# ROUTLEDGE REVIVALS

# **Science and Ethics**

An Essay

C. H. Waddington



# Routledge Revivals

# Science and Ethics

First published in 1942 (second impression 1944), this book forms a debate about the endeavour to find an intellectual basis for ethics in science.



# Science and Ethics: An Essay

C. H. Waddington



First published in 1942 Second impression 1944 by George Allen and Unwin LTD

This edition first published in 2016 by Routledge 2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN and by Routledge

711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 1944 George Allen and Unwin LTD

The right of C. H. Waddington to be identified as author of this work has been asserted by him in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

#### Publisher's Note

The publisher has gone to great lengths to ensure the quality of this reprint but points out that some imperfections in the original copies may be apparent.

#### Disclaimer

The publisher has made every effort to trace copyright holders and welcomes correspondence from those they have been unable to contact.

A Library of Congress record exists under LC control number: 43002080

ISBN 13: 978-1-138-95694-0 (hbk) ISBN 13: 978-1-315-66542-9 (ebk)

ISBN 13: 978-1-138-95695-7 (pbk)

# SCIENCE AND ETHICS

an essay by

## C. H. WADDINGTON, sc.d.

Fellow of Christ's College, Cambridge

together with a discussion between the author and

The Right Rev. E. W. Barnes, Bishop of Birmingham

The Very Rev. W. R. Matthews, K.C.V.O., Dean of St. Paul's

Professor W. G. de Burgh, F.B.A.

Professor C. E. M. Joad

Professor Susan Stebbing

Professor A. D. Ritchie

Professor H. J. Fleure, F.R.s.

Professor J. S. Huxley, F.R.s.

Professor J. B. S. Haldane, F.R.S.

Dr. C. D. Darlington, F.R.S.

Dr. J. Needham, F.R.s.

Professor H. Dingle

Dr. G. Burniston Brown

Dr. Karin Stephen

Miss Melanie Klein

Miss Miriam Rothschild

Professor J. D. Bernal, f.r.s.

Professor Chauncey D. Leake

London
GEORGE ALLEN & UNWIN LTD

FIRST PUBLISHED IN 1942 SECOND IMPRESSION 1944



THE PAPER AND BINDING OF THIS
BOOK CONFORM TO THE AUTHORISED
ECONOMY STANDARD

#### ALL RIGHTS RESERVED

PRINTED IN GREAT BRITAIN

in 11-Point Baskerville Type

BY UNWIN BROTHERS LIMITED

WOKING

# CONTENTS

Chapter		Page
1	SCIENCE AND ETHICS	9
	An essay by Dr. C. H. Waddington	
2	COMMENTS	00
		20
	The Bishop of Birmingham	
	The Dean of St. Paul's	
	Professor de Burgh, F.B.A.	
	Professor C. E. M. Joad	
	Professor Susan Stebbing	
	Professor A. D. Ritchie	
	Professor H. J. Fleure, F.R.S.	
	Professor J. S. Huxley, F.R.S.	
	Dr. C. H. Waddington	
3	FURTHER COMMENTS	42
	Professor J. B. S. Haldans, F.R.S.	
	Dr. C. D. Darlington, F.R.S.	
	Dr. J. Needham, F.R.S.	
	Dr. H. Dingle	
	Dr. Burniston Brown	
	Dr. C. H. Waddington	

Chap	ter	Page
4	SOME PSYCHOLOGICAL CONSIDERATIONS	56
	A correspondence with Dr. Karin Stephen	
	A comment by Mrs. Melanie Klein	
	A comment by Miss Miriam Rothschild	
	A reply by Dr. C. H. Waddington	
5	SOME PHILOSOPHICAL DIFFICULTIES	94
	A correspondence with Professor H. Dingle	
6	A MARXIST CRITIQUE	114
	Professor J. D. Bernal, F.R.S.	
	Dr. C. H. Waddington	
7	SOME FINAL COMMENTS	126
	The Bishop of Birmingham	
	The Dean of St. Paul's	
	Professor Chauncey D. Leake	
	Dr. C. H. Waddington	
	THE CONTRIBUTORS	141
	INDEX	142

### INTRODUCTION

This book is in the form of a debate about a thesis. The original essay which gave rise to the discussion was intended as a fairly systematic, although extremely summary, exposition of a point of view which had been implied in a short popular booklet which I had recently published under the title of The Scientific Attitude. The essay was submitted to the editors of Nature, who invited a number of authorities to comment upon it. Other authors were moved to contribute to the discussion, which became too voluminous for the correspondence columns of a weekly journal. The whole debate, both that portion which has not yet appeared in print as well as the original public discussion, appears to constitute a valuable contribution to a subject the profound importance of which is becoming ever more generally recognized. In collecting it together, and recording it in a form more permanent than a private correspondence, every attempt has been made to edit it in such a way that it does not lose the essential character of a discussion, that of being an interchange of views. The age-long endeavour to find an intellectual basis for ethics is an enterprise of such importance, and of such difficulty, that any explorer of that country must always be glad to hear the voices of his fellowtravellers. "This," Wittgenstein once said to me, "is a terrible business—just terrible! You can at best stammer when you talk of it." This book is communal, perhaps even co-operative, stammering.

C. H. W.



#### CHAPTER I

## THE RELATIONS BETWEEN SCIENCE AND ETHICS

### By Dr. C. H. WADDINGTON

Throughout most of history, man's concept of the Good has been rightly considered to have, or at any rate to require, a philosophical justification; that is to say, a justification dependent on the characteristics, not of a particular individual, or group of individuals, but of the world in general. This might be deduced from observation, as in the theory of Utilitarianism, or revealed by the voice of God or of conscience. During the last quarter of a century, four lines of thought have converged in an attack on this notion, and their combined effect has apparently gone far, at least among what may be called 'popular intellectual' circles, to rob ethical statements of any claims to intellectual validity. All four of these trains of thought had their origin in scientific movements. They were:

- (1) The psycho-analytical, based on an examination of individual psychology, which seemed to imply that man's ethical system is a mere product of his early sexual reactions to family life, and has no more generality than that has.
- (2) The anthropological, based on a comparative study of social systems, which tended to show that ethical beliefs differ extremely from culture to culture and can therefore have no general validity.
- (3) The Marxist, primarily based on a study of the changing society of Western Europe, which appeared to assert that ethical systems are expressions of class forces and are epiphenomena which may be left out of account when we are considering the mechanism of social development.
  - (4) The anti-metaphysical of the Logical Positivists, based

on the attempt to realize the 'unity of science' through a study of meaning, and issuing in the view that ethical statements have no meaning of a verifiable nature.

None of these summary statements of the four arguments is, I think, an entirely fair account of the contribution which the science in question has made to the study of ethics. But they do represent not too inadequately the sense in which these contributions have been understood among wide circles of the general reading public, including many of the vounger men of science. Taken together, the four lines of attack were undoubtedly successful in persuading many people that science either has nothing to do with the formulation of ethical systems, or even is necessarily inimical to any such attempt. I wish to argue here the contrary thesis: That if these four contributions are correctly interpreted, ethical judgments are statements of the same kind-having, as the logisticians would say, the same grammatical structure -as scientific statements. I shall deny Carnap's argument that the typical ethical statement 'killing is evil' is merely a paraphrase of the command 'do not kill',1 and "does not assert anything, and cannot be proved or disproved". I shall argue that an ethical judgment is better typified by a statement such as "You are an animal of such a kind that you must consume 7 mgm. of vitamin C per diem, and should consume 100 mgm.", that is to say, by a statement which has scientific significance.

An ethical belief must be believed by someone; and the psycho-analytical discoveries, which are concerned with the development of the ethical systems of individuals, are the most profitable basis from which to begin an examination of the scientific basis of ethics. Psycho-analytical literature is voluminous, and is couched in a somewhat anthropomorphic jargon which, while it may be an inevitable result of attempting to write in conscious language of mental processes which do not occur within consciousness, is undoubtedly not very perspicuous for the layman. But one

<sup>&</sup>lt;sup>1</sup> Carnap, R., Philosophy and Logical Syntax, Kegan Paul (1935), 24.

may, with all due diffidence, mention two points which seem to emerge from it.

In the first place, ethics appears among psycho-analytical phenomena as the consciously formulated part of a much larger system of compulsions and prohibitions. Many of these remain permanently below the level of consciousness, but, all together, they make up a more or less isolable dynamic function within the personality, known as the super-ego. By setting up the super-ego as the entity for investigation, psycho-analysts are abolishing, in a very radical way, the class distinctions which we commonly make among our inner compulsions, which lead us to hold that the prohibition on picking one's nose in public, for example, although often much stronger than that on lying, is less worthy of consideration. This is a piece of realism for which one can have nothing but gratitude. Moreover, it brings out clearly the very important point that one cannot avoid ethics; it is impossible to give them up like smoking in Lent. They are part of the super-ego, and the super-ego is inescapably among those present (accompanied by the ego, the id, the ghosts of Edipus, Narcissus and the rest) whenever we do anything.

The second of the psycho-analytical results which requires attention is more fundamental, but in some ways less straightforward. Put shortly and crudely, it is that the super-ego is formed as a result of experience of the material world, and that its propositional content has been verified in experience. There are two difficulties in the way of establishing this. First, the super-ego is being formed from the age of about six months onwards, and empirical observation at that time has a peculiar character which it later loses. "The baby", writes Joan Riviere, "cannot distinguish between me and not-me; his sensations are his world, the world to him." The first crude notion of externality, of otherness, arises through the experience of an inability to control; and the objects which thus intrude into the baby's solipsistic day-dream are inevitably personalized, distinguished as

<sup>1</sup> Riviere, J., Love, Hate and Reparation, Hogarth Press (1937), 9.

"not-me but another person". More than that, they must appear to butt in from outside what had been thought of as all-embracing. It is, I suggest, because the development of ethics is connected with this break-up of solipsism that it has that character of other-worldliness, of absoluteness, which made plausible the anti-metaphysical comment that one can no more talk about it than about the ultimate reality behind the world's appearances. "Wovon man nicht sprechen kann, darüber muss man schweigen", said Wittgenstein in 1919, addressing philosophers. His words would have been more apposite in the mouth of a mother talking to her child; but unfortunately one screams as though the devil were on one's tail; probably he is.

The second difficulty in establishing the dependence of the super-ego on experience arises in connexion with the distinction between the external and the internal, between the individual and his environment. There is first a simple confusion to clear out of the way. One finds, for example, the following sentence by Freud: "Whereas the ego is essentially the representative of the external world, of reality, the super-ego stands in contrast to it as the representative of the internal world. . . ." But the context makes it quite clear that Freud is speaking here of the adult personality, at a time when the super-ego has already been formed. He is not, in calling that entity the representative at that time of the internal world, denying that at an earlier period, during its formation, it was dependent on the external world. In fact, in another place he states, fairly explicitly, the point which I wish to make: "The role which the super-ego undertakes later in life is at first played by an external power, parental authority. . . . This objective anxiety is the forerunner of the later moral anxiety."3

<sup>&</sup>lt;sup>1</sup> Wittgenstein, L., Tractatus Logico-Philosophicus, Kegan Paul (1919), concluding sentence.

<sup>&</sup>lt;sup>3</sup> Freud, S., The Ego and the Id. Cf. 'General Selection from the Works of Sigmund Freud,' Hogarth Press (1937), 259.

<sup>&</sup>lt;sup>3</sup> Freud, S., New Introductory Lectures on Psycho-analysis, Hogarth Press (1933), 84.