BERTRAND RUSSELL

MYSTICISM AND
LOGIC

AND OTHER ESSAYS

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MYSTICISM AND LOGIC
AND OTHER ESSAYS

BY BERTRAND RUSSELL

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PREFACE

The following essays have been written and published at various times, and my thanks are due to the previous publishers for the permission to reprint them.

The essay on "Mysticism and Logic" appeared in the _Hibbert Journal_ for July, 1914. "The Place of Science in a Liberal Education" appeared in two numbers of _The New Statesman_, May 24 and 31, 1913. "The Free Man's Worship" and "The Study of Mathematics" were included in a former collection (now out of print), _Philosophical Essays_, also published by Messrs. Longmans, Green & Co. Both were written in 1902; the first appeared originally in the _Independent Review_ for 1903, the second in the _New Quarterly_, November, 1907. In theoretical
Ethics, the position advocated in "The Free Man's Worship" is not quite identical with that which I hold now: I feel less convinced than I did then of the objectivity of good and evil. But the general attitude towards life which is suggested in that essay still seems to me, in the main, the one which must be adopted in times of stress and difficulty by those who have no dogmatic religious beliefs, if inward defeat is to be avoided.

The essay on "Mathematics and the Metaphysicians" was written in 1901, and appeared in an American magazine, _The International Monthly_, under the title "Recent Work in the Philosophy of Mathematics." Some points in this essay require modification in view of later work. These are indicated in footnotes. Its tone is partly explained by the fact that the editor begged me to make the article "as romantic as possible."

All the above essays are entirely popular, but those that follow are somewhat more technical. "On Scientific Method in Philosophy" was the Herbert Spencer lecture at Oxford in 1914, and was published by the Clarendon Press, which has kindly allowed me to include it in this collection. "The Ultimate Constituents of Matter" was an address to the Manchester Philosophical Society, early in 1915, and was published in the _Monist_ in July of that year. The essay on "The Relation of Sense-data to Physics" was written in January, 1914, and first appeared in No. 4 of that year's volume of _Scientia_.,

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VI. On Scientific Method in Philosophy
Metaphysics, or the attempt to conceive the world as a whole by means of thought, has been developed, from the first, by the union and conflict of two very different human impulses, the one urging men towards mysticism, the other urging them towards science. Some men have achieved greatness through one of these impulses alone, others through the other alone: in Hume, for example, the scientific impulse reigns quite unchecked, while in Blake a strong hostility to science co-exists with profound mystic insight. But the greatest men who have been philosophers have felt the need both of science and
of mysticism: the attempt to harmonise the two was what made their life, and what always must, for all its arduous uncertainty, make philosophy, to some minds, a greater thing than either science or religion.

Before attempting an explicit characterisation of the scientific and the mystical impulses, I will illustrate them by examples from two philosophers whose greatness lies in the very intimate blending which they achieved. The two philosophers I mean are Heraclitus and Plato.

Heraclitus, as every one knows, was a believer in universal flux: time builds and destroys all things. From the few fragments that remain, it is not easy to discover how he arrived at his opinions, but there are some sayings that strongly suggest scientific observation as the source.

"The things that can be seen, heard, and learned," he says, "are what I prize the most." This is the language of the empiricist, to whom observation is the sole guarantee of truth. "The sun is new every day," is another fragment; and this opinion, in spite of its paradoxical character, is obviously inspired by scientific reflection, and no doubt seemed to him to obviate the difficulty of understanding how the sun can work its way underground from west to east during the night. Actual observation must also have suggested to him his central doctrine, that Fire is the one permanent substance, of which all visible things are passing phases. In combustion we see
things change utterly, while their flame and heat rise up into the air and vanish.

"This world, which is the same for all," he says, "no one of gods or men has made; but it was ever, is now, and ever shall be, an ever-living Fire, with measures kindling, and measures going out."

"The transformations of Fire are, first of all, sea; and half of the sea is earth, half whirlwind."

This theory, though no longer one which science can accept, is nevertheless scientific in spirit. Science, too, might have inspired the famous saying to which Plato alludes: "You cannot step twice into the same rivers; for fresh waters are ever flowing in upon you." But we find also another statement among the extant fragments: "We step and do not step into the same rivers; we are and are not."

The comparison of this statement, which is mystical, with the one quoted by Plato, which is scientific, shows how intimately the two tendencies are blended in the system of Heraclitus. Mysticism is, in essence, little more than a certain intensity and depth of feeling in regard to what is believed about the universe; and this kind of feeling leads Heraclitus, on the basis of his science, to strangely poignant sayings concerning life and the world, such as:

"Time is a child playing draughts, the kingly power is a child's."
It is poetic imagination, not science, which presents Time as despotic lord of the world, with all the irresponsible frivolity of a child. It is mysticism, too, which leads Heraclitus to assert the identity of opposites: "Good and ill are one," he says; and again: "To God all things are fair and good and right, but men hold some things wrong and some right."

Much of mysticism underlies the ethics of Heraclitus. It is true that a scientific determinism alone might have inspired the statement: "Man's character is his fate"; but only a mystic would have said:

"Every beast is driven to the pasture with blows"; and again:

"It is hard to fight with one's heart's desire. Whatever it wishes to get, it purchases at the cost of soul"; and again:

"Wisdom is one thing. It is to know the thought by which all things are steered through all things."[1]

Examples might be multiplied, but those that have been given are enough to show the character of the man: the facts of science, as they appeared to him, fed the flame in his soul, and in its light he saw into the depths of the world by the reflection of his own dancing swiftly penetrating fire. In such a nature we see the true union of the mystic and the man of science--the highest eminence, as I think, that it is possible to achieve in the world of thought.

In Plato, the same twofold impulse exists, though the
mystic impulse
is distinctly the stronger of the two, and secures
ultimate victory
whenever the conflict is sharp. His description of the
cave is the
classical statement of belief in a knowledge and reality
truer and
more real than that of the senses:

"Imagine[2] a number of men living in an underground
cavernous
chamber, with an entrance open to the light, extending
along the
entire length of the cavern, in which they have been
confined, from
their childhood, with their legs and necks so shackled
that they
are obliged to sit still and look straight forwards,
because their
chains render it impossible for them to turn their
heads round: and
imagine a bright fire burning some way off, above and
behind them,
and an elevated roadway passing between the fire and
the prisoners,
with a low wall built along it, like the screens which
conjurors
put up in front of their audience, and above which
they exhibit
their wonders.

I have it, he replied.

Also figure to yourself a number of persons walking
behind this
wall, and carrying with them statues of men, and
images of other
animals, wrought in wood and stone and all kinds of
materials,
Together with various other articles, which overtop
the wall; and,
as you might expect, let some of the passers-by be
talking, and
others silent.
You are describing a strange scene, and strange prisoners.

They resemble us, I replied.

Now consider what would happen if the course of nature brought them a release from their fetters, and a remedy for their foolishness, in the following manner. Let us suppose that one of them has been released, and compelled suddenly to stand up, and turn his neck round and walk with open eyes towards the light; and let us suppose that he goes through all these actions with pain, and that the dazzling splendour renders him incapable of discerning those objects of which he used formerly to see the shadows. What answer should you expect him to make, if some one were to tell him that in those days he was watching foolish phantoms, but that now he is somewhat nearer to reality, and is turned towards things more real, and sees more correctly; above all, if he were to point out to him the several objects that are passing by, and question him, and compel him to answer what they are? Should you not expect him to be puzzled, and to regard his old visions as truer than the objects now forced upon his notice?

Yes, much truer....

Hence, I suppose, habit will be necessary to enable him to perceive objects in that upper world. At first he will be most successful in distinguishing shadows; then he will discern the reflections of men
and other things in water, and afterwards the realities; and after this he will raise his eyes to encounter the light of the moon and stars, finding it less difficult to study the heavenly bodies and the heaven itself by night, than the sun and the sun's light by day.

Doubtless.

Last of all, I imagine, he will be able to observe and contemplate the nature of the sun, not as it _appears_ in water or on alien ground, but as it is in itself in its own territory.

Of course.

His next step will be to draw the conclusion, that the sun is the author of the seasons and the years, and the guardian of all things in the visible world, and in a manner the cause of all those things which he and his companions used to see.

Obviously, this will be his next step....

Now this imaginary case, my dear Glancon, you must apply in all its parts to our former statements, by comparing the region which the eye reveals to the prison house, and the light of the fire therein to the power of the sun: and if, by the upward ascent and the contemplation of the upper world, you understand the mounting of the soul into the intellectual region, you will hit the tendency of my own surmises, since you desire to be told what they are; though, indeed, God only knows whether they are correct. But,
be that as it may, the view which I take of the subject is to the following effect. In the world of knowledge, the essential Form of Good is the limit of our enquiries, and can barely be perceived; but, when perceived, we cannot help concluding that it is in every case the source of all that is bright and beautiful,—in the visible world giving birth to light and its master, and in the intellectual world dispensing, immediately and with full authority, truth and reason;—and that whosoever would act wisely, either in private or in public, must set this Form of Good before his eyes."

But in this passage, as throughout most of Plato's teaching, there is an identification of the good with the truly real, which became embodied in the philosophical tradition, and is still largely operative in our own day. In thus allowing a legislative function to the good, Plato produced a divorce between philosophy and science, from which, in my opinion, both have suffered ever since and are still suffering. The man of science, whatever his hopes may be, must lay them aside while he studies nature; and the philosopher, if he is to achieve truth, must do the same. Ethical considerations can only legitimately appear when the truth has been ascertained: they can and should appear as determining our feeling towards the truth, and our manner of ordering our lives in view of the truth, but not as themselves dictating what the truth is to be.
There are passages in Plato—among those which illustrate the scientific side of his mind—where he seems clearly aware of this. The most noteworthy is the one in which Socrates, as a young man, is explaining the theory of ideas to Parmenides.

After Socrates has explained that there is an idea of the good, but not of such things as hair and mud and dirt, Parmenides advises him "not to despise even the meanest things," and this advice shows the genuine scientific temper. It is with this impartial temper that the mystic's apparent insight into a higher reality and a hidden good has to be combined if philosophy is to realise its greatest possibilities. And it is failure in this respect that has made so much of idealistic philosophy thin, lifeless, and insubstantial. It is only in marriage with the world that our ideals can bear fruit: divorced from it, they remain barren. But marriage with the world is not to be achieved by an ideal which shrinks from fact, or demands in advance that the world shall conform to its desires.

Parmenides himself is the source of a peculiarly interesting strain of mysticism which pervades Plato's thought—the mysticism which may be called "logical" because it is embodied in theories on logic. This form of mysticism, which appears, so far as the West is concerned, to have originated with Parmenides, dominates the reasonings of all the great mystical metaphysicians from his day to that of Hegel and his
modern disciples. Reality, he says, is uncreated, indestructible, unchanging, indivisible; it is "immovable in the bonds of mighty chains, without beginning and without end; since coming into being and passing away have been driven afar, and true belief has cast them away." The fundamental principle of his inquiry is stated in a sentence which would not be out of place in Hegel: "Thou canst not know what is not—nor utter it; for it is the same thing that can be thought and that can be." And again: "It needs must be that what can be thought and spoken of is; for it is possible for it to be, and it is not possible for what is nothing to be." The impossibility of change follows from this principle; for what is past can be spoken of, and therefore, by the principle, still is.

Mystical philosophy, in all ages and in all parts of the world, is characterised by certain beliefs which are illustrated by the doctrines we have been considering.

There is, first, the belief in insight as against discursive analytic knowledge: the belief in a way of wisdom, sudden, penetrating, coercive, which is contrasted with the slow and fallible study of outward appearance by a science relying wholly upon the senses. All who are capable of absorption in an inward passion must have experienced at times the strange feeling of unreality in common objects, the loss of contact with daily things, in which the solidity
of the outer world is lost, and the soul seems, in utter loneliness,
to bring forth, out of its own depths, the mad dance of fantastic
phantoms which have hitherto appeared as independently real and
living. This is the negative side of the mystic's initiation: the
doubt concerning common knowledge, preparing the way for the reception
of what seems a higher wisdom. Many men to whom this negative
experience is familiar do not pass beyond it, but for the mystic it is
merely the gateway to an ampler world.

The mystic insight begins with the sense of a mystery unveiled, of a
hidden wisdom now suddenly become certain beyond the possibility of a
doubt. The sense of certainty and revelation comes earlier than any
definite belief. The definite beliefs at which mystics arrive are the
result of reflection upon the inarticulate experience gained in the
moment of insight. Often, beliefs which have no real connection with
this moment become subsequently attracted into the central nucleus;
thus in addition to the convictions which all mystics share, we find,
in many of them, other convictions of a more local and temporary
character, which no doubt become amalgamated with what was essentially
mystical in virtue of their subjective certainty. We may ignore such
inessential accretions, and confine ourselves to the beliefs which all
mystics share.

The first and most direct outcome of the moment of illumination is
belief in the possibility of a way of knowledge which
may be called revelation or insight or intuition, as contrasted with sense, reason, and analysis, which are regarded as blind guides leading to the morass of illusion. Closely connected with this belief is the conception of a Reality behind the world of appearance and utterly different from it. This Reality is regarded with an admiration often amounting to worship; it is felt to be always and everywhere close at hand, thinly veiled by the shows of sense, ready, for the receptive mind, to shine in its glory even through the apparent folly and wickedness of Man. The poet, the artist, and the lover are seekers after that glory: the haunting beauty that they pursue is the faint reflection of its sun. But the mystic lives in the full light of the vision: what others dimly seek he knows, with a knowledge beside which all other knowledge is ignorance.

The second characteristic of mysticism is its belief in unity, and its refusal to admit opposition or division anywhere. We found Heraclitus saying "good and ill are one"; and again he says, "the way up and the way down is one and the same." The same attitude appears in the simultaneous assertion of contradictory propositions, such as: "We step and do not step into the same rivers; we are and are not." The assertion of Parmenides, that reality is one and indivisible, comes from the same impulse towards unity. In Plato, this impulse is less prominent, being held in check by his theory of ideas; but it
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