

FIRST PHILOSOPHY

WHEN Sir Arthur Eddington writes that "Religion first became possible for a reasonable scientific man about the year 1927,"¹ and when apologists expound their novel vindications of the classical cosmology in the light of quantum mechanics, it is clear to a metaphysician that both sides have missed the point. For the metaphysical approach to reality, with its immediate determinations in psychology and cosmology, either transcends the contingent data of individual research, or it does not exist. Yet apologists and even representative metaphysicians have not always appreciated this essential preliminary to philosophy and apologetics.

Hence it is all the more a remarkable fact when a non-Catholic writer appreciates it, independently, it would seem, of any manifest contact with a philosophical tradition.² And in spite of the charges of buffoonery and leg-pulling sure to be brought against him from academic strongholds, the fact that he penetrates again and again to radical metaphysical realities, scattering pseudo-scientific question-begging postulates right and left in his convinced insistence, evidently commands our conscientious attention. We do not praise him precisely for his individual work, but rather because he is representative of an approach greatly, but often vainly, sought. The added fact that he is a professional mathematician, nurtured in the atmosphere of modern physics and thoroughly familiar with it, inevitably inclines many of us all the more to give him a hearing—not because he is a physicist, but because he is a physicist who has gate-crashed the conventional postulates of the physicist philosophers of the last three decades—intelligently, that is to say, and not by mere reaction. For such rational transcending of these

¹ *The Nature of the Physical World*, p. 350.

² *The Philosophy of Religion versus the Philosophy of Science*, by Albert Eagle, Lecturer in Mathematics in the Victoria University of Manchester (obtainable from the author, The University, Manchester, 15, or through Simpkin Marshall, London; 5/-).

BLACKFRIARS

conventions is needed, desperately. We have seen enough individual reaction and intellectual "mucking out"—and that not only among evangelical missionaries. It is easy for an academic hothouse mind to plough its own furrow across everyone else's, through impartial recognition of metaphysical fundamentals. Any fool can do it, if he has the luck to stumble across the metaphysical tradition. But for a mind breathing the atmosphere of modern science, in that physicists' underworld which has never looked beyond its heritage of nineteenth century materialist monism, to break through to the immutable realities behind the ephemeral flux of theory, and to turn round in an attempt at unglossed communication of its realizations to that world of physics, has considerable fascination and importance.

A deep impression has been forced on many of us in recent years, by the revolutionary work of S. Alexander, C. Lloyd Morgan, and A. N. Whitehead, names characterizing a small group of physicist philosophers moving far in the direction of return to a sane—the perennial—cosmology, in its simplest and basic theses. Nevertheless, praise of that school is inevitably qualified by its admixture of fundamental error in theodicy. For the doctrine of emergent Deity is infantile. Bergson's *Evolution Créatrice* is infinitely more impressive. And the author of *Philosophy of Religion versus the Philosophy of Science* has, in spite of his frequently naïve exposition in contrast with the beautiful literary form and scholarship of that triumvirate, penetrated much further than they in his deep grasp of metaphysical ultimates in their widest and most far-reaching determinations—with one exception, to be noted below. For, however much his theses need refinement—and they do need refinement, *dematerialization*—they are, when thus corrected, the classical theses of Aristotle and St. Thomas. Essence and existence, potency and act, matter and form, efficient causality, sufficient reason, and finality, are all there, without any stretch of the reader's imagination. The approach to the notion of final causality is especially well indicated. And the general approach is, indeed, the only perfectly valid one—by the two-fold process, of a primordial intuition of their transcendental

necessity, and of a *reductio ad absurdum*: *Ens esset non ens*.

And the main theses are “got across” with a happy dexterity (although the humorous note will possibly distract some greybeards). Thus, the essential notion of a true science is outlined in contradistinction to the mere induction of positive “laws” descriptive of the way things behave. *Scientia est cognitio certa et evidens per causas*. And if the idea of formal explanation and sufficient reason is excluded from the final purpose of physical research it is no longer a true science. Yet Sir Arthur Eddington has suggested a fertile method of research, through complete elimination of seeking any “causal scheme” whatever beneath atomic quantitative phenomena. And Einstein’s entire philosophy for mathematical physics, in so far as he has manifested one, has, up to the present, laid down no rational criteria for research, beyond a similar positivist programme.

Expressed more exactly the error beneath this dominant trend of the mathematical physicists, during the last three decades, has been the semi-Galilean notion of the autonomy of logical coherence, independently of the categories in which that coherence is found, and often, incredible as it may seem, independently of a shred of real evidence for the actual existence of that logically coherent possibility—as if the discovery of a possible cosmic structure were sufficient witness to its contingent actuality. Thus, mathematic coherence subsists purely in the category of quantity, and of itself can tell us nothing of the constant realities beneath the flux of spatio-temporal configurations, however coherent the pattern of those configurations may be. (The application to Prof. Alexander’s *Space, Time, and Deity*, is obvious.) For being *par excellence* subsists solely in the category of substance; and accidental modifications of substance, of which quantity is one kind, are only intelligible and strictly explicable in terms of the subsistent substantial being underlying them. Ultimately the cause lies in the *analogy of being*, in which subsistent substances emerge as the sole beings properly so called. For they constitute the *summum analogatum* (in the order of secondary, i.e. created, being). And however coherent the quantitative pattern of accidental dispositions,

BLACKFRIARS

these of themselves can neither constitute the essence of the "thing-itself" nor be their own rational explanation. Whitehead's definition of an essence, as the "prehension into unity of a pattern of aspects," is, therefore, misleading (although critical perusal of his entire works shows his relative orthodoxy, for Whitehead is sufficiently original to demand independent examination in his own highly personal context alone, to give him fair play). *Omnis mutatio supponit subiectum mutabile* is no merely naïve postulate of common sense. It is the formulation of an objective consequence of penetrating metaphysical analysis. And it is only a postulate of common sense in a secondary way, because the mind is made for being.

The essential error of the physicist philosophers has, in short, been the implied postulate of all their theories, namely, that when a coherent system of formulae has been arrived at, it is safe to apply that quantitative synthesis to the chaotic flux of material phenomena, and to say that that coherence is their essential explanation, beyond which it is impossible to penetrate. Hence the boundless subjectivism of the innumerable readers of popular redactions of these theories. For to them any coherently sensuous "pattern of aspects," which happens to fit the "facts" more closely than any precedent pattern, becomes the ultimate possible solution to the riddle of the universe. Hence, also, the absorption of catch-words like "space-time continuum," with the pathetic sense of an empty finality beyond which further questioning is declared meaningless. For "the encyclopædic knowledge of reality furnished by the particular sciences remains imperfect. The mind does not find full and abiding satisfaction in their observations and practical solutions. It seeks the link which connects and unifies the scattered results of the particular sciences . . . Philosophy . . . deals with their respective objects in an ultimate fashion and arrives at notions so simple as to defy analysis and so general as to be unlimited in application. . . . Biology reduces the lower forms of life to the activity of primordial unities and properties. But it is timid in the presence of that force which directs the evolution of the

FIRST PHILOSOPHY

organism . . . and, at the same time, eludes all mathematical representation and measure; to establish its nature and properties, origin and end, is the rôle of philosophy."³

All this the author of *Philosophy of Religion versus the Philosophy of Science* recognizes and forcefully expresses. Nevertheless there are some notions gravely needing modification. No doubt a careful following of the note of advice appended below would inevitably render the required corrections almost automatic. For it seems clear that they are all due to the one fundamental need of *dematerialization*. Although there is deep penetration of metaphysical principles, and consequently of the primordial intuition of being (for those ultimates are appreciated solely on its contemplation), and "*c'est cette intuition qui fait le métaphysicien*,"⁴ nevertheless the vision is still confused by *quantitative images*. Were a purgation from these inappropriate phantasmal vehicles undertaken, notions of spiritual "matter," a spherical "inner ego," and "patterns on the surface of the Being of God," would fade away. The same applies to several less important inaccuracies.

But perhaps the criticism can best be stated by reference to the one important point in which this writer is far inferior to the Alexander-Morgan-Whitehead triumvirate. These three have a far more accurate concept of *form* (*forma*, in the classical Thomist sense), and it is proportionately dematerialized. Hence a study of Lloyd Morgan's *Emergent Evolution*, or Whitehead's *Science and the Modern World* (the most simple and popular yet representative work of this school), would be a useful corrective. For here will be seen, too, the really significant tendency of these writers, the tendency to see all material beings as constituted out of a dual complex of contributory contraries—a recipient, ultimately unintelligible, indefinable "out-of-which," in which emerges and is generated the second, received, intelligible, definable "what." The former is chaotic, having a possibility in itself to receive any of the latter. But these latter

³ R. G. Bandas, *Contemporary Philosophy and Thomistic Principles*, pp. 84-86.

⁴ J. Maritain, *Sept Leçons sur L'Être*, p. 52.

BLACKFRIARS

are limited in number, and can only be generated in succession—if there be succession—in discontinuous “jumps” (*cf.* the quantum theory). This generation is producible in the various dispositions of the recipient—that is, its orderly reduction from unreal, unknowable chaos to order, pattern, and organic unity. The sign of such a reduction to order, and the induction of a new reality (“essence expressed,” for Whitehead), is always the emergence of new properties, specifically distinct from precedent ones. “New qualities characterize the new integral entity.” And the generated entity is such that “one may, so to speak, point the mental finger to any given item of stuff and say it is just here in the entity or there. But the substantial unity of plan is *everywhere* in the sense of pervading the whole entity throughout its entirety” (Lloyd Morgan). The implied parallels will be clear to those familiar with the Thomist cosmology.

Nevertheless this school is unsatisfactory in many ways, and its theodicy, with its notion of an emergent Deity, is, as we have remarked, open to riddling criticism. Notwithstanding his frequent naïvety, the author is never derailed in this way, although he may sway from side to side perilously sometimes; he is always going in the right direction. And where such work is found, one can suspect the presence of that quasi-infallibility of metaphysical penetration springing from the “primordial intuition of being.” *C'est cette intuition qui fait le métaphysicien.*

One suggestion. That the author should study Books I to III of the *Summa Contra Gentiles* of St. Thomas Aquinas. It will be an ecstatic revelation to him. For there he will find all his theses perfectly expressed *and dematerialized*. A corrected edition of his book in the light of that study would give it almost unlimited improvement.

NORBERT DREWITT, O.P.