, I have found an articulation of this insight in Plato's great vision of God. He is the Artisan (*Demiurge*) of Plato's *Timaeus*, the Lover of Plato's *Symposium*. The joy we feel in fulfilling our obligation to grow is an invitation to become labourers (*demiurgoi*) together with him.

Sense and Reason in Aristotle's Psychology of Cognition

by

S. G. HULYALKAR,
S. P. College, Poona

Although sense-perception is a function of the sensitive soul, Aristotle maintains, that in man it is rationalised and develops without a break into thought. What part perception plays in the account of 'Active and Passive Reason' is pointed out in this paper by discussing the interdependence of sense and reason in the Aristotle's Psychology of Cognition.

According to Aristotle thinking proper or reason in man is active even on the perceptual level. That is, the act of perception in man entails the activity of reason. This is illustrated that if a man notices moving torches at night, he will judge that the enemy is approaching; and the same stimulus may also serve to cause him to run away, and consequently he may try to justify his running away. This briefly shows how the active intellect plays a part in man's perceptions. All the higher mental functions exist as it were in a dark cabinet of the human mind and are only brought into play when the intellect is active, just as the "special" senses are effective only when the *sensus communis* is acting. It will be of some interest to note the general nature of *Nous* in this context.

Aristotle's doctrine of *Nous* is highly complicated and even at the present day awaits completely satisfactory statement. We shall first state Aristotle's views about the two intellects and then explain what seems to us the correct view of his conception of how sense is related to reason.

It should be noted that Aristotle holds that "we cannot think without images". Mental images are necessarily employed in the service of intellect. And in comparing thinking with perceiving, he holds that thinking is a process in which the soul is acted upon by an object of thought¹, just as in perception the sense is acted

1. *De Anima*, 429 a 14.

on by the sensible object. In this very consideration he is led by his study of nature to maintain that to whatever serves as matter there corresponds something else (form) which is the cause or agent, and these two are related to one another as art is to its material.² Such a distinction must also be found in the soul, i.e. in the rational faculty. Thus one function of intellect (the Passive) is that by which it "becomes all things", the other (Active) that by which it "makes all things", as light may be said to make potential colours actual.³ It is the 'active' intellect "which is separable, impassive and unmixed, being in its essential nature an activity. For that which acts is always superior to that which is acted upon, the cause or principle to the matter."⁴ It is however, only when separated that it is its true self; and this, its essential nature, alone is immortal and eternal."

The above scanty statements about intellect have become a great stumbling block for interpreters of the *De Anima* (Bk 3, c. 5). The distinction between the intellect "which makes" from the one "which becomes" is notorious. The relation between them has been interpreted differently by such commentators as Theophrastus, Themistius, Alexander of Aphrodisias and other mediaeval thinkers.⁵ For all of them, the problem is whether to regard these two intellects as distinct faculties of the human soul, or to seek to identify "active" intellect with an intelligence outside man i.e., Divine intelligence or God (the description which we find in the *Metaphysics*, 1072a 25 1075a).

As regards the interpretation of "passive" intellect there seems to be a divergence of opinion among many Aristotelian scholars—Trendelenburg, Zeller, Ravaisson, Hammond, etc.⁶ Some of these identify it with all the lower faculties of soul in contrast with the active intellect, others with the functions of *sensus communis* as a judging faculty. But the relation between the two 'intellects' is not established with complete clearness by any of them. Wallace's answer seems on the whole to be most in harmony with the account in *De Anima*. He says⁷ "the creative reason (Active intellect) is the faculty which constantly interprets and as it were keeps up an

2. Ibid., 430 a 10-15.

3. Ibid., 430 a 16.

4. Ibid., 430 a 17-19.

5. Hicks, *De Anima*, Introduction, p. 65.

6. Ibid., p. 67.

7. Wallace, *De Anima*, Introduction, p. 98.

intelligible world for experience to operate upon, while the receptive reason is the intellect applying itself in all the various processes which fill our minds with the materials of knowledge". And again, "the two, it must be remembered are not *two* reasons. They are merely different *modes* of viewing the work of reason". For, as Theophrastus pointed out, Aristotle nowhere states or implies that the active intellect exists per se in man independently of the passive.⁸ It is separable only in the sense that it is immortal and endures even after the destruction of the individual man.

Sense and reason are said to furnish knowledge and in so doing they apprehend and pass judgments on their own proper objects. By sense we apprehend the sensible forms of things; by intellect the intelligible forms.⁹ When in activity both have an object, and the transition from the dormant power to its actual exercise is always due to some efficient cause. At the moment of apprehension there is an identity between the form which apprehends and the form which is apprehended. Similarly, when we think of a pen or a circle, the form or essence in our mind is identical with the form of the object itself.¹⁰

Thus external things in affecting our senses cause us to apprehend the various sensible qualities.¹¹ Through intellect we are then enabled to think of such qualities individually, abstracting them from the concrete of the particular instances in which they occur. The substance (or concrete particular) in which the attributes inhere is said to be indirectly perceived by sense and directly judged and known by thought. So the intelligible forms are implicit in the sensible forms.¹² Here the question arises, "How can intellect, which is assumed to have no special bodily organ, apprehend the intelligible forms of objects? Aristotle answers that so far as knowable things are pure forms, no such expedient is required; for its objects are not external but internal. The soul is thus potentially a place of forms¹³ as a tablet on which writing exists potentially. From this account it seems that "active intellect" is introduced in the doctrine of thinking "to provide a cause of that transition from potency to act which takes place whenever we actually think."

8. Hicks, (*De Anima*), Introduction, p. 64.

9. *De Anima*, 431 b 20-432 a 3.

10. Ibid., 432 a 1.

11. Ibid., 429 b 14-16.

12. Ibid., 432 a 5.

13. Ibid., 429a 26.

Active intellect "makes all things" thus, seems to have meant that just as in the act of perception the sense realizes its own nature so active intellect realizes its own nature (i.e. knows the object) in the recognition of the ready-made material of the passive intellect.

The dependence of reason on sense perception leads us to the following considerations. Though it is true that intellect has no bodily organ, yet when perception by means of a special sense is wanting, the activity of intellect is impeded; for the source of all knowledge through the avenues of that sense is stopped.¹⁴ Thus without the sensations in question the man will not have the corresponding images and without these he cannot have thoughts and conceptions.¹⁵ For it is impossible for us to think without an image before the mind.¹⁶ A past experience which we remember includes not only perceptions but thoughts and the reference of the images to their particular sensibles. For Aristotle maintains that what is sensible is remembered *per se* and directly; that the whole of our thoughts, notions, etc., are remembered *per accidens*—indirectly. Further, the use of images in thinking implies their use in that process of deliberation in which the mind balances the present against the future, and after due calculation decides upon a course of action.¹⁷ But when reason is obscured by passion, images of sense themselves directly move to action and such images generally control the behaviour of the lower animals.¹⁸

But the resemblance between the processes of perception and thinking is only partial. Thus the sense-faculty is stimulated by an object that is individual, particular and external to the percipient; whereas in thinking, the universals (the forms which we think) are present in the understanding, at any rate, of the mature man.¹⁹ So in the case of perception the stimulus comes from without, but the stimulus to thinking is internally produced. In thought the active intellect works upon the passive and thus sets the whole mental apparatus thinking. The transition from potential to actual thinking cannot be explained except by assuming the prior exis-

14. Ibid., 432 a 7.

15. De Sensu b, 445 b 16.

16. De Anima 431 a 16, 432 a 8-13; De Memo 449b 31.

17. Ibid., 431b 2; 432a 5.

18. Ibid., 429a 4, 433a 9, b28-30.

19. Ibid., 429a 28.

tence of an efficient cause,²⁰ and this role is filled by the active intellect.

Thus the dependence of reason upon the lower faculties in Aristotle's doctrine, is shown by the gradual evolution of knowledge out of sense-perception and experience.²¹ And it is in this way he thinks to show how during our advance in knowledge, the order of cognitive development is different from the order in nature²² that is qualities of perception are epistemologically prior to objects of thought; but the logical order—the order in nature—is the reverse.

20. Metaphysics 1072a 2-7; 1071b 12-32.

21. De Anima III, 8, 7, 431a 14.

22. Metaphysics 1010b—Cf. "What is more knowable to oneself to what is more knowable to nature."

The Conception of Reality as Dynamic

by

G. R. MALKANI

Amalner

1. *The Static Conception of Reality Criticised.*

Philosophy has long been used to a static conception of reality. Reality is something that merely *is* or *exists*. The philosophical problem thus reduces itself to "what is reality in itself?" Thought evidently can only know the static and the standing, and all its questions naturally presuppose a static conception of reality. But is reality static at all? Does not thought assume too much, and predetermine the nature of reality? If reality is not static, the philosophical question posed by such a conception of reality is really non-sensical. The question should not be asked, what are things-in-themselves? This is the sort of criticism levelled against the Kantian standpoint by certain modern philosophers. Or what comes to the same thing, things-in-themselves can be known if we give up the intellectualistic bias. Thought is the devil of the piece. It creates the distinction of appearance and reality in one way or another. It should be replaced by a feeling-type of experience which is an integrating experience, or by a conative type of experience which can penetrate into the heart of things and reveal their inner dynamic nature. We are here concerned with the latter type of new thought.

2. *Can Reality be both Static and Dynamic?*

Let us suppose that thought has succeeded (which is doubtful) in knowing something that is static and immutable. Can we be satisfied with such knowledge? The immutable can at best be only a phase of reality, not the whole of reality. The other phase would be movement or change. The two phases cannot be intelligibly related. Our knowledge of the immutable will therefore be only partial, if it is even that.

Some philosophers have argued that reality is both static and dynamic. It has so to say two different poises. It moves from

one poise to the other, from the static to the dynamic, and vice-versa. When reality is in a static poise, there is no creation, no activity, no movement or change. But reality is not always that. It is not eternally unchanged. It moves out of itself to create a world. This is the dynamic moment of its life. These moments in the life of reality alternate as such moments alternate in the life of the individual. That is the law of all life. Life is not continuously active and creative. It has moments of rest and of retreat within itself, alternating with moments of activity. This, it appears to us, is good poetry, but not good philosophy. It ignores inconvenient questions. It relies too much on analogy. It employs a mixed logic; and it fails to press forward for a revealing notion of reality.

3. *Universality of Change.*

The static conception of reality easily appears to be inadequate and unsatisfactory. Even if we intellectually apprehend reality as static, how could we make certain that reality as apprehended by us was *really* static and did not merely *appear* to be so. We know that most things in this world, that appear quite static to us, are not really static. Only we fail to catch the movement at the surface. The one universal fact of experience about which no-one seems to have any doubt is the fact of change. Change cannot be denied, while its opposite can always be denied. More than that Change cannot be traced to the unchanging.

Some philosophers have tried to do this in various different ways. They have argued that change has issued out of the unchanging. But they are clearly mistaken. If we try to reconstruct such a process, we are bound to fail. The unchanging cannot, by itself, move or bring forth change. Let us suppose that something else is needed to draw it out of itself. But can this something else be itself static? If it is, neither can go out of itself, and so much as affect the other. One static entity by the side of another can only make a whole block which is itself static. In order that anything should be affected or moved or changed, a movement in the situation of which the something is a part must be presupposed. In other words, to account for change, we must presuppose change. Nothing that is unchanging can account for change. We might then say that all that is real is changing or momentary (*ksanik*). Conversely, the momentary alone is real. Reality is essentially dynamic. It is movement or change; and

the constituents of this change are momentary occurrences or point-events.

The fallacy of the view that change can issue out of the unchanging can also be pointed out in another, and perhaps a more convincing, way. Let us concede that the unchanging is moved from the outside, through an external relation or a stimulus. We might still enquire, how is the unchanging moved at all? How does the stimulus act? The stimulus may indeed come very near, it may even touch, the static object; but what of that? It is a drama outside the unchanging, and must stop at the unchanging. Unless the latter *moves itself* to receive the stimulus, the stimulus cannot so much as have an entrance. The unchanging can take no note of it, and cannot be affected by it. Taking note is an act which nothing merely from the outside can impose upon us. We must ourselves move in the matter. We must allow ourselves to be affected, before we can be affected. In other words, the unchanging must first move out of itself, before it can be moved from the outside. But then it is the unchanging no longer. We are forced to the conclusion that, in order that something should be moved, it must have already moved; in order that something should be affected, it must already be affected, etc. That which is literally immovable is also the impenetrable. It simply cannot be moved. Self-movement is pre-supposed in all other-movement. But if that is so, nothing is really left unchanging. Change only issues out of change, not out of the unchanging. Or what is the same thing, the unchanging cannot begin to change, and can have no intelligible connection with change.

4. *Why we are obliged to go beyond change?*

Shall we then say that change is universal, and that reality is dynamic in that sense? But even so, change does not stand by itself. We have to go beyond change. The moment we try to make change self-sufficing and self-explanatory, change itself undergoes a change of character, and we cannot recognise the original thing. Or what is the same thing, change has ceased to be change. Ultimate Reality is no longer of the nature of change, but paradoxical although it may appear, it has every character of the unchanging.

Let us see how this transformation is forced on us. Change consists in something being brought into existence or in passing

out of existence. It consists in birth or in death, let us say. Birth is an event, and death is an event. Events are the only constituents of change. An event does not exist of itself. It is caused to exist; and it can only be caused by another event. Events are the only ultimate reality. But what is an event? It has every appearance of static being. We may call it a *moment* in a process of change. But this moment is a result of a hypostatization of change. It has a static sort of unity. Every kind of unity or self-identity, and everything that can be described as *this* or as *that*, is static. To correct this self-contradiction between pure process and its so-called ultimate constituents, we must negate the latter. The self-identical entity called an "event" can only be unreal. It is our creation or a creation of the intellect. The reality, which is pure process, has no *this-ness* or *that-ness* in it, nothing that we can name or fix in thought. The moment we do this, we hold up the process, which is pure becoming, and create the appearance of being in it. The reality of change or process thus entails the unreality or the illusoriness of all forms of *being*. Liquidate all being, and nothing remains which you can name or know. This is the same thing as saying that *śūnya* remains; and *śūnya* (nothingness) is inexpressible.

5. *The Buddhistic notion of ultimate Reality as completely Dynamic.*

We have however a question, and it must be answered. What exactly is this *śūnya*? It is evidently the negation of all being; and since this negation itself can only be conceived as an intellectualised transcript of reality, and so something static, the negation also must be negated. What remains? We may call it by any name,—we may call it "pure change" or "*śūnya*", etc.,—but it will have nothing in common with any intellectualised image of reality. Will it be anything that we can know? If it is nothing that we can know, why talk of it as ultimate reality or as the ultimate nature of all things? Why use any words in connection with it that are intended to be significant? If we cannot know it intellectually, what is the kind of non-intellectual intuition that is going to be recommended to us? So far as our analysis of change itself is concerned, we are left in the domain of objectivity, but with nothing that has any nature of its own or *svarūpa* which can be known in any form of intuition to which human beings have access. Not only all meaning has terminated, but all symbolic

meaning too has terminated; so that we can never speak intelligibly about this so-called ultimate reality which is purely dynamic. We are faced with an ultimate negation, which is the negation of negation itself, but which cannot emerge as positive reality in any kind of intuitive knowledge. Reality becomes *nis-svarūpa*. We are in the Wilderness of Nothingness, if we consistently pursue the dynamic notion of reality as change.

6. *Change must lead to the Unchanging: the Vedantic Way.*

There is, however, another way to tackle change, and in a way to explain it, and that way does not lead us to a blind alley. Change indeed! But something must emerge in change. What emerges may have no real being. It is born to die; and in a sense, it dies the moment it is born. "That which has no being in the beginning and no being in the end, has no being in the middle either where it appears." But change implies the emergence of this illusory kind of being. This emergent being must have a cause. Can its prior non-being or *abhāva* be the cause? Evidently not. Out of non-being, non-being. Something, as we say, cannot come out of nothing. We naturally go, in search of the cause, to the prior event, which is another illusory appearance of being. But our question remains unanswered,—what does the illusory appearance of being come out of? If we merely carry the series further, we explain nothing. The illusory cannot come out of the illusory. If the illusory cannot stand or exist by itself, if it must come out of "another", that "another" must in the end be non-illusory being. It is possible for the illusory to come out of the non-illusory, through error; and that is the only way in fact that the illusory can come out at all. It is possible to say, "Out of being, being". Being then, and real unchanging being, is the limiting concept in this analysis of change. All change leads to being. All things are born out of being, remain and subsist in being, and go back to being. Or what is the same thing, all the moments of change appear within being, which is the substratum of change.

7. *Analysis of free causality.*

The argument can also be put in a slightly different way. All causality is in the end free causality. It is causality by free will. If one billiard ball pushes another, the real cause of the movement is not the first billiard ball. We must carry the movement backward, till we come to a self-movement or movement by

free will. If we analyse this last cause in the series, which is really the *first cause* of the series as a whole, we shall find that it does not belong to the series, that it is not caused to exist, and that it is in some sense self-caused or self-moved. The first cause is the only real cause, and that cause may be said to move of itself. It is the unmoved mover. How are we to understand this mystical concept of philosophy? We can only understand it in terms of real immutable being, falsely identifying itself with an act of the mind (*sankalpa*) called will. Any kind of spiritual impulse or free act can only be led back to immutable being as its origin, in this Pickwickian sense. That which does not act alone can be said to act freely. There is freedom of being here or free being, not a free act. No act is free in itself. Being alone is free; and any act with which this free and immutable being identifies itself gets a transferred sort of freedom. The will is free only in this transferred sense. Primarily the Self alone is free; and the Self is being that is immutable. It can act, or not act, or act otherwise, and yet its freedom is never affected. It is part and parcel of its very being. It is *mukta-svabhāva*, or free by nature. Being is freedom.

8. *Our Conclusion: Change is only an Illusory appearance of Change-less-ness.*

What then is our conclusion? The dynamic conception of reality depends upon our volitional experience. Any analysis of this experience leads us straight to an immutable reality as the ground of will. All change is to be traced in the end to an act of the will. It is in this sense that change can be said to issue out of the unchanging. It does not really do so, but only appears to do so. The immutable reality does nothing, and yet it is the only doer, if there is one. In other words, change is an illusory appearance of change-less-ness. This changeless ground of being has a nature of its own or *svarūpa* which we can know. We have merely to analyse the implications of free causality.

(a) *The Self alone is free.*

Something is a free cause when it does not itself change in causing something else to exist. Immutable being alone can be free, not the so-called act of the will, which arises and also disappears in the process of effectuating a desired object. I am free, not my *will*. In other words, being is free, and being is of the nature of the Self (*mukta-ātman*).

(b) *The Self is intelligent.*

Being that is free must be *intelligent* being. Unintelligent being cannot be said to act of itself. It has no initiative and no self-movement. It is always moved, never moves. Only intelligent being can act freely. It alone can freely adopt a purpose, and act in order to achieve that purpose. It alone can have an impulse towards greater and greater freedom, if for any reason whatsoever it takes itself to be in bondage. Thus freedom leads to being that is not only immutable, but also intelligent.

(c) *The Self is beyond the opposition of the static and the dynamic.*

There is no sense in calling this being "static". It is never grasped as standing and devoid of movement. What is so grasped is part of *jada-prakṛiti* or unintelligent nature. The being that is the ground of the will is not grasped at all, certainly not in the objective attitude, or as 'this'. It is beyond things that are grasped as static and those that are grasped as dynamic; for both these are objects of a kind. They belong to nature, physical and mental. True being or the intelligent Self does not belong to nature, or to the known and the visible universe. It is beyond that which is known. And yet it has a nature or *svarūpa* which we can know in an intellectual intuition.

(d) *The Self can be known in an intellectual intuition.*

The intellect is not ordinarily intuitive. It becomes intuitive, when it is face to face with a reality that is by its very nature immediate and also intelligent. Nothing else except the Self has these characters, *Pratyakṭva* and *Boddhṛtva*. The intellect itself has them only in a relative and borrowed sense. They do not constitute the nature of the intellect, as they constitute the very essential nature of the Self. An intellectual intuition is only possible of such reality, never of a reality which is either objective or non-intelligent. Thus, while change leads to the changeless, the Vedantic interpretation of the latter is clearly superior to, and more satisfactory than, the Buddhistic interpretation of it.

9. *A new interpretation of Dynamic Reality.*

We can then conclude in a somewhat paradoxical language, the Self is dynamic, if anything is dynamic; for it is the only ultimate ground and origin of all dynamism wherever it is seen. And

yet it does not move. This is a new interpretation of dynamic reality. What we take as dynamic is movement and change which is the expression of the blind power of nature. This is not real power. Real power is intelligent power, which alone can move or act. Blind power or the power of nature is in the end governed by intelligent purpose. Intelligent purpose is governed by the will to freedom. And the will to freedom is governed by the freedom of being or free being, which is an eternally accomplished reality. This reality is the ultimate ground of all expressions of power. Here the dynamic conception of reality merges into the static, and their opposition disappears.

Mind and Consciousness

A Comparison of Indian and Western Views

by

SARASVATI CHENNAKESAVAN

University of Madras

The problem of the status of mind and its relation to other facts of existence has been one of the persistent problems of philosophy. Cartesian dualism between mind and matter arises out of the fact that in the last resort, neither mind nor body can be reduced to the other. Beginning from the time of Descartes, we find persistent efforts in the West to bridge the gulf between mind and matter. Simultaneously, we also notice that mind is often identified with consciousness, Self or Soul. Mind is psyche, and the study of mind is Psychology—that is, mind is soul or consciousness. Knowledge, which is the province of mind is impossible unless there is consciousness—so it follows that whatever is mental, is consciousness; the self and the mind are identical. "When we speak of mind we mean above everything else, consciousness".¹ "I mean then by mind a consciousness of which I am aware in myself"² "Consciousness appears to us as a sensory organ which perceives a content proceeding from another source".³ These are some of the statements of Western thinkers showing the tendency among them to identify mind and consciousness. The various schools of psychology and epistemology and especially the recent psycho-philosophical discussions of mind evoked by Gilbert Ryle's book "Concept of Mind", all point in the same direction.

Both philosophers and psychologists struggle in vain to find some concrete characteristics or qualities of the "I" or "Self", so that, it may be differentiated from that which is purely mental and physical. Obviously, they cannot succeed, for the self is of the

1. Bergson—"Mind-Energy", translated by H. Wildon Carr, p. 5. (Macmillan & Co., London 1920).

2. A. H. B. Allen—Mind, July 1952.

3. Freud—*Interpretation of dreams*—Chap.4. (George Allen & Unwin Ltd., London.)

nature of the pure "subject", and the moment any attribution is made, it automatically becomes "objective". The nature of the self, if at all it can be characterised, is to be "conscious". The problem of the status of mind in the scheme of body, mind and soul is sought to be solved by identifying mind with consciousness and sometimes, both in turn with matter. To explain "I" it is said to equal "mind", to explain "mind" it is said to equal "body" or a much less subdivision of the body: the "brain". This is the position of a great many of the Western thinkers.

There seems to be a confusion of terminology here. When mind is used as an equivalent of the "I" it means the conscious self, the knower, the one who has memory and recollection. Then logically it follows that such a mind cannot in its turn be equated with body. When mind is used as an equivalent of matter or 'brain', it is given the connotation of that which has reflex activities of the nerves and which is almost identical with the glandular and other physiological activities. On the face of it these two meanings of the word 'mind' cannot be identical, nor can they refer to the same thing. Even so, the continuity of the self through actions which are psychic and the resultant self-consciousness cannot be explained, if mind is equated with brain. As psychologists themselves admit, sentience can never reside in matter. Matter cannot know itself.⁴

There are also metaphysical theories like the Neutral Monism of Russell. But they too are unsatisfactory. It is the contention of Russell and others that mind as consciousness or self, and matter as body are but the results of different permutations and combinations of the same neutral particulars. But, when intoxicants like alcohol which are material are introduced into the body, mental changes also are perceived. On the theory of Russell this can only be explained by saying that alcohol has got a psychic quality as well as a physical quality, each affecting its kind. Such a position involves the metaphysical theory that ultimate reality which is One, is double-faced, and this contradicts the original premises of Russell. A similar argument can be produced against Russell's theory if we examine the physical effects of emotions.

The whole trouble arises because Western thinkers do persist in identifying mind with consciousness. For them, the sum total of man's spirituality rests on the fact that he is mind. If mind is

4. Troland—*The Mystery of Mind*, p.233 (Chapman & Hall Ltd., London, 1926).

pure consciousness as William James says ("Thoughts themselves are thinkers"), then the necessity for a body does not arise, for thoughts can exist without their physical counterpart. If mind were purely material then the fact of awareness or self-consciousness cannot be adequately explained. If it is pure body, the problem of *will* remains unsolved; if it is pure consciousness, the problem of physical perception involving the sense-organs remains unsolved. So, the only way out of the impasse would be to view mind as a physical entity though not of the same type as the gross body, and at the same time to be so subtle as to be capable of reflecting the conscious principle. This may be illustrated by citing the views of some Indian philosophical systems. Here we find, as we proceed from system to system, a gradual progressive postulation of one spirit which is the whole, and which is the substrata of the Spatio-temporal order of things and minds.

The word *Manas* literally means "Measuring" and it was used in this sense in the early Vedas and Brāhmaṇas. *Manas* was part of that which was designated by name, *nāma*. It is an activity in the life of man by which he measures his wisdom, pleasures, etc. In the Chāndogya, *Manas* is said to be *annamaya* (6. 6. 5 & 6). Śankara in his commentary on this says that by eating food one increases one's mind, for when a man does not eat, his powers of speech and mind are at a very low ebb. The increase in food must therefore be the cause, either directly or indirectly, of the increase in mental functions. Hence mind is a form of subtle matter. Again in the Brhadārṇyaka we find *manas* treated as a sense-organ, i.e. as an instrument of knowledge with a physical basis. To link up matter which is gross and self which is pure consciousness, *manas* or mind which is subtle matter capable of reflecting consciousness, is necessary. This idea that *manas* is subtle matter is common to almost all systems of Indian thought.

But consciousness is viewed differently by different systems and accordingly the relation between mind and self or consciousness, which are two distinct entities, differs from system to system.

Nyāya-Vaiśeṣika includes self and *manas* in the category of substance. They are both substances, but their substantiality is spiritual. The self differs from matter only in that it becomes conscious sometimes. *Jñāna* or knowledge is an adventitious attribute of the self and arises in the self when there is contact between the self, mind and object. In deep sleep, when this contact is absent, the Naiyāyika says, consciousness ceases to be a quality of the self

and the self lapses into its original nature of being as if inert (*Jada*) temporarily. Hence consciousness is only an adventitious quality of the self.

Rāmānuja also holds that consciousness is a quality of the soul, but with this difference, that here, it is an essential quality, present eternally in the soul. It is this *dharma-bhūta-jñāna*, which literally means subsidiary or attributive *jñāna*,⁵ which is responsible for knowledge arising in the self. This acts through *manas*, through the sense-organs, goes out to the object, assumes the form of the object and thus gives rise to knowledge of that object. *Dharma-bhūta-jñāna* is not only self-manifest as a quality of the soul, but it also manifests all objects for the soul. This dual manifestation always serves the purposes of the self and never for itself.⁶

But to Rāmānuja, consciousness is not only a quality of the self, but also the very nature of the self. The *Jīva* is consciousness. A similar view is held by the Sāṅkhya, where *Puruṣa* is said to be pure consciousness. But the *Jīva* of Rāmānuja and the *Puruṣa* of the Sāṅkhyas, though of the nature of Pure Sentience, cannot know or act for themselves, being limited, the one by *dharma-bhūta-jñāna* and the other by *Prakṛti*, through which the pure consciousness views itself as limited.

The Sāṅkhya holds that both matter and mind are but evolutes of ultimate reals (*Guṇas*) which are the constituents of *Prakṛti*. Substantive matter is predominantly *Tāmasic* whereas psychic matter (*manas*) is predominantly *Sāttvic*. When we analyse mind we find only a series of fleeting states, and when we analyse our conscious experience, we find that through these mental states, there is an implied unity which gives a purpose, a meaning to these states. Hence the continuity of individual life does not lie in these mental states but in the self who is the enjoyer, the knower of these states. But this knower who is the *Puruṣa* is limited by *Prakṛti*. This does not solve the problem of how matter which is inert, unconscious, and consciousness, interact.

The Vedāntic view, in particular the Advaitic view, is that *Antahkaraṇa* or mind, is like everything, a product of *māya*. The self alone is consciousness, and consciousness cannot arise as a contingent factor of subject-object relation. The Advaitin agrees

5. Hiriyanna—*Outlines of Indian Philosophy*, p.388.

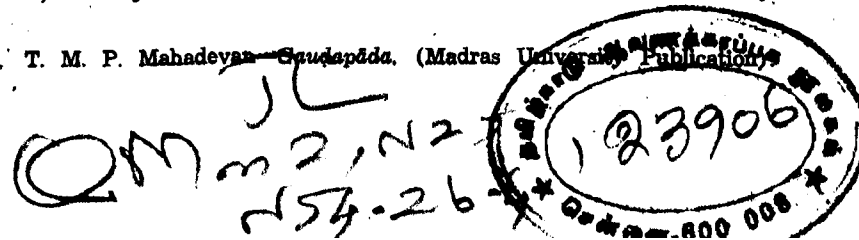
6. *Ibid.* p.387.

with the modern psychologists and says that mind is just a totality of conscious states and processes. The self which is neither mind nor matter is the ground of both mental and physical states of existences. Sankara in his *Bhāṣya* on the *Bṛhadāraṇyakopaniṣad* says (3. 4. 1.) "That which reveals every other object and illumines the entire world cannot be apprehended as a 'this' or a 'that'". Therefore that which reveals everything else, viz., consciousness is the basis of all experience whether it is psychic or physical. Consciousness, i.e., the self, which alone is real, appears as mind and matter. The nature of this consciousness can be understood from the phenomenal point of view as that which is limited by subject-object relations, and from the noumenal standpoint as pure, unlimited consciousness which is without differences. The latter is implied in the former.

To explain how the unlimited pure consciousness appears as the many limited particulars of every day experience, the Advaitin gives us an analysis of the four levels of experience viz. the waking, the dreaming, the sleeping and the fourth which is called *Turiya*. An analysis of the first three states, "through which we pass and repass reveals that we are the self which alone is constant while the appearances vary".⁷ The waking experience is different from the dreaming, because in dream, the objects are not external. In deep sleep these mental objects also are not present. The existence of consciousness during deep sleep is understood by the implication of the continuity of self-awareness. The *givenness* of the waking experience which is the givenness of the sense-object relation and the *givenness* of the dream experience which is the givenness of mental activity alone—both are not seen in sleep-experience. And in sleep there is consciousness. Hence mind cannot be equated with consciousness. Consciousness is not mere knowing; it involves transcendence of the objects known and the knowing process. Mind is that which has a locus in time and space, whereas consciousness is that which is not limited either by time or space, but still is that which gives a meaning to these. Mind like matter is only an appearance of consciousness. Just as in dreams the material, substantive, experience of waking life becomes only an appearance, so also in the light of pure consciousness the mental and physical experience merely become illusions.

The theory of the Advaitin who says that everything that there is, is only an appearance of consciousness, is in some way

7. T. M. P. Mahadevan—*Saṅkṣepa*, (Madras University Publications)



corroborated by modern scientific views of consciousness, mind and matter. Modern psychologists⁸ say that all thought is the result of nervous energy, although what the nature of this energy is they are not able to state. Physicists and biologists say that there is a continuous process of evolution from the grossest material to the subtlest forms of mental energy. All these are forms of one energy whose sum total is always constant. This can neither be created nor destroyed. The Advaitin holds that the ultimate reality which is consciousness can neither be created nor destroyed. It is *anādi* and *ananta*. So it cannot be equated with either mind or body, for both these are perishable and are but appearances. As Eddington remarks, "All through the physical world runs that unknown content, which must surely be the stuff of our consciousness. . . . We have found a strange foot-print on the shores of the unknown. We have devised profound theories, one after another to account for its origin. At last we have succeeded in reconstructing the creature, that made the foot print. And lo! it is our own!"⁹

8. Refer "Mind and its Place in Nature"—Durant Drake (Mac Millan & Co., New York, 1925) and also a book of the same title by C. D. Broad.
9. "Space, Time and Gravitation" by Eddington, pp.200-201.

Can Unified Sciences Replace Logic?

ONTOLOGY AND UNIFIED SCIENCE

by

P. S. SASTRI

University of Saugar

"All philosophy", says Wittgenstein, "is a critique of language".¹ This philosophy is the same as a linguistic enquiry, a logic of science, the syntax of the language of science and so on.² It holds that there is no knowledge outside of the sciences. To know anything about anything we have to depend on some science or other. And sense-observation alone gives positive science. Yet the positivist thinker holds that sight as such can give us no purely empirical science. Every proposition is to be translated into the language of sense-observations. It is here that Carnap brings his semantical and syntactical speculations which yield an abundance of signs to designate individuals, properties and relations. By restricting the scope of philosophy to the interpretation and clarification of the results of science in the language of sense-data, their orders, correlations and structures, the positivist offers a new theory of language and a novel account of the labours of scientists. We are never told why one method of scientific observation is to be preferred as against any other. There is no justification offered for the scientific methods. Certain signs are introduced to 'clarify' the results of science, though science is said to be incapable of explaining the objective world. Carnap, for instance, tells us that the signs enable us to form atomic sentences which may be grouped into sets called 'state-descriptions'. Each such state-description "gives us a complete description of a possible state of the universe of individuals with respect to all properties and relations expressed by the predicates of the system. Thus the state-descriptions represent Leibniz's possible worlds or Wittgenstein's possible states of affairs".³ And "a sentence is logically true if it holds in all state-descriptions". This is similar to "Leibniz's conception

1. *Tractatus Logico-Philosophicus*, 4.0031.

2. Carnap: *Logical Syntax of Language*, 279, 281.

3. Carnap: *Meaning and Necessity*, Pp. 9-10.

that a necessary truth must hold in all possible worlds". With this much of self-contradiction, Carnap brings in the principle of necessity.

Mr. C. W. Morris observes that a sign functions in a three-fold relationship. It is related to the people using it, to the object it designates, and to other signs.⁴ These three are respectively the pragmatic, the semantic and the syntactic aspects or dimensions. Carnap originally confined his analysis of language to the last of these. But in his *Introduction to Semantics* (1940) he accepts the lead given by Morris. He now pleads not only for a 'formal' analysis of language, but also for an analysis of the signifying functions of language. He needs a theory of meaning; and the Semantics, he accepts, contains a 'theory of designation' as well as "a theory of truth and of logical deduction."

Descriptive semantics is 'an empirical study' and is a branch of the 'pragmatics'. It deals with signs in relation to the people and the purpose for which the people use those signs. Pure semantics is the theory of "the construction and analysis of semantical systems". It deals with the definitions and rules that are involved in meaning and therefore in truth or falsity. This pure semantics does not refer to any actual language, but to any expressions in any language, to the analytic consequences of the definitions and rules. Every language has rules of formation and transformation. The former explain how the signs may be combined to form sentences; and the latter explain how sentences may be combined, and how one can be derived from another. These are purely syntactical rules; and with the introduction of the semantic point of view, we need rules of designation and rules of truth. By a rule of designation is meant any statement which indicates the things, properties or relations designated by a given term. The conditions which enable us to classify statements as true and false are indicated by the rules of truth.

Thus far Carnap's new adventure deserts the old positivism to the extent that it recognises the place and value of meaning in the examination of the nature of a word. The introduction of this consideration brings the word and the object nearer. We have however to examine Carnap's illustration of the rules of truth with reference to the simplest 'atomic' sentences. An atomic sentence has "a predicate followed by an individual constant". It is

4. *Foundations of the theory of signs*, 1938.

"true if and only if the individual to which the individual constant refers possesses the property to which the predicate refers".⁵ For instance, the sentence 'A is blue' is true only if the individual designated by the name 'A' has the property designated by the predicate 'blue'. When two or more atomic sentences are united by connectives like 'and', 'or', 'if ... then', then we get 'molecular' sentences. A sentence like "p or q is true" is true, "if and only if at least one of the two components is true".⁶ Considered in this light, even the 'truth-tables' of Wittgenstein are semantical 'truth rules'.⁷

The truth of a statement is determined by its agreement with fact. When only one individual constant is taken to possess the property referred to by the predicate, Carnap is implicitly admitting a necessary and relevant relation between the object and its property, and also between a word and its meaning. In other words, the word is no longer a conventional symbol as in formal logic. Moreover, this account reveals the inter-connections existing amongst the word, its meaning, its referent and its truth. Again, it admits the value and significance of necessity. Thus the new advances point to the resuscitation of the good old idealist logic.

A new approach to the same conclusion is offered by a consideration of the 'syntactical system' or 'calculus' which plays a considerable part in this new school of logical analysis. The rules of formation and transformation determine the combinations of signs in the system. This 'system of signs' is arrived at by the method of giving a list of the signs which are employed. When these signs do not indicate the objects they have to designate, then we have the syntactical system or calculus. Thus we have the sign-combinations of calculus, but we do not know what they mean. We cannot even say whether they are true or false; and Carnap does not mind these difficulties. If these problems are not solved, it is of no avail to speak about meaning. A system of signs whose truth we do not know, is of no value to us. To obviate this objection Carnap tells us that a system of semantical rules of designation and truth is to be added to the sign-combinations of a calculus, if the signs are to carry a meaning. These rules reveal what a sign signifies and under what conditions a sign-combination is true or false.

5. See *Meaning and Necessity*, (1947), 1-3.

6. *Ibid.* 1-5.

7. *Introduction to Semantics*, 8.

Thus he arrives at a 'semantical system' which offers an 'interpretation' of the syntactical system or calculus. Arguing in this manner, Carnap proceeds to tell us that the logical principles are "predetermined by the semantical rules of designation and of truth which are employed in constructing any semantical system".⁸ These principles, however, can be arbitrarily chosen, in which case they become conventional. But we should not forget that a logical system cannot be a matter of choice.⁹ To construct a system of significant statements we need three sets of rules. First we need rules of designation whereby the terms employed stand for things, properties and relations. Next we need rules of formation that help the construction of sentences. Finally we need rules of truth. All these make the principles of logic necessary truths. This logical necessity is due to the fact that the semantical rules alone are enough for establishing the truth of the significant statements.¹⁰ The principles of formal logic are necessary truths because they are the analytic consequences of the semantical rules. A principle of formal logic is thus a logically true statement; and it needs no empirical verification. Its truth is a necessary consequence of the rules of designation and truth of the semantical system. This conclusion is at variance with the chosen and cherished presuppositions and premisses of empiricism.

There is however a formidable drawback in Carnap's argument. When signs are to be combined with others, the governing principle must be a relation that is relevant to their unity. Such a relation cannot be an axiom that is given from outside the signs. It must be sought in a principle which operates in them. We do not give meanings to signs merely by giving out the rules of designation. When an entity is designated by a sign, we do not give a meaning to the sign. It is the entity which has already the meaning in it; and the sign we use embodies that meaning. Proceeding from this standpoint, we can explain satisfactorily the relation of a word to its meaning and the relation of both to the object concerned. Yet Stuart Chase has a peculiar analysis to offer. According to him, we receive the sign from the physical world and it indicates a thing. We give a name to the thing. "But the name is not the thing. The thing is nameless and non-verbal".¹¹ Interpret-

8. Introduction to Semantics, P. 39.

9. See Carnap: *Foundations of Logic and Mathematics*, 12.

10. See *Meaning and Necessity*, 2.

11. *The Tyranny of Words* (1937), P. 25.

ing the sign as the sign of the object is taken to be the first level of abstraction.¹² When we give the object a name, we come to the second level of abstraction. As we begin designating the properties of the object, we connect the name with various statements or descriptions; and this is said to be the third level of abstraction. When we arrive at generalizations and inferences about the objects of a certain kind, we reach the fourth level of abstraction. In the final stage, "abstractions can break out in all directions", and each abstraction will be "increasingly remote from the object".¹³ These "abstract terms are personified to become burning, fighting realities".¹⁴ In every discussion we should find out the referent.¹⁵ And "a good semantic discipline gives the power to separate mental machinery from the tangible events, makes us conscious of abstracting, prevents us from peopling the universe with non-existent things". As such the golden maxims are: "Look to the context. Find the referent".¹⁶

This doctrine is in essence the rejection of thought and a denial of meaning. In short it says that we have to speak about the sense-experience of the object, not about the meaning of the object. To talk about meaning is said to be indulging in abstractions. But to talk of a meaningless sense-experience is the highest abstraction. And the semantics of this school is a very high-order abstraction. Instead of thinking about real things, this school thinks about the instruments of thinking. Consequently the positivist reality is the 'unspeakable' space-time event. The so called referent is in itself an abstraction arrived at by us; and this abstraction is said to correspond to some "sign from the outside world". Such a sign is illogically torn from its context. The positivist can take this privilege because the context to him is the unknowable and unspeakable. And in the absence of a knowable context, it is pretty difficult to formulate a system of signs. Every system necessarily implies the idea of the context; and each sign can be related to the system only under the law of the excluded middle which merges into non-contradiction.

Further, we speak of the unknowable and unspeakable reality by assigning to it a meaning. This meaning comes from the rules

12. See also Korzybaski: *Science and Sanity*.

13. Chase: *The Tyranny of Words*, Pp. 56 ff.

14. *Ibid.*, P. 13.

15. *Ibid.*, P. 68.

16. *Ibid.*, Pp. 247 ff.

of designation which apply to metaphysical entities. That is, we have to speak of that reality in a metaphysical way because Chase's 'search for the referent' agrees with Carnap's 'rules of designation'. Let us enquire a little further. The referent is in the data of physical observations; it is in the operations that give rise to the data. These operations may be the abstractions like the concepts and theories of the physical sciences. But those abstractions enable us to predict the occurrence of observational data. How is this achieved? The concept of the electron, for instance, refers to the observations like the pointer readings of the laboratory. When we speak of electrons, we formulate rules about those observations. The pointer-readings, flashes on the screen, lines on the photographic plates and the like are directly observed; and these observational data are referred to by the 'elementary' terms. The singular sentences which consist of such terms can be 'directly tested'. But the sentences having more abstract terms like the theorems of Physics can be indirectly tested by deriving singular sentences from them according to the syntactical rules of the science. Then their truth or falsity is to be obtained from the semantic rules. This would mean that we need not give any clear interpretation of the abstract terms or theorems of physics; and we need not even try to say that there are entities called electrons and the like. What is needed is that physics should have syntactical rules which will enable us to connect the abstract theorems with the singular sentences; and we have only to 'interpret' the singular elementary sentences.¹⁷ The same argument has been advanced by Victor F. Lenzen; and Leonard Bloomfield gives the various 'steps' that we come across in a 'typical act of science'.¹⁸

All these accounts ignore the fact that the observational data for any scientific theory are never 'given' like any object in perception. The data are manufactured through a technique, and this technique is grounded in an already existing theoretical knowledge. A technique is preferred by the scientist because it agrees with the known facts and because the facts compel us to adopt it in our search for a solution. The technique, in other words, cannot be divorced from the facts. These facts do not acquire an objective status because all of us perceive them alike. Yet Victor

17. See Carnap: *Logical Foundations of Logic and Mathematics*. Chapters 24 and 25.

18. See Lenzen: *Procedures of Empirical Science* (International Encyclopedia); and Bloomfield: *Linguistic Aspects of Science*.

F. Lenzen records: "The development of the concept of an object is completed by the hypothesis of the identity of the perceptible objects of a society of observers. Thus the concept of objective thing is social; science is tested by social procedure. The scientific criterion of objectivity ultimately rests upon the possibility of occurrence of predicted perceptions to a society of observers".¹⁹ This criterion of objectivity does not refer to the existence of the object, but to the knowledge of the object that we may have. And in so far as our knowledge is determined by the objective existents, our knowledge too is essentially objective. It may appear to be arising in and for an individual. But a knowledge that is grounded in an objective fact really arises from reality. Carnap's new logic is thus a return to the old solipsistic atomism which is contradicted by the very premisses accepted by him.

Returning to our earlier problem, we have to ask: what do we have in a physical theory? It is a theory that attempts at interpreting a fact. It involves the questions that refer to meaning and truth. The interpretation of a fact involves our previous experiences and our knowledge of the facts that are necessary in evaluating it. It may need our observations. But our observations always carry the knowledge which has arisen from our previous experiences and knowledge.

Yet, following the lead given by Morris and Carnap, Philipp Frank discovered that in every physical theory we have (i) the equations or the calculus, (ii) the laws of transformation of the calculus or the syntactical rules, and (iii) the statements defining the physical meaning of terms or the semantical rules.²⁰ The semantic rules of physics are said to "consist in the description of physical operations." "We can ascribe 'physical reality' to the objects of our new mechanics, provided we mean 'reality' in the operational and not metaphysical sense".²¹ In other words, we have to discuss only the operational meaning of the symbols used.²² Thus P. W. Bridgman too argues that by concept we mean only "a set of operations", for, "the proper definition of a concept is not in terms of its properties, but in terms of actual operation".²³ The concept 'length', for instance, does not refer to the properties and relations of the physical objects, but to the operation of measure-

19. See *Procedures*, 11, 3.

20. *Foundations of Physics* (1946), P.

21. *Ibid.*, P. 47.

22. *Ibid.*, See Introduction.

23. *The Logic of Modern Physics*, Pp. 5, 6.

ment with a foot-rule. The properties and relations are said to exist independent of such operations. It is in this way that nature is to be analysed into correlations; and "such a thesis is the most general, that can be made if nature is to be intelligible at all."²⁴ Our knowledge then is "relative to the operations selected."²⁵ Our physical knowledge refers to the operations of the physicists and never to the physical reality. In such a case the ground and the referent of these operations is practically nothing, and then we cannot understand what our operations mean. Yet Frank observes that the world is real only in an operational sense, though we cannot say that it is material.²⁶

But the meaning of our concept of length does not lie in the mere measurement with a foot-rule. The measurement is only a roundabout synonym for length; and the meaning of a word does not lie in its synonym. Since meaning always involves the question of truth, and since truth implies the nature of fact, meaning as such must be given in terms of the fact. The concept of length can then be understood only as a property or relation. If we leave this argument, we will get the widest generalisation; and Bridgman admits that we can have only a general idea. This new operational sense can offer only the abstract ideas for the concrete terms and things. And if it is said that nature becomes intelligible through these most general and therefore highly abstract ideas, we do not know what it means. An object or a term becomes intelligible only when it is most concrete. A given leaf cannot be understood by me when I have only the abstract idea of a class to which it is said to belong. I must know it as a concrete actuality and I must also know its relation to other leaves, both similar and dissimilar. Through mere similarity I arrive at an abstraction; and dissimilarity enables me to locate its context and to specify its nature.

The operationist theory tells us that our physical knowledge refers to the operations of the physicists, and not to physical reality. We can then ascribe reality to the operations and not to the world where, or with reference to which, these operations are made. We cannot even say that it is material. But the physicist proceeds to know something about physical reality. He does not start with the idea of knowing his own operations. He may think of comprehending the reactions to his operations. Even then these reactions

24. *Ibid.*, P. 37.

25. *Ibid.*, P. 25.

26. *Foundations of Physics*, 51.

must be emanating from a reality which is other than his operations. If there were no such reality, his operations cannot exist.

The operations of the physicist are directed towards measurements. He reduces every entity he observes into certain numbers. In this process he sacrifices the essence or the quality to quantity. At the same time he admits the qualitative differences between any two divergent entities which are quantitatively known. Wherefrom do these differences come? And does a number which an entity carries have any specific necessary relation to its quality? These questions have to be answered. If all connection between quantity and quality is rejected, then the operations of the physicists become meaningless. The unit of the measurement viz. number, cannot be divorced from the entity numbered. It is the divorce between these two that has led to the lop-sided doctrine of operationism which ends in formulating an abstract idea of a class.

When we disconnect number from the numbered, we get a series of concepts which do not have any locus standi. As a result our thought will have to be peopled with signs and symbols. C. W. Morris, for instance, fabricates the new science of semiotic which studies semiosis or the functioning of signs. He regards the use of signs as the essential feature of all thinking. The chief function of statements and ideas is the control and organisation of behaviour.²⁷ Signs refer to the goal-seeking behaviour;²⁸ they are employed to regulate the behaviour towards the attainment of the goal. Every sign, however, signifies, though it does not denote. A sign which is a mere pointer is one that can have no specific meaning. The relation between the word which is a sign and the object which it signifies, cannot be one of mere external association. An associationist theory refuses to recognise the evolution of the meanings of words; and it disregards the actual usage of living beings. Moreover, when a sign is said to regulate or control human behaviour, it can do this not as a mere sign or symbol. Words control and direct our activity because of their meanings, and because of their intimate connections with objects.

This question of meaning raises the problem of the universal. Does a word represent an abstract universal? Does it stand for an idea of an abstract class? A word may be used in this way. Whenever it is thus used, it fails to render a satisfactory account of the

27. See *Signs, Language and Behaviour* (1946).

28. *Ibid.*, P. 7.

objects. In our understanding of the objects, we need general concepts at the initial stage. Later on we modify them greatly and arrive at the idea of a real universal. Yet in the semantics of this school all general concepts are said to be meaningless. But in the absence of concepts we cannot understand the real events and their causes; and accordingly the new semantics must be said to fail in understanding events. Instead of admitting this failure, the positivist, who has to defend things as they are, rejects every problem as being metaphysical. As Prof. Barrows Dunham observes: "By the simple exhalation of breath, they have conjured out of existence every major problem which has vexed mankind throughout the entire history of the human race."²⁹ This conjuring trick is performed in two ways. First, they accuse their opponents of using meaningless abstractions; and next, they argue that every evil is an evil emanating from verbal confusion. Like the Freudian, they try to convict their opponents of playing foul. This has been the method followed by the Protagorean solipsists and sophists down the ages.

The modern positivist accordingly has no metaphysics, if we are to accept his avowal. His latest metaphysics, however, is the unity of science or the unified science; and its method is an analysis and censorship of words. Carnap observes that 'the unity of science' involves the 'reduction' of all the scientific statements to the 'observable thing-predicates'.³⁰ Each science gives rules for predicting observations. We arrive at 'unified science' when science is presented as a language that can be reduced to the terms of 'observable thing-predicates', to the terms of the data of observation. These data are the perception, sensation and sense-data. Hence, says Carnap, "the question of the unity of science is a problem of logic, not of ontology". This language has terms which must refer to and denote things. The data of the scientist's observations are necessarily based on certain events that really take place in reality. The analysis of his observations reveal not only his sensations and perceptions, but also the sensed and perceived entities. Without the latter he cannot have the former. Science therefore examines the nature of the existent, the nature of being. If the scientific problem is not an investigation of being or existence, what else can it be? The question of the unity of science is therefore bound to be an ontological problem. We cannot run away from things whether we speak of thought or of language.

29. *Man against Myth*, p. 208.

30. See *Logical Foundations of the Unity of Science*, Chapters 3 and 4.

A Note on Thomas Aquinas

by

K. SATCHIDANANDA MURTY
Andhra University, Waltair

St. Thomas Aquinas is one of the greatest theologians. In this paper his doctrine of the demonstrability of God's existence is examined.

According to Aquinas, whatever is not material cannot be directly perceived. Non-sensible reality can only be inferred from what we perceive. God being non-sensible cannot be known *per se*; He can be only known *per suos effectus* or through His effects, and *per ea quae sunt* or through the things He has made.¹ But since the effects of God—the sensible things—are not proportionate to Him, perfect knowledge of Him cannot be obtained from them.² The existence of an effect is sufficient to demonstrate the existence of its cause, so God's existence can be demonstrated; but at the same time, though we can demonstrate God's existence and can comprehend the meaning of the statement that God is, we cannot know what God is *quod est*.³ Aquinas furnishes five proofs of God's existence.⁴ The first three are Aristotelian: the argument from motion to the unmoved mover, the argument from the instances of causation to the first uncaused cause, and the argument from contingent beings to an absolutely necessary being. Some have held that Aquinas got the third proof from Avicenna through Maimonides, but as it is found in germ in the *Metaphysica*, he may have as well got it from Aristotle.⁵ The fourth proof is Platonic. "More" and 'less' are predicted of different things, according as they resemble in their different ways something which is the maximum, so that there is something which is truest, something best, something noblest, and consequently, something which is uttermost be-

1. *Summa Theologica*, I, 2. 2. *Summa Contra Gentiles*, I, 12.
2. *Summa Theologica*, I, q. 2, a. 2., ob. 3.
3. *Summa Contra Gentiles*, loc. cit.
4. *Summa Theologica*, I, q. 2, a. 3.
5. *Metaphysica*, 1071B, 18-24.

ing."⁶ This is the same way in which Anselm proved a supreme being who is *summum bonum*, *summum magnus* and *summum ens*. From the order and adaptation evident everywhere in the universe, the fifth argument concludes that a supremely intelligent being is directing all things.

Aquinas' proofs depend upon the principle that the character of an effect must be found in its cause in a more eminent degree. Proclus was the first to elaborate this theory of causality, which was incidental to the theory of a triadic development accepted by him. It is that the produced is similar to what produces it, while the produced differs from that which produces it as the derivative from the original. By its similarity to the cause, the effect is drawn towards it, seeks to imitate it on a lower scale, and tends to return back to it; while by reason of its difference from the cause it differentiates or produces. The Thomist position that creatures are similar to God in an imperfect way, that the characters found in them are found in God in a more eminent way, and that they are all originated by God and are orientated towards God, their Final End, betrays the influence of Proclus. The second point to be noted is that according to Aquinas, the principle of causation is based on the principle of sufficient reason, which is regarded by him to be a first principle, indispensable to all thought. As soon as the existence of a thing is admitted, there must be a sufficient reason why it is as it is and not otherwise. A thing that begins to exist, that which has come into existence from nothing, has not itself the sufficient reason for its passing from non-existence to existence. The sufficient reason for the existence of a thing must be found in some actually existent thing other than itself. In other words, the concept of a *new* thing involves the concept of another, which is actually existent, and which exercises a necessary and sufficient causality. The third point to be noted is that Aquinas starts from the position of Plato and Aristotle that reality is objective and independent of what we think, and that we directly apprehend things. In so far as a thing is, it is knowable and this constitutes its ontological truth. As things are objective, the relations between them are also objective. So the principle of causation is ontologically valid.

It is necessary to take note of the criticisms of these arguments. If the premises of Aquinas are accepted, the proofs escape

6. *Summa Theologica*, Eng. Trans., Vol. I., p. 28.

the criticism of Kant. Kant thinking that God proved by the cosmological argument is "the highest member in the series of the causes of changes in the world", which begins the series, commented that the causality of such a thing would be in time, and so it would belong to the world.⁷ Aquinas regarded an infinite series of causes perfectly conceivable, and he also said that the world's having no finite duration is conceivable, because the creation of the world in time is indemonstrable.⁸ What he argued was that a causal series temporally finite or infinite is inherently contradictory, unless it is regarded as dependent on an ultimate cause outside the series. A series of dependent things each referring itself to the one before it is unintelligible and contradictory, unless it is grounded in an independent self-sufficient being which is its own *raison d'être*. The cosmological argument, of which the first three proofs of Aquinas are variants, does not concern itself with succession in time, and the point of the argument remains unaffected by the problem of the beginning of time and a time when there were no events. The argument does not lead us to a first cause which is like the members of the series of causes, but one which is wholly unlike the rest. The sufficient reason for the world cannot be found in anything in the world, because it is possible and justifiable to ask about everything in the world why it is so and what its conditions are. So if there is a cause of the world, it must be transcendent to the world and not of it, it is foolish to ask why it is so, because it contains in itself its own *raison d'être*. The fundamental fact from which the cosmological argument starts is the common awareness that everything in this world is contingent, i.e. is something which has begun to be and will cease to be. Kant himself admitted that the "cosmological proof takes its stand on experience"⁹, and that "experience may perhaps lead us to the concept of absolute necessity".¹⁰ What we have to remember in connection with this argument is that (i) the relationship between the world and God is one of dependence, (ii) that this relationship of dependence is a unique one and lastly that (iii) only if the world has this sort of relationship with a transcendent thing can it be intelligible.¹¹ The third implication follows from the Thomist premises. If we accept the two postulates, namely that substances

7. *Critique of Pure Reason*, Kemp Smith's Trans., p. 416.

8. *Summa Theologica*, I., q. 46, a. 2.

9. *Critique of Pure Reason*, p. 509.

10. *Op. cit.*, p. 510.

11. C. D. Broad's discussion in *Journal of Theological Studies*, Vol. XL.

are the primary reality,¹² and that everything credited with existence¹³ must have a cause, then the cosmological argument seems to be inevitable. To call this sort of relationship causation is to some extent misleading, as it is an altogether unique kind of relationship.

A more fundamental objection against the argument is raised by Prof. Broad. What is meant by saying that God is a necessary being? The statement means that there must be something which has the characteristic of being the cause of the world. But we can never dogmatise in this way, because we can only say that a thing exists, but never that it necessarily exists. Aquinas himself has got something to say on this point. The existence of God cannot be known in the sense that it signifies the actuality of being, but only in the sense that it is only a propositional affirmation made by the mind in joining a predicate and a subject. In other words, we can just know that the statement that God exists is true.¹⁴ We now come to the second criticism of Broad. What is the nature of the relationship between God and the world? As Broad himself said, this relationship is not that of ordinary causation; nor can it be that of logical implication of the type Spinoza envisaged, for then God is subjected to the *necessity* of causing the existence of the world. To put it otherwise God would then be as much necessary to the world as the world would be to God. This is emphatically rejected by Aquinas. The relationship between God and the world is that of creation. Creation is a peculiar action of God, which presupposes nothing but is presupposed by all others. It is an activity which is not possessed by anything else. Creation works without any raw material or an instrumental cause.¹⁵ While all other things are only partially active, God is pure act. So the mode of efficient causality found in the case of ordinary things is transcended in God's case. Natural causes are impeded in their causality, as they are not pure form and as their form is limited; and so no natural cause can produce being as such, but only determinate being. On the other hand, God is not subject to these limitations, and so the whole of existence is produced by His action from nothing.¹⁶ Here the preposition 'from' should not be taken

12. *Commentary*, XII Metaphysics, Lect. 5.

13. *Summa Contra Gentiles*, I, 15.

14. *Summa Theologica*, 1. a. III. 4, and 2.

15. *Op. cit.*, 1a. XIV, *Contra Gentiles*, II, 21.

16. *Disputations*, III de Potentia, I.

in the sense that it denotes some material stuff; it only signifies precedence as when we say, noon comes from forenoon.¹⁷ Creation is not new change; for in change, there is something both before and after.¹⁸

To sum up, absolute existence (God) brings into existence this world by a unique act of His which is known as 'creation'. So here the world is not explained either as due to external necessity or due to an Idea which transcends existence. No doubt the created object is in time, but it does not imply that creation is a temporal act subject to the rules of time.¹⁹ With reference to the object created the contention may be accepted; but the act as such does not signify duration.²⁰ It cannot be proved that the world is eternal, nor can it be proved that the world began in time.²¹ Even if the world existed always, it could be co-eternal with God, nor could it do without him; for even an always-existing thing is not exempted from contingency; and an always-existing thing need not be eternal. To make it clearer, the world can be indefinite in duration; but as it is variable it cannot be truly eternal.²² It now remains for us to comment on Kant's criticism that "experience perhaps leads us to the concept of absolute necessity."²³ If we accept the Thomist premises that being is prior to concepts (existence to essence), and that the world's existence can be thought of apart from its essence, then it is clear that the world's existence depends not on a transcendent idea, nor even on the idea of being, but on being itself. The other contention of Kant that God is not a "determinate thing"²⁴ is not disputed by Thomism. God is pure form or pure actuality including in Himself the perfection of every actuality, and it is precisely on this account that He is able to produce the whole of subsisting being by His action.

Aquinas' proofs call for another remark. Contingency of things forces us to conclude that there is necessity, which means that the idea of contingency involves that of necessity. Since the idea of contingency is derived from things, and since this idea again involves another idea, the latter should also have an objective

17. *Summa Theologica*, 1a. XLV, 1 ad 3.

18. *Op. cit.*, 2, ad 2.

19. *Opusc.* XXIII.

20. *Disputations*, III de Potentia 14 ad 8.

21. *Summa Theologica*, 1a. XLVI, 1 ad 2.

22. *Disputations*, III, de Potentia, 13, 14.

23. *loc. cit.*

24. *Ibid.*

basis. Aquinas thinks that this method,—abstraction from sense material, deductions from the concepts so formed, and the application of those conclusions to facts—is common to all sciences. The idea of contingency arises from observation of things by means of the abstractive activity of thought. This is the proper way in which thought moves, and so long as there is thought, it will always try to rise above sense material by abstracting from it and would try to apply the results it has so achieved to sense material. He who advocates the abandonment of this method advocates the abandonment of thought.²⁵

An usual criticism of the cosmological argument is that though based on the principle of causality it seeks to prove that there is a thing to which the causal law does not apply, and thus it cuts off the ground from under its own feet. Kant was not correctly informed when he said that this argument is based on the "dialectical assumption" that "everything must have a cause."²⁶ The principle of causality does not state that everything must have a cause, but that everything contingent must have a cause. A self-dependent immutable thing has no cause; only things which change must have causes. Another misunderstanding is to think that the last argument of Aquinas, the teleological, is based on analogy. It is also based on the principle of sufficient reason. The order and purpose manifest everywhere in nature both in the organic and the inorganic spheres must have a sufficient cause, and this sufficient cause must be admitted to be intelligent. The teleological argument has been formulated in another way. Basing itself on the analogy found between human handiworks and nature, it is argued that the cause of the world must be intelligent. This is the way in which Hume frames the teleological argument, subjecting it to a ruthless criticism in his dialogues. Aquinas' fifth argument cannot be affected by that criticism.

25. Cf. Hegel, *Logic*. Wallace's Trans., p. 102-4.

26. *Op. cit.*, p. 511.

The Significance of Beauty

by

SRINIWAS DIXIT

Kolhapur

Here, on the table, is a flower. Let us agree, for argument's sake, to call it a beautiful flower. We call it beautiful, presumably, because, at the sight of the flower, we experience beauty.

The FIRST problem that naturally arises is: What is it exactly that we experience when we say we experience beauty? What is IT that we are aware of? Is it simply that the flower has so many petals, of such and such dimensions, of such and such tinges of colours, arranged in such and such a fashion? Clearly not. Because one may be aware of all these and be not aware of any beauty.

Beauty, then, is not the same thing as the physical qualities nor their arrangement. At the same time, the—physical qualities and their arrangement is not irrelevant to our awareness of beauty. If these were not the qualities, this colour and this tinge; and if this were not their—arrangement, conceivably, we may not experience beauty here. We do not experience beauty floating loose in the air. The experience of beauty is made possible by these colours and this arrangement of colours, but it is not identical with the experience of these colours, and this arrangement of colours.

We may then restate the FIRST problem as:—Is beauty something out there for us to behold, even as the physical qualities are out there (though it is not identical with the physical qualities)? Or, is it something within us, a kind of our feeling, a peculiar mode of our sensibility occasioned by the physical qualities of the flower? On the former view, to say the flower is beautiful means there is an objective character called beauty which somehow belongs to the flower and we are aware of it, in, roughly, the same manner as we are aware of the colour of the flower. On the latter view, to say the flower is beautiful means, that in the presence of the flower we experience a certain feeling within us which is no

part of the true nature of the flower. The question at issue is where does beauty reside; in the flower or within us? I do not propose to give an answer to this question—for the reason that I do not know it. But supposing the correct answer is beauty does not reside in the physical object, but is the name of our attitude towards it, that it is a feeling within us, there arises a **SECOND** problem.

That problem is: Is the relation between the physical qualities and our experience of beauty a necessary relation?

One feels like saying 'Yes'. When we see the splash of colours in some November sunset and have the experience of the Beautiful, there seems to be a certain appropriateness, a natural fitness, an inherent congruity, between what we see and what we feel. It is as if the sunset deserves, by right, this feeling and no other feeling. The feeling and the overtones of the feeling which the sunset arouses, do not seem something contingent. The feeling, one thinks, has a necessary relation to the object.

This however is one way of thinking. I have been saying 'it seems as if there is a necessary relation'. I do not want to commit myself. For the opposite view also demands attention.

It will be argued on the opposite side that the feeling which arises in us by perceiving, say, the sunset, is contingent. There is not an *a priori* necessity. At a certain stage, in the course of evolution, it happens that the sight of sunset arouses certain feelings in man. At some future time, it is conceivable, the same sight may arouse some other feeling, possibly, a feeling which, at present, is occasioned by the sight of filth and dirt. This supposition is not absurd as it will be absurd to suppose that at some future time 3×3 will be 8. In the latter case there is an *a priori* necessity, in the former, there is not. If beauty is the name of a feeling, we can well conceive, that in future it will be conditioned in other ways.

I have merely indicated the two sides of the **SECOND** problem. To state it once more, the problem is: Supposing beauty is experienced in our feeling, is the relation between our feeling and the physical objects, contingent or necessary?

Again I do not know the answer. I cannot give an *ipse dixit*—in this matter.

But supposing we accept the latter view, that the relation is necessary, that the myriad colours of the sunset have a necessary relation to our feeling of the sublime which we experience in its presence, I want to suggest a **THIRD** problem. I am not raising this problem for it is very difficult even to formulate it—I am merely suggesting it. If the relation between the sunset and the feeling it arouses in us is a necessary relation, does it throw any light on the relation of the individual to the cosmos? Does it, for example, mean that there is a fundamental attunement between man and nature? Does it mean that man and nature are tunes in a universal Harmony? If, say, a particular musical tune is, by an intrinsic necessity, connected with some feeling on our part, if that feeling and no other feeling is divined, by a sort of intuitive perception as suitable to it, is it not reason enough to accept an Idealistic View of Life (in some sense)? I strongly feel inclined to answer in the affirmative.

