

Process and Reality

CORRECTED EDITION



Alfred North Whitehead

Edited by David Ray Griffin
and Donald W. Sherburne

PROCESS AND REALITY
AN ESSAY IN COSMOLOGY

GIFFORD LECTURES DELIVERED IN THE UNIVERSITY
OF EDINBURGH DURING THE SESSION 1927-28

BY

Take note of what years Whitehead gave
Gifford Lectures (which
provides the content for this book)

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Hi all.

For class and quiz preparation, please read the few paragraphs of text in BLUE SQUARES ONLY.

You are welcome to read more as you like.

Wt's deconstruction
by pulling out
ignored
elements

p. 10-11

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PREFACE

[v]* THESE lectures are based upon a recurrence to that phase of philosophic thought which began with Descartes and ended with Hume. The philosophic scheme which they endeavour to explain is termed the 'Philosophy of Organism.' There is no doctrine put forward which cannot cite in its defence some explicit statement of one of this group of thinkers, or of one of the two founders of all Western thought, Plato and Aristotle.

But the philosophy of organism is apt to emphasize just those elements in the writings of these masters which subsequent systematizers have put aside. The writer who most fully anticipated the main positions of the philosophy of organism is John Locke in his *Essay*, especially¹ in its later books.

The lectures are divided into five parts. In the first part, the method is explained, and the scheme of ideas, in terms of which the cosmology is to be framed, is stated summarily.

In the second part,‡ an endeavour is made to exhibit this scheme as adequate for the interpretation of the ideas and problems which form the complex texture of civilized thought. Apart from such an investigation the summary statement of Part I is practically unintelligible. Thus Part II at once gives meaning to the verbal phrases of the scheme by their use in discussion, and shows the power of the scheme to put the various elements of our experience into a consistent relation to each other. In order to obtain a reasonably complete account of human experience considered in relation to the philosophical [vi] problems which naturally arise, the group of philosophers and scientists belonging to the seventeenth and eighteenth centuries has been considered, in particular Descartes, Newton, Locke, Hume, Kant. Any one of these writers is one-sided in his presentation of the groundwork of experience; but as a whole they give a general presentation which dominates the development of subsequent philosophy. I started the investigation with the expectation of being occupied with the exposition of the divergencies from every member of this group. But a careful examination of their exact statements disclosed that in the main the philosophy of organism is a recurrence to pre-Kantian modes of thought. These philosophers were perplexed by the inconsistent presuppositions underlying their inherited modes of expression. In so far as they, or their

¹ Cf. *An Essay Concerning Human Understanding*, Bk. IV, Ch. VI, Sect. 11.*

successors, have endeavoured to be rigidly systematic, the tendency has been to abandon just those elements in their thought upon which the philosophy of organism bases itself. An endeavour has been made to point out the exact points of agreement and of disagreement.

In the second part, the discussions of modern thought have been confined to the most general notions of physics and biology, with a careful avoidance of all detail. Also, it must be one of the motives of a complete cosmology to construct a system of ideas which brings the aesthetic, moral, and religious interests into relation with those concepts of the world which have their origin in natural science.

In the third and fourth parts, the cosmological scheme is developed in terms of its own categorical notions, and without much regard to other systems of thought. For example, in Part II there is a chapter on the 'Extensive Continuum,' which is largely concerned with the notions of Descartes and Newton, compared with the way in which the organic philosophy must interpret this feature of the world. But in Part IV, this question is treated from the point of view of developing the detailed method [vii] in which the philosophy of organism establishes the theory of this problem. It must be thoroughly understood that the theme of these lectures is not a detached consideration of various traditional philosophical problems which acquire urgency in certain traditional systems of thought. The lectures are intended to state a condensed scheme of cosmological ideas, to develop their meaning by confrontation with the various topics of experience, and finally to elaborate an adequate cosmology in terms of which all particular topics find their interconnections. Thus the unity of treatment is to be looked for in the gradual development of the scheme, in meaning and in relevance, and not in the successive treatment of particular topics. For example, the doctrines of time, of space, of perception, and of causality are recurred to again and again, as the cosmology develops. In each recurrence, these topics throw some new light on the scheme, or receive some new elucidation. At the end, in so far as the enterprise has been successful, there should be no problem of space-time, or of epistemology, or of causality, left over for discussion. The scheme should have developed all those generic notions adequate for the expression of any possible interconnection of things.

Among the contemporary schools of thought, my obligations to the English and American Realists are obvious. In this connection, I should like especially to mention Professor T. P. Nunn, of the University of London. His anticipations, in the *Proceedings of the Aristotelian Society*, of some of the doctrines of recent Realism, do not appear to be sufficiently well known.

I am also greatly indebted to Bergson, William James, and John Dewey. One of my preoccupations has been to rescue their type of thought from the charge of anti-intellectualism, which rightly or wrongly has been associated with it. Finally, though throughout the main body of the work I

am in sharp disagreement with Bradley, the final outcome is after all not so greatly different. I am particularly indebted to his chapter on the nature [viii] of experience, which appears in his *Essays on Truth and Reality*. His insistence on 'feeling' is very consonant with my own conclusions. This whole metaphysical position is an implicit repudiation of the doctrine of 'vacuous actuality.'

The fifth part is concerned with the final interpretation of the ultimate way in which the cosmological problem is to be conceived. It answers the question, What does it all come to? In this part, the approximation to Bradley is evident. Indeed, if this cosmology be deemed successful, it becomes natural at this point to ask whether the type of thought involved be not a transformation of some main doctrines of Absolute Idealism onto a realistic basis.

These lectures will be best understood by noting the following list of prevalent habits of thought, which are repudiated, in so far as concerns their influence on philosophy:

- (i) The distrust of speculative philosophy.
- (ii) The trust in language as an adequate expression of propositions.
- (iii) The mode of philosophical thought which implies, and is implied by, the faculty-psychology. *referring to "the free will" / determinism*
- (iv) The subject-predicate form of expression.
- (v) The sensationalist doctrine of perception.
- (vi) The doctrine of vacuous actuality.
- (vii) The Kantian doctrine of the objective world as a theoretical construct from purely subjective experience.
- (viii) Arbitrary deductions in *ex absurdo* arguments.
- (ix) Belief that logical inconsistencies can indicate anything else than some antecedent errors.

By reason of its ready acceptance of some, or all, of these nine myths and fallacious procedures, much nineteenth-century philosophy excludes itself from relevance to the ordinary stubborn facts of daily life.

The positive doctrine of these lectures is concerned with the becoming, the being, and the relatedness of 'actual entities.' An 'actual entity' is a *res vera* in the [ix] Cartesian sense of that term;² it is a Cartesian 'substance,' and not an Aristotelian 'primary substance.' But Descartes retained in his metaphysical doctrine the Aristotelian dominance of the category of 'quality' over that of 'relatedness.' In these lectures 'relatedness' is dominant over 'quality.' All relatedness has its foundation in the relatedness of actualities; and such relatedness is wholly concerned with the appropriation of the dead by the living—that is to say, with 'objective immortality' whereby what is divested of its own living immediacy becomes

² I derive my comprehension of this element in Descartes' thought from Professor Gilson of the Sorbonne. I believe that he is the first to insist on its importance. He is, of course, not responsible for the use made of the notion in these lectures.

a real component in other living immediacies of becoming. This is the doctrine that the creative advance of the world is the becoming, the perishing, and the objective immortalities of those things which jointly constitute *stubborn fact*.

The history of philosophy discloses two cosmologies which at different periods have dominated European thought, Plato's *Timaeus*,^a and the cosmology of the seventeenth century, whose chief authors were Galileo, Descartes, Newton, Locke. In attempting an enterprise of the same kind, it is wise to follow the clue that perhaps the true solution consists in a fusion of the two previous schemes, with modifications demanded by self-consistency and the advance of knowledge. The cosmology explained in these lectures has been framed in accordance with this reliance on the positive value of the philosophical tradition. One test of success in adequacy in the comprehension of the variety of experience within the limits of one scheme of ideas. The endeavour to satisfy this condition is illustrated by comparing Chapters III, VII, and X of Part II, respectively entitled 'The Order of Nature,' 'The Subjectivist Principle,' and 'Process,' with Chapter [x] V of Part III, entitled 'The Higher Phases of Experience,' and with Chapter V of Part IV, entitled 'Measurement,' and with Chapter II of Part V, entitled 'God and the World.' These chapters should be recognizable as the legitimate outcome of the one scheme of ideas stated in the second chapter of Part I.

In these lectures I have endeavoured to compress the material derived from years of meditation. In putting out these results, four strong impressions dominate my mind: First, that the movement of historical, and philosophical, criticism of detached questions, which on the whole has dominated the last two centuries, has done its work, and requires to be supplemented by a more sustained effort of constructive thought. Secondly, that the true method of philosophical construction is to frame a scheme of ideas, the best that one can, and unflinchingly to explore the interpretation of experience in terms of that scheme. Thirdly, that all constructive thought, on the various special topics of scientific interest, is dominated by some such scheme, unacknowledged, but no less influential in guiding the imagination. The importance of philosophy lies in its sustained effort to make such schemes explicit, and thereby capable of criticism and improvement.

There remains the final reflection, how shallow, puny, and imperfect are efforts to sound the depths in the nature of things. In philosophical discussion, the merest hint of dogmatic certainty as to finality of statement is an exhibition of folly.

In the expansion of these lectures to the dimensions of the present book,

^a I regret that Professor A. E. Taylor's *Commentary on Plato's Timaeus* was only published after this work was prepared for the press. Thus, with the exception of one small reference, no use could be made of it. I am very greatly indebted to Professor Taylor's other writings.

I have been greatly indebted to the critical difficulties suggested by the members of my Harvard classes. Also this work would never have been written without the constant encouragement and counsel which I owe to my wife.

A. N. W.

Harvard University
January, 1929