Prologue on Science and Philosophy

Prologue on Science and Philosophy

With remarks on the evasiveness of Reality

Yet all experience is an arch wherethro'
Gleams that untravell'd world, whose margin fades
For ever and for ever when I move.

TENNYSON, *Ulysses*.

WE live in a Universe of which we know very little: we eke out our knowledge by precarious reasoning. We are apt to confront a special instance with a generalization; as if we should try to establish the fact—otherwise doubtless certain enough—that, say, Œdipus and Moses and Elijah must have died, by the thesis, All men are mortal, and they were men. But admitting the minor premiss, how do we know that their end was not exceptional? The generalization sums up our experience, but *proves* nothing,—*i.e.* adds nothing to our certainty.

An induction is helpful as a summary, but has no power over a specific instance to the contrary, if such instance were forthcoming. Proof might be based on the known liability of organic matter to degeneration: but

apply this to an amœba and it fails; a lowly organism may be killed, but it need not die. So we might argue thus:—cells may persist, a body is composed of cells, therefore it may persist. Experience disproves the conclusion, it is a *non sequitur*. Reasoning of a formal kind is based on generalizations which may or may not be true; whereas experience can be direct and specific as well as general.

Some things there are however which evade experience, and these are apt to be excluded altogether by the inductive process on which all generalizations are founded. It should be more widely recognised that inductions may be hasty, or may be extended unduly: a single instance, well established, will upset a premature generalization. The force of prejudice, however, may be so strong as to overpower the evidence of our senses, or render us incompetent to recognise their clear indications. As if an unwary naturalist, having unconsciously assumed as a major premiss that all grass is green, might thereafter blind himself to the direct experience that the blade of grass shown him is red. Similarly, many people would insist that communication with the dead is

impossible. "The dead know not anything. In that day their thoughts perish." A major premiss is usually a generalization from necessarily imperfect knowledge, an assumption which may be upset by a single authentic specific instance: it has or ought to have no force, save a cautionary one, against direct experience.

The aim of science is not mere formularies or convenient modes of expression, it is or should be truth and reality; we seek, on the evidence of our senses, to form some conception of what Reality is like. But some kinds of reality are evasive; they either never make an impression on our senses, or very seldom. What strongly appeals to us is matter—material objects in various forms; anything else seems, or really is, a matter of inference. The inference may strike us as of doubtful validity unless we can adduce some direct sensory experience in its favour; and this evidence it may be difficult to receive or attach credence to, in the face of a uniformly established prejudice which we may dignify as a law of nature with no exceptions. So it happens that even direct experience of an exceptional instance, combined with evidence or testi-

mony concerning many such instances, is sometimes powerless to effect conviction. Indeed persons afflicted with what psycho-analysts of the more reasonable variety might call "a materialistic complex" * appear constitutionally unable to open their minds to evidence of any non-material or anti-materialistic kind. They straightway deny its authenticity. It makes no impression; they are incompetent to receive it, however cogent; though otherwise and in other directions they are mentally alert and highly qualified intellectually. They exhibit a curious kind of mental aberration or unconscious warp, and yet they are quite unconscious that their perceptive faculty is atrophied in one direction. They have been known to stigmatise as demented those who call their attention to exceptional specific occurrences. But there is no dementia on either side, there is only a kind of obsession; and the obsession is a very natural one, born of a wide knowledge, a broad basis of experience, throughout which such exceptional incidents have not occurred, or at least have not forced themselves upon attention.

* W. R. Bousfield, K.C., F.R.S., on *A Neglected Complex* (Kegan Paul).

We can admit that normal experience displays mind only in association with matter. It is therefore pardonable though illogical to assume that without matter mind cannot exist; in other words, that a physiological organism is an absolute necessity, not only for the display, but for the very existence, of memory, thought, and affection, notwithstanding that these attributes make no pretence of being themselves physiological things. Memory is not really a function of matter, though it does seem to have a physical basis or concomitant. Love need not necessarily be associated with protoplasm. Thought is not proven to be a secretion of the brain. We have no right to make that over-hasty generalization: we ought to keep our minds open and be guided by carefully scrutinised facts. This cannot be done without patience and study; and study needs an open mind. Violent assertions, whether positive or negative, are useless, or are only useful for focussing attention: we must be guided by observed facts, not by preconceptions or past experience alone, else would new knowledge be impossible.

Similarly if we make the assertion that all

bodies—bodies of every kind—must be composed of matter, we are speaking plausibly, but may be generalizing too hastily and leaving out of consideration the possibility that some "bodies" may be composed, either wholly or partially, of Ether. Such an idea would not have occurred to us unless the idea of Ether had been brought to our minds in a multitude of other ways, and unless we had begun to realise something of its reality and its numerous or perhaps innumerable functions. Hitherto it has been almost ignored in Philosophy. That is a defect to be remedied: it is no fault of philosophers. Physics must come to the rescue. Philosophy seeks to unify and comprehend all knowledge, and cannot afford to ignore anything—certainly not so omnipresent and intense a reality as the Ether of Space. For to know anything thoroughly, nothing accessible must be excluded. It is only because the Ether has seemed inaccessible that it has been neglected. Neglect was inevitable until more was known about it, and hitherto Physicists have not sought to expound what in this direction they know.

Many of us are not even physicists, but

just learners; such as both young and old ought to be. Young people must take things piecemeal, and be content at first to learn something about them. They cannot learn all about them, and they cannot philosophise; they do not know enough. Probably we none of us know enough to philosophise effectively. Even philosophers have to do their best with less than complete knowledge; and accordingly each makes a system, with which others do not agree. Each however probably catches a glimpse of some aspects of truth, and that is why the history of Philosophy is instructive.

We can all recognise the very certain truth that to know all about any one thing we have to know about a great number of other things. Everything is interlocked; we cannot take a comprehensive survey before we look at things individually, and we cannot consider individual things fully and completely without a comprehensive survey. Thus there is a difficulty, but it is unavoidable.

In science, as a rule, we concentrate on one aspect, and try to get that clear. Hitherto science has mainly concentrated on the purely material aspect of the Uni-

verse; while the philosopher is left to group all aspects together if he can. But there are gaps, which he must depend on Science to fill up. And sometimes he has to wait, not always knowing what he is waiting for; not always knowing that there is a great deal to wait for.

Meanwhile life is short, and if we do nothing but wait, no progress is made. Progress can be made, but always tentatively, and with a sense of incompleteness. Everything excluded is a weakness. To exclude the Ether is a terrible weakness: an effort to understand the connexion between mind and matter is hopeless if we exclude the *tertium quid*, the essential intermediary. To exclude life and mind is another weakness: it is the basis of a materialistic system. To exclude matter is another but less common error,—the basis of a narrow idealism. To over-emphasise conduct as a test for truth is the basis of Pragmatism. To under-estimate conduct and practical affairs is Mysticism. The positive side of all these systems may be strong; the negative side is feeble and misleading.

It is rather like the old controversy between faith and works. All sides must be