UNIVERSAL
LIBRARY

OU_156522

UNIVERSAL
LIBRARY

Osmania University Library

Call No. Accession No.

Author

Title

This book should be returned on or before the date last marked below.

CAMBRIDGE UNIVERSITY PRESS
C. F. CLAY, MANAGER
LONDON : FETTER LANE, E.C. 4

NEW YORK : THE MACMILLAN CO.
BOMBAY
CALCUTTA } MACMILLAN AND CO., LTD.
MADRAS
TORONTO : THE MACMILLAN CO. OF CANADA, LTD.
TOKYO : MARUZEN-KABUSHIKI-KAISHA

ALL RIGHTS RESERVED

A HISTORY
OF
ENGLISH PHILOSOPHY

BY

W. R. SORLEY, LITT.D., LL.D.
Professor in the University of Cambridge
Fellow of the British Academy

CAMBRIDGE
AT THE UNIVERSITY PRESS
1920

PREFACE

THE purpose of this book is to trace the history of philosophy in Great Britain from the time when it began to be written in the English language until the end of the Victorian era.

There are two ways of writing the history of philosophy. One of them sets out from the standpoint of philosophy as conceived by the writer; the other from that of the philosophers themselves. On the former method the fundamental problems of philosophy will be presented at the outset, and each step taken towards their definition and solution will then be noted; whatever is irrelevant to the main issue will be left out of sight, however important it may have been in the minds of some of the philosophers. On the latter method the subject will be approached as it appeared to each philosopher in turn, and the presentation of definite concepts and clear issues will emerge gradually as the story progresses. Each of these methods has its own advantages and its own dangers. The former concentrates upon the essential, but it is liable to miss historical proportion by stressing certain features and overlooking others. The latter keeps in close touch with the documents, but care is needed to prevent the meaning of the whole from being obscured by details.

The accounts of English thought contained in the general histories of modern philosophy have, for the most part, followed the former method; and the result has often been one-sided and misleading, so that even English readers have been led to misjudge the character of their

national philosophy. The other method has been followed in the present treatise. All the leading philosophical writers have been passed under review; they have been studied in their lives and in their books; and an effort has been made to seize and to express what was essential in their contribution to thought.

I am fully aware of the difficulties of the plan, but I have done my best to surmount them. Biographical and bibliographical detail has been introduced, but it has been used to explain and illustrate thought. Minor writers, now seldom read, have been dealt with, but only by giving a concise estimate of the contribution which each had to make to the subject; and they have been grouped round the leading representatives of a period or type of thought. These leading writers have been made the central figures in successive chapters of the history. In carrying out this plan the scope of philosophy itself has been understood in the wider sense which most of the writers gave it in their own minds. The boundaries which separate it from theology, economics, and political theory have not been drawn very sharply, or, rather, they have been allowed to become more sharply marked in the course of the history just as they did in the minds of successive thinkers.

By strict economy of phrase it has been found possible to deal with the subject within the compass of a single volume. The great writers have indeed not received all the space that might have been fitly devoted to them; but an effort has at least been made to preserve a due proportion. Yet even this statement is true only on the whole. It seemed more important to recognise the significance of early and now almost forgotten philosophers than to give a full account of the well-known writers who

have left distinction to the philosophical literature of this and the immediately preceding generation. In the case of these latter little more has been done than to convey an impression of the purpose and outcome of their work. Living writers have been rarely mentioned and then only under a sort of intellectual compulsion—lest their omission should convey a false impression of the state of philosophy in the closing years of the nineteenth century.

The book, as it now appears, is based upon a series of chapters contributed to *The Cambridge History of English Literature*. The proofs have been read by Professor Gibson, of the University College of North Wales, to whom I am indebted for a number of valuable suggestions.

W. R. S.

March 1920

CONTENTS

PAGE

PREFACE v

CHAPTER I

THE BEGINNINGS OF ENGLISH PHILOSOPHY

English philosophy in the Middle Ages 1
John Scotus Erigena 2
Roger Bacon 5
John Duns Scotus 6
William of Ockham 7
The Renaissance and the Scholastic revival 8
John Case; John Sanderson 8
Everard Digby 9
William Temple 10
Physical Science: William Gilbert 12

CHAPTER II

FRANCIS BACON

Philosophical writing in English 14
Bacon's life and writings 15
The Renewal of the Sciences 21
Bacon's leading general ideas 23
The unity of science 23
The practical aim of knowledge 24
The tendencies to error in the human mind 24
The doctrine of forms 27
The new method 28
Its defects 31
Political and moral theory 32
Influence and importance of Bacon 33

CHAPTER III

HERBERT OF CHERBURY AND OTHERS

PAGE

Herbert's life and writings 35
The enquiry into the nature of truth 36
The activity of mind 37
The doctrine of common notions 39
The comparative study of religions 41
Platonic and Aristotelian influence 41
Davies; Fotherby; Hakewill 41
The mysticism of Lord Brooke 42
The doctrine of a law of nature 44
The casuists; Jeremy Taylor 44
Political and juridical theory: John Selden 45

CHAPTER IV

THOMAS HOBBES

Hobbes's life, writings, and controversies 47
His scientific idea and the political occasion 52
Style and thought 57
His chief works 59
The mechanical theory of reality as a whole 61
The psychological theory 62
The natural state of man 64
The laws of nature 65
Sovereignty in state and church 66
Characteristics of *Leviathan* 68
Critics of Hobbes
Harrington and his *Oceana* 69
Previous imaginary commonwealths: More's *Utopia* and Bacon's *New Atlantis* 69
Sir Robert Filmer 72
Clarendon; Bramhall; Tenison; Eachard 73

CHAPTER V

THE CAMBRIDGE PLATONISTS

PAGE

Characteristics of the school 75
Whichcote and his influence 76
Henry More 78
Life and writings 78
Influences: Plato; Descartes; occultism 79
The limits of mechanism 80
The nature of knowledge: innate ideas 81
The nature of spiritual substance 83
The orders of created spirits 85
Ethical views 86
Ralph Cudworth 88
The spiritual nature of reality, and the method of establishing it in *The True Intellectual System* 89
The theory of knowledge contained in his *Eternal and Immutable Morality* 94
John Smith 96
Nathanael Culverwel 99
Other contemporary writers
Joseph Glanvill 100
Parker; Gale; Pordage 102
Richard Cumberland 102

CHAPTER VI

JOHN LOCKE

Life and writings 104
The controversy with Stillingfleet 108
Origin and problem of his *Essay* 109
Ideas as the objects of the understanding 111
Their origin in sensation or reflection 113
The universal element in knowledge 115
The idea of substance 117
The reference to reality in knowledge 118

CHAPTER X

THOMAS REID AND OTHERS

PAGE
The Reply to Hume 203
Campbell; Beattie; Oswald 203
Reid's criticism of the ideal theory 204
His natural realism 205
The doctrine of suggestion 206
The principles of Common Sense 207
Dugald Stewart 207
Thomas Brown 209

CHAPTER XI

BENTHAM AND THE UTILITARIANS

The Utilitarian school 211
Bentham's life and writings 212
The influence of James Mill 215
Bentham's criticism of Blackstone 216
The principle of utility 218
Quantitative utilitarianism 219
The criterion in politics and in ethics 221
The hedonic calculus 223
The indirect method 225
The utilitarian sanctions 226
Estimate of Bentham 228
His political theories and activities 229
His views on religion and education 231
Godwin and Malthus 231
Significance of Malthus's work 232
Utilitarian economics: David Ricardo 234
The work of James Mill 236

CHAPTER XII

THE VICTORIAN ERA

PAGE

I. INTRODUCTION

Period of decline in speculative interest 239

II. SIR WILLIAM HAMILTON AND OTHERS

Hamilton's reputation 240
His new orientation of English philosophy 242
His new analytic of logical forms 243
Baynes; Thomson; de Morgan; Boole 244
His philosophy of perception 244
His philosophy of the conditioned 246
H. L. Mansel 248

III. JOHN STUART MILL AND OTHERS

Mill's intellectual development 249
His estimates of Bentham and Coleridge 251
Logical theory
Predecessors: Whately; Herschel; Whewell 253
Theory of inductive inference 255
Theory of the external world and of mind 256
Ethical theory 257
Social and political doctrines 258
J. F. Stephen's criticism 259
Economic theory 259
Attitude to ultimate questions 260
Reaction against Mill's views: Jevons 261
Adherents of Mill: G. Grote; Bain; Robertson 261
English positivism: Congreve; Bridges; Harrison . . 263

IV. RATIONAL AND RELIGIOUS PHILOSOPHERS

John Grote 264
Maurice; Newman; Martineau 265

V. HERBERT SPENCER AND THE PHILOSOPHY OF EVOLUTION

Spencer's life and writings 267
His view of philosophy 268
The unknowable 269

PAGE

The interpretation of life, mind, and society . . . 270
His individualism 272
George Henry Lewes 273
Thomas Henry Huxley 275
Leslie Stephen 276
The historical method in the social sciences 277
Maine; Cliffe Leslie; Bagehot 278

VI. HENRY SIDGWICK AND SHADWORTH HODGSON

Sidgwick's philosophical and ethical work 279
Hodgson's analysis of experience 282

VII. IDEALISTS

Influence of post-Kantian speculation 283
James Frederick Ferrier 284
James Hutchison Stirling 286
Thomas Hill Green 287
William Wallace 289
Edward Caird 290
Francis Herbert Bradley 291

VIII. OTHER WRITERS

Alexander Campbell Fraser 293
Simon Somerville Laurie 294
James Ward 295
Robert Adamson 296

CHAPTER XIII

RETROSPECT

General characteristics of English philosophy 298

COMPARATIVE CHRONOLOGICAL TABLE 303

BIBLIOGRAPHY 323

INDEX 375

CHAPTER I

THE BEGINNINGS OF ENGLISH PHILOSOPHY

FROM the end of the eighth century, when Alcuin of York was summoned to the court of Charles the Great, down to the middle of the fourteenth century, there was an almost constant succession of scholars of British birth among the writers who contributed to the development of philosophy in Europe. The most important names in the succession are John Scotus Erigena, John of Salisbury, Alexander of Hales, Robert Grosseteste, Roger Bacon, John Duns Scotus, William of Ockham, and Thomas Bradwardine. They wrote in Latin; and with the Latin language went community of culture, of topics, and of audience. All these they shared with an international commonwealth of scholars. National characteristics are never so strongly marked in science and philosophy as in other branches of literature, and their influence takes longer in making itself felt. The British birth or residence of a medieval philosopher is of little more than biographical interest; and the attempt to trace its influence on the ideas or style of his work is apt to be conjectural and arbitrary. His work belongs to a tradition only slightly affected by the differences between nation and nation; it is a part of the history of philosophy, without being distinctively British. In this place, accordingly, it must suffice to characterise in general terms the movement of which the British schoolmen formed part, and some of the directions in which their ideas exercised an influence on later science and speculation.

The philosophy of the Middle Ages was, above all things, an attempt at the systematisation of knowledge. The instrument for this synthesis was found in the logical

conceptions and method of Aristotle. Its material consisted of the existing records of ancient philosophy and science, what was learned from contemporary experience, and the teachings of the church. In the heterogeneous mass of material thus brought together, a pre-eminent position was assigned to religious doctrine. The claims of theology were based upon revelation, interpreted by ecclesiastical authority. Philosophy, on the other hand, belonged to the province of reason, as distinct from that of faith; but it was essential that its results should be in harmony with theological doctrine. In this way it came to be regarded as ancillary to theology, and this feature became characteristic of the scholastic method and a frequent ground of objection to it in its decline. Connected with it was another and a more favourable feature. In accepting and interpreting theological doctrine the thought of the period recognised the independent value of the facts of the spiritual life. What the Scriptures and the fathers taught was confirmed by inner experience. In the laborious erudition and dialectical subtleties of the schoolmen there is seldom wanting a strain of this deeper thought, which attains its full development in medieval mysticism. Thus, in the words of a recent historian, "it dawned upon men that the spiritual world is just as much a reality as the material world, and that in the former is man's true home. The way was prepared for a more thorough investigation of spirit and matter than was possible to antiquity. Above all things, however, a sphere of experience was won for human life which was, in the strictest sense, its own property, into which no external powers could penetrate[1]."

To Erigena may be traced both medieval mysticism and some anticipations of the scholastic method. He seems to have been born in Ireland about 810, and to have proceeded to France some thirty years later. Charles the Bald appointed him to the *schola palatina* at Paris.

[1] Höffding, *History of Modern Philosophy*, Eng. tr. 1, p. 6.

He appears to have had no further connection with Ireland or with England, and to have died in France about 877. It was probably owing to the protection of the king that he escaped the graver results which usually followed a suspicion of heresy. His works were officially condemned by papal authority in 1050 and 1225. Erigena was the predecessor of scholasticism but not himself one of the schoolmen. His anticipation of them consists not only in his dialectical method, but also in his recognition of the authority of the Bible and of the fathers of the church as final. But this recognition is guarded by the assertion that it is impossible for true authority and true reason really to conflict; and he deals quite freely with the letter of a doctrine, while he interprets its spirit in his own way. On the development of mystical thought he exercised an even greater influence. The fundamental conceptions and final outcome of his great work, *De divisione naturae*, are essentially mystical in tone; and, by his translation of the pseudo-Dionysian writings, he made accessible the storehouse from which medieval mystics derived many of their ideas. These writings are first heard of distinctly in the early part of the sixth century; even in that uncritical age they were not received without question; but they soon gained general acceptance as the genuine work of Dionysius the Areopagite who "clave unto" St Paul after the address on Mars' hill, and who was supposed to have become bishop of Athens. The work attributed to him contains an interpretation of Christian doctrine by means of Neoplatonic ideas. It exercised a strong influence upon Erigena himself and upon subsequent medieval thought; and this influence was powerfully reinforced long afterwards by the study of Plato and the Neoplatonists at the time of the revival of learning.

Erigena's work opens with a division of the whole of reality into four classes—that which creates and is not created, that which both is created and creates, that which is created but does not create, and that which neither

creates nor is created. The last class is not mere non-existence. In general, it may be said to signify the potential as distinguished from the actual; in ultimate analysis, it is the goal or end towards which all things strive that in it they may find rest. It is therefore God as final cause, just as the first class in the division—the uncreate creator—is God as efficient cause. God is thus at once the beginning and end of all things, from which they proceed and to which they return. From the uncreate creator proceed the prototypes or ideas which contain the immutable reasons or grounds of all that is to be made. The world of ideas is created and yet eternal, and from it follows the creation of individual things. Their primordial causes are contained in the divine Logos (or Son of God), and from these, by the power of the divine Love (or Holy Spirit), is produced the realm of created things that cannot themselves create. God created the world out of nothing, that is to say, out of his ineffable divine nature, which is incomprehensible to men and angels. And the process is eternal: in God vision does not precede operation. Nor can anything subsist outside God: "the creature subsists in God, and God is created in the creature in a wonderful and ineffable manner, manifesting himself, the invisible making himself visible, and the incomprehensible comprehensible, and the hidden plain, and the unknown known[1]." Thus, while God, as creator and as final cause, transcends all things, he is also in all things. He is their beginning, middle, and end. And his essence is incomprehensible; nay, "God himself knows not what he is, for he is not a 'what.'" Hence, all expressions used of God are symbolical only. Strictly speaking, we cannot even ascribe essence to him: he is super-essential; nor goodness: he is beyond good (ὑπερ-άγαθος).

Erigena was more influenced by Plato than by Aristotle. His acquaintance with the latter's works was restricted to

[1] *De divisione naturae*, III, 18, ed. Schlüter (1838), p. 238.

certain of the logical treatises. The greater part of the Aristotelian writings became known to the schoolmen at a later date and mainly by means of Latin translations of Arabic translations of a Syriac version. The new Aristotelian influence began to make itself distinctly felt about three centuries after Erigena's time. Alexander of Hales is said to have been the first schoolman who knew the whole philosophy of Aristotle and used it in the service of Christian theology. The metaphysical and physical writings of Aristotle were at first viewed with suspicion by the church, but afterwards definitely adopted, and his authority in philosophy became an article of scholastic orthodoxy. The great systems of the thirteenth century—especially the most lasting monument of scholastic thought, the *Summa* of St Thomas Aquinas—are founded on his teaching.

But uniformity of opinion was not maintained completely or for long, and three English schoolmen are to be reckoned among the most (if not as the most) important opponents of St Thomas. These are Roger Bacon, Duns Scotus, and William of Ockham.

Roger Bacon, who was born about 1214 and died in 1294, was the earliest in time of the three named, and also the greatest and the most unfortunate. He lived and wrote under the shadow of an uncongenial system then at the height of its power. He suffered persecution and long imprisonments; his popular fame was that of an alchemist and a wizard; his works were allowed to lie unprinted for centuries; and only later scholars have been able to appreciate his significance. His learning seems to have been unique; he read Aristotle in Greek, and expressed unmeasured contempt for the Latin translations then in vogue; he was acquainted with the writings of the Arabian men of science, whose views were far in advance of all other contemporary knowledge. He does not appear himself to have made the original scientific discoveries with which he used to be credited, but he had

thoroughly mastered the best of the science and philosophy of his day. There is, of course, much in his writings that may be called scholasticism, but his views on the method of science are markedly modern. His doctrine of method has been compared with that of his more famous namesake Francis Bacon. He was as decided as the latter was in rejecting all authority in matters of science; like him, he took a comprehensive view of knowledge and attempted a classification of the sciences; like him, also, he regarded natural philosophy as the chief of the sciences. The differences between the two are equally remarkable and serve to bring out the merits of the older philosopher. He was a mathematician; and, indeed, he looked upon mathematical proof as the sole type of demonstration. Further, he saw the importance in scientific method of two steps that were inadequately recognised by Francis Bacon—the deductive application of elementary laws to particular cases, followed by the experimental verification of the results. "Roger Bacon," it has been said, "has come very near, nearer certainly than any preceding and than any succeeding writer until quite recent times, to a satisfactory theory of scientific method[1]."

The work of Duns Scotus (1265?—1308?) disturbed the harmony of faith and reason which had been asserted by St Thomas, and which was of the essence of orthodox scholasticism. And "Scotism" became the rival of "Thomism" in the schools. Scotus was not himself heretical in religious belief, nor did he assert an antagonism between faith and reason; but he was critical of all intellectual arguments in the domain of theology. The leading school had not attempted a justification by reason of such specifically Christian doctrines as those of the Trinity or the Incarnation (as Erigena, for instance, had done). These were accepted as mysteries of the faith, known by revelation only. But certain doctrines—such

[1] R. Adamson, *Roger Bacon: the Philosophy of Science in the Middle Ages* (1876), p. 33.

as the being of God, the immortality of the soul, and the creation of the world out of nothing—were held to admit of rational proof, and thus to belong to "natural theology." The arguments for the latter doctrines are subjected to criticism by Scotus. He denied the validity of natural theology—except in so far as he recognised that a certain vision of God may be reached by reason, although it needs to be reinforced by revelation. In restricting the power of intellect, Scotus exalted the significance of will. Faith is a voluntary submission to authority, and its objective ground is the unconditional will of God.

At the hands of Ockham (d. 1349?), who was a pupil of Duns Scotus, the separation between theology and philosophy, faith and reason, was made complete. He admitted that there are probable arguments for the existence of God, but maintained the general thesis that whatever transcends experience belongs to faith. In this way, he broke with Scotism as well as with Thomism on a fundamental question. He denied the real existence of ideas or universals and reverted to the doctrine known as nominalism, of which he became the greatest exponent. Entities are not to be postulated without necessity shown. The universal exists only as a conception in the individual mind: though it signifies, without change of meaning, any one of a number of things. The only reality is the individual, and all knowledge is derived from experience. Ockham is equally remarkable for his political writings, in which he defended the independent power of the temporal sovereign against the claims of the pope. His philosophical doctrines had many followers and opponents: but he is the last of the great scholastics, for his criticisms struck at the root of the scholastic presuppositions.

For more than two centuries after Ockham's death, only one writer of importance can be reckoned among English philosophers. That writer was John Wyclif (d. 1384), in whose case a period of philosophical authorship

—on scholastic lines—preceded his theological and religious activity. After him comes a blank of long duration. The leaders of the Renaissance, both in philosophy and in science, belonged to the continent; and, although their ideas affected English scholarship and English literature, philosophical writings were slow to follow. And the theological controversies of the Reformation led to no new enquiry into the grounds of knowledge and belief. On the universities the teaching of Aristotle retained its hold, at least as regards logic, even after the introduction of the new "humanistic" studies.

In the latter part of the sixteenth century Aristotelianism experienced an academic revival, though its supporters, in all cases, were suspected of papistical leanings. John Case of St John's College, Oxford (B.A. 1568), gave up his fellowship on this ground (it is said), married, and was allowed by the university to give lectures on logic and philosophy in his house. In 1589 he took the M.D. degree and, in the same year, became a canon of Salisbury. He died in 1600. Between 1584 and 1599 he published seven books—text-books of Aristotelianism—dealing with logic, ethics, politics, and economics. His *Speculum moralium questionum in universam ethicen Aristotelis* (1585) was the first book printed at Oxford at the new press presented by the Earl of Leicester, chancellor of the university. John Sanderson, fellow of Trinity College, Cambridge (B.A. 1558), was appointed logic reader in the university in 1562, but, in the same year, was expelled from his fellowship for suspicious doctrine. He became a student at Douay in 1570, was ordained priest in the Roman Catholic Church, and was appointed divinity professor in the English college at Rheims. He died in 1602. The only work of his that is known is *Institutionum Dialecticarum libri quatuor*, printed at Antwerp in 1589 and at Oxford in 1594.

About the year 1580 a vigorous controversy regarding the merits of the old logic and the new was carried on

between two fellows of Cambridge colleges, Everard Digby and William Temple. They were both younger in academic standing than Sanderson or Case, but they published earlier. Digby took his B.A. degree in the beginning of 1571, and became fellow of St John's early in 1573, shortly before Francis Bacon entered Trinity College as an undergraduate. He began to give public lectures on logic soon after this date. It is possible—we have no evidence on the point—that Bacon attended these lectures. If he did, they may have been the means of arousing his interest in the question of method, and they may also, at the same time, have awakened the spirit of criticism in him and led to that discontent with the philosophy of Aristotle which, according to his own account, he first acquired at Cambridge.

Digby's career was chequered. He was suspected of "corrupt religion," and he made enemies in his own society by his contempt for the authorities. In the end of December 1587, on the nominal ground of an irregularity in his payments for commons, he was deprived of his fellowship by Whitaker, master of the college and a stern puritan. But Digby seems to have had friends in high place. He appealed to Burghley the chancellor and to Archbishop Whitgift. By their order a commission was appointed to enquire into the grounds of his dismissal, and, as a result, Digby was restored 28 May 1588. But, by the end of the same year, he seems to have been got rid of—how, we do not know[1]. Probably, the real ground of objection to him—his lukewarm protestantism—made it prudent for him to leave the university. Digby was famous in his day for his eloquence as a lecturer, his skill in the disputations of the schools, and his learning. His learning, however, is much less than appears from the mere array of authorities which he cites. These are

[1] All the ascertainable facts were for the first time brought together by R. F. Scott in *The Eagle* (St John's College magazine), October term, 1906, pp. 1–24.

often taken from Reuchlin's *De arte cabbalistica* (1517), the fictitious personages of this work being sometimes referred to as actual authors. Digby wrote in the true scholastic spirit; for him Aristotle's doctrines were authoritative, and to disagree with them was heresy. At the same time, his own Aristotelianism was coloured by a mystical theology for which he was largely indebted to Reuchlin. Digby's chief work, *Theoria analytica, viam ad monarchiam scientiarum demonstrans*, was published in 1579. This was followed next year by two books—a criticism of Ramus entitled *De duplici methodo*, and a reply to Temple's defence of the Ramist method. He was also the author of a small treatise *De arte natandi* (1587), and of an English *Dissuasive from taking away the lyvings and goods of the Church* (1589).

William Temple passed from Eton to King's College, Cambridge, in 1573; in due course he became a fellow of the latter society, and was soon engaged in teaching logic. From about 1582 till about 1585 he was master of Lincoln grammar school. He then became secretary to Sir Philip Sidney (to whom his edition of the *Dialectica* of Ramus had been dedicated). After the latter's death he occupied various secretarial posts, and was in the service of the Earl of Essex when he was obliged by the favourite's fall to leave England. He does not seem to have returned till after the accession of King James. In 1609 he was made provost of Trinity College, Dublin, and, a few months later, master of chancery in Ireland. He was knighted in 1622, and died in January 1627.

Temple's important philosophical writings belong to the early part of his career. He was a pupil of Digby at Cambridge, and wrote in terms of warm appreciation of his master's abilities and fame and of the new life that he had put into philosophical study in England. But he had himself found a more excellent way of reasoning in the logical method of Ramus, then coming to be known in this country. When scarcely twenty years of age, Ramus

had startled the university of Paris by his strenuous opposition to the doctrines of Aristotle; he had allied himself to the Calvinists; and he ended his life as a victim of St Bartholomew's eve. The protestant schools, accordingly, tended to favour his system, in which logic, as the art of discourse, was assimilated to rhetoric and given a practical character. Ascham indeed, in a letter of 1552 and again in his *Scholemaster* (1570), expressed his disapproval of it. But, as early as 1573, we hear of its being defended in Cambridge[1]. And in 1574, when Andrew Melville returned from Geneva and was appointed principal of the University of Glasgow, he "set him wholly to teach things not heard in this country of before[2]," and the *Dialectica* of Ramus took the place of Aristotle's *Organon* or the scholastic manual elsewhere current in the universities of Great Britain. By his published works Temple became celebrated on the continent as well as at home as an expositor and defender of Ramist doctrine; and, doubtless, it is to his activity that Cambridge acquired a reputation in the early part of the seventeenth century as the leading school of Ramist philosophy[3]. Temple began authorship in 1580, under the pseudonym of Franciscus Mildapettus Navarrenus[4], with an *Admonitio* to Digby in defence of the single method of Ramus. Other controversial writings on the same text, against Digby and Piscator of Strasbourg, followed in 1581 and 1582. In 1584 he published an annotated edition of Ramus's *Dialectica*, and in the same year he issued, with a preface by himself, a disputation against Aristotle's

[1] Mullinger, *The University of Cambridge*, II, p. 411.

[2] James Melvill's *Diary* (Edinburgh, Wodrow Society, 1842), p. 49; cf. T. McCrie, *Life of Melville*, I, p. 73; Sir A. Grant, *Story of the University of Edinburgh*, I, p. 80.

[3] See Mullinger, *op. cit.* II, p. 412.

[4] "Navarrenus" proclaims the author's allegiance to Ramus, who was educated at the Parisian collège de Navarre; "Franciscus" may indicate nothing more than the French origin of the doctrine; the word "Mildapettus" is obscure.

doctrine concerning the generation of simple and complex bodies, written by James Martin of Dunkeld, then a professor at Turin. These two books must have been among the first published by the university press, after the restoration of its licence by Burghley, the chancellor, in this year[1].

In clearness of thought and argumentative skill Temple was far superior to Digby. On the more special point in dispute between them—whether the method of knowledge is twofold, from particulars to universals and from universals to particulars, or whether there is only one method of reasoning, that from universals—the truth was not entirely on Temple's side. Nor had his method anything in common with the induction used in the physical sciences. But, in spite of its theoretical weakness, the new logic he recommended had the advantage of clearness and practicality, and was free from the complicated subtleties of the traditional systems. That Bacon was acquainted with the works of Digby and Temple is highly probable, though it cannot be conclusively established. Their influence upon him, however, must have consisted mainly in stimulating his interest in the question of method: they did not anticipate his theory of induction.

While these questions occupied the schools, William Gilbert, fellow of St John's College, Cambridge (1561), president of the Royal College of Physicians (1600), was engaged in the laborious and systematic pursuit of experiments on magnetism which resulted in the publication of the first great English work of physical science, *De Magnete, magneticisque corporibus* (1600). Gilbert expressed himself as decidedly as did Bacon afterwards on the futility of expecting to arrive at knowledge of nature by mere speculation or by a few vague experiments. He had indeed no theory of induction; but he was conscious that he was introducing a "new style of philosophising." His work contains a series of carefully graduated experi-

[1] See Mullinger, *op. cit.* II, pp. 297, 405.

ments, each one of which is devised so as to answer a particular question, while the simpler and more obvious facts were set forth first, and their investigation led by orderly stages to that of the more complex and subtle. It is unfortunate that Bacon was so little appreciative of Gilbert's book, as a careful analysis of the method actually employed in it might have guarded him from some errors. Gilbert has been called "the first real physicist and the first trustworthy methodical experimenter[1]." He was also the founder of the theory of magnetism and electricity; and he gave the latter its name, *vis electrica*. He explained the inclination of the magnetic needle by his conception of the earth as a magnet with two poles; he defended the Copernican theory; and, in his discussion of the attraction of bodies, there is a suggestion of the doctrine of universal gravitation. He had also reached a correct view of the atmosphere as extending only a few miles from the surface of the earth, with nothing but empty space beyond.

On an altogether different plane from Gilbert were two younger contemporaries of Bacon. Robert Fludd, a graduate of Oxford, was a man of fame in his day. He followed Paracelsus, defended the Rosicrucians and attacked Copernicus, Gilbert, Kepler, and Galileo. His works are distinguished by fantastic speculation rather than by scientific method. Nathanael Carpenter, a fellow of Exeter College, Oxford, attacked the physical theory of Aristotle in his *Philosophia libera* (1621). The works of William Harvey belong to the period following Bacon's death, although he had announced his discovery of the circulation of the blood in 1616.

[1] K. Lasswitz, *Geschichte der Atomistik* (1890), I, p. 315.

CHAPTER II

FRANCIS BACON

THE English language may be said to have become for the first time the vehicle of philosophical literature by the publication of Bacon's *Advancement of Learning* in 1605. Hooker's *Ecclesiastical Polity*, which preceded it by eleven years, belongs to theology rather than to philosophy; the nature of William Baldwin's *Treatise of Moral Phylosophie, containing the Sayings of the Wyse* (1547) is sufficiently indicated by its title; and the little-known treatise of Sir Richard Barckley, entitled *A Discourse of the felicitie of man: or his Summum bonum* (1598), consists mainly of amusing or improving anecdotes, and contains nothing of the nature of a moral philosophy. In the sixteenth century, however, a beginning had been made at writing works on logic in English. In 1552, Thomas Wilson published *The Rule of Reason, conteining the arte of logique*. The innovation was not without danger at the time, if it be true that his publication on this subject in a vulgar tongue led to the author's imprisonment by the Inquisition at Rome. His example was followed in safer circumstances by Ralph Lever, who, in his *Arte of Reason rightly termed Witcraft, teaching a perfect way to argue and dispute* (1573), not only wrote in English, but used words of English derivation in place of the traditional terminology —*foreset* and *backset* for "subject" and "predicate," *inholder* and *inbeer* for "substance" and "accident," *saywhat* for "definition" and so on. This attempt was never taken seriously; and a considerable time had to elapse before English became the usual language for books on logic. In the seventeenth century, as well as in the sixteenth, the demands of the universities made the use of Latin almost essential for the purpose.

Bacon's predecessors, whether in science or in philosophy, used the common language of learned men. He was the first to write an important treatise on science or philosophy in English; and even he had no faith in the future of the English language[1]. In the *Advancement* he had a special purpose in view: he wished to get support and cooperation in carrying out his plans; and he regarded the book as only preparatory to a larger scheme. The works intended to form part of his great design for the renewal of the sciences were written in Latin. But the traditional commonwealth of thought was weakened by the forces which issued in the Renaissance; and, among these forces, the increased consciousness of nationality led gradually to greater differentiation in national types of culture, and to the use of the national language even for subjects which appealed chiefly or only to the community of learned men. However much he may have preferred the Latin tongue as the vehicle of his philosophy, Bacon's own action made him a leader of this movement; and it so happened that the type of thought which he expounded had affinities with the practical and positive achievements of the English mind. In this way Bacon has come to be regarded, not altogether correctly, not only as the beginner of English philosophy, but also as representative of the special characteristics of the English philosophical genius.

Francis Bacon was the younger of the two sons of Sir Nicholas Bacon, lord keeper of the great seal, by his second wife Anne, daughter of Sir Anthony Cooke and sister-in-law of Lord Burghley. He was born at York House, London, on 22 January 1561. In April 1573 he was sent, along with his brother Anthony, to Trinity College, Cambridge, where he remained (except for an absence of about six months when the plague raged there) till Christmas 1575. Of his studies in Cambridge we know little or nothing; and it would be easy to lay too

[1] *Letters and Life*, ed. Spedding, VII, p. 429.

great stress on the statement long afterwards made to Rawley, his first biographer, that, before he left the university, he "fell into the dislike of the philosophy of Aristotle; not for the worthlessness of the author, to whom he would ever ascribe all high attributes, but for the unfruitfulness of the way." In 1576 he was sent by his father to France with Sir Amyas Paulet, the ambassador, and in his suite he remained until recalled home by Sir Nicholas's sudden death in February 1579. This event had an unfortunate effect upon his career. A sum of money which his father had set apart to purchase an estate for him had not been invested, and he inherited a fifth part of it only. He had therefore to look to the bar for an income and to the grudging favour of the Cecils for promotion. He was called to the bar in 1582, and entered parliament in 1584: sitting in each successive House of Commons until he became lord keeper. But office was long in coming to him. The queen had been affronted by an early speech of his in parliament in which he had criticised the proposals of the court; and the Cecils always proved more kin than kind. The objects which he sought were never unworthy nor beyond his merits; but he sought them in ways not always dignified. He pleaded his cause in many letters to Burghley and Salisbury and Buckingham; and the style of his supplications can hardly be accounted for altogether by the epistolary manners of the period. In 1589 Burghley got him the reversion of an office in the Star Chamber, worth about £1600 a year; but to this he did not succeed till 1608. From about 1597 he had come to be employed regularly as one of the queen's learned counsel. In 1604 he was made one of his ordinary counsel by King James, with a salary of £40; and Bacon reckoned this as his first preferment. He was made solicitor-general in 1607, attorney-general in 1613, privy councillor in 1616, lord keeper in 1617, lord chancellor in 1618. He was knighted in 1603, but, to his chagrin, along with a crowd of three hundred others;

he was created Baron Verulam in 1618, and Viscount St Albans in 1621. A few weeks later charges of having received bribes from suitors in his court were brought against him in the newly-summoned House of Commons; these were remitted to the House of Lords for trial; he was convicted on his own confession, and sentenced to deprivation of all his offices, to imprisonment in the tower during the king's pleasure, to a fine of £40,000, to exclusion from the verge of the court, and to incapacity from sitting in parliament. The imprisonment lasted a few days only; the fine was made over to trustees for Bacon's benefit; the exclusion from the verge was soon removed; but, in spite of many entreaties, he was never allowed to sit in parliament again.

In the midst of the legal and political work which crowded these years, Bacon never lost sight of his larger ambitions. He published the first edition of his *Essays* in 1597, the second (enlarged) edition appearing in 1612 and the third (completed) edition in 1625. The *Advancement of Learning* was published in 1605, addressed to King James, *De Sapientia Veterum* in 1609, *Novum Organum* in 1620. After his disgrace he lived at Gorhambury, the paternal estate to which he had succeeded on the death of his brother Anthony in 1601, and there he devoted himself to writing. The *History of Henry VII* appeared in 1622, and *De Augmentis Scientiarum* in 1623; the *New Atlantis* was written in 1624; at his death he was at work on *Sylva Sylvarum*; and he left behind him many sketches and detached portions of his great but incomplete design. Bacon had been married in 1606 to Alice Barnham, the daughter of an alderman. He died on 9 April 1626, from the effects of a chill caught by moving out of his carriage in order to try an experiment on the antiseptic properties of snow.

Bacon's plan for the renewal of the sciences was never fully elaborated by himself, and it has never been deliberately and systematically followed by others. In his

personal career, too, there are some events that still remain obscure. But material is not lacking for forming a judgment on his philosophy and on his life. We cannot expect to remove either from the range of controversy. But the life-long devotion of Spedding may be said with confidence to have made one thing clear. Pope's famous epigram—" the wisest, brightest, meanest of mankind " —and the brilliant elaboration of the same in Macaulay's essay cannot be made to fit the facts. Bacon was not a monster; and his character and genius cannot be explained by being set in sharp antithesis. Life and philosophy are revelations of the same mind, and we must expect one to shed light on the other. It is on this account that it is necessary to attempt an estimate of Bacon's character and to touch upon the disputed events in his career, although the questions cannot be discussed at length, and little more can be done than indicate results.

In a fragment[1] written about 1603, and apparently intended as a preface to his great work, Bacon set forth the ambitions which guided his life; and there is no reason for doubting the substantial accuracy of his account. Believing (he begins) that he was born for the service of mankind, he set himself to consider for what service nature had fitted him best. He saw that the good effects wrought by practical statesmen " extend over narrow spaces and last but for short times; whereas the work of the Inventor, though a thing of less pomp and shew, is felt everywhere and lasts for ever." And for this end he thought nature had destined him. " I found that I was fitted for nothing so well as for the study of Truth; as having a mind nimble and versatile enough to catch the resemblances of things (which is the chief point), and at the same time steady enough to fix and distinguish

[1] *De interpretatione naturæ proœmium*, *Works*, III, pp. 518–520. In this and other quotations from the Latin works the translations contained in Ellis and Spedding's edition have been used.

their subtler differences; as being gifted by nature with desire to seek, patience to doubt, fondness to meditate, slowness to assert, readiness to consider, carefulness to dispose and set in order; and as being a man that neither affects what is new nor admires what is old, and that hates every kind of imposture. So I thought my nature had a kind of familiarity and relationship with Truth." His first object, therefore, was the knowledge that would extend and establish the empire of man over nature. But birth and education had introduced him to the service of the state, and "a man's own country has some special claims upon him." For these reasons he sought civil employment; and the service of the State may be said to have been his second object in life. Finally, he adds, "I was not without hope (the condition of Religion being at that time not very prosperous) that if I came to hold office in the state, I might get something done too for the good of men's souls." According to Bacon's own account, therefore, the service of mankind to which he held himself born was to be carried out by devotion to three objects: the discovery of truth, the welfare of his country, and the reform of religion. And of these three objects the first always held the highest place in his thoughts. "I confess," he wrote to Burghley about 1592, "that I have as vast contemplative ends as I have moderate civil ends: for I have taken all knowledge to be my province[1]."

This greatness of design was characteristic of the mind of the period as well as of Bacon personally. But it was accompanied by inadequate preparation in the methods and principles of the exact sciences as understood at the time, and often by an imperfect grasp of details. If the latter defect may be traced in his intellectual work, it is still more apparent in his practical activity. It is not fanciful to connect with this characteristic some of the actions for which he has been most censured. Throughout

[1] *Letters and Life*, I, p. 109.

his career he was never free from financial difficulties; and, when he had obtained high preferment, he maintained a magnificent style of living without exercising any effective control over the expenditure of his household. When the charge of taking bribes was made against him he was much surprised, but he had no defence. It may be true, as he asserted, that he never allowed a present from a suitor to influence his decision; nor do any of his judgments appear to have been reversed on this ground. It may be true also that Bacon only followed the custom of his time: though, on this point, it is difficult to get evidence. But he himself saw the impropriety of a judge being " twice paid "—to quote the mild term of censure used in his *New Atlantis*. And he took no care to guard against the impropriety in his own conduct. In the main he was probably a just, as well as an efficient, judge. But he was too tenacious of his office as he had been too eager to obtain it; and it is hardly possible to resist the evidence for the conclusion that, on one occasion at least[1], he allowed the court favourite Buckingham to influence his decision. In another matter—that of the trial of the Earl of Essex—Bacon's conduct has been blamed in a manner too unqualified. The benefits which he had received at the hands of Essex would not have been a sufficient reason for his standing aside when the need arose for his taking part in the prosecution. The rebellion of Essex had been a real danger to the state and not merely an explosion of bad temper. It was essential that the prosecution should not fail through the case being badly presented; and Bacon's intervention was not merely excusable: it may be argued that it was his duty to safeguard the interests of the state, and to subordinate to them the claims of private friendship and gratitude, in spite of the tragedy of the personal situation. At the same time, it must be admitted that the record of the trial does not suggest that he felt

[1] See the letter of D. D. Heath (one of the editors of the *Works*) in Bacon's *Letters and Life*, VII, pp. 579–588.

the tragedy. Judging from the manner in which he pressed home the charge, the personal factor seems to have touched him but slightly. And this perhaps is characteristic. He was capable of high enthusiasm for ideas and for causes. His philosophical works are inspired by the former; and his writings on public affairs show a spirit of devotion to the common weal as well as political wisdom. But, on the side of personal sentiment, his nature seems to have been cold—not easily stirred to the love or hate which unite and divide mankind.

Bacon intended that his Great Instauration or Renewal of the Sciences should be set forth in six parts. These he enumerated as follows: (1) The Division of the Sciences; (2) The New Organon, or Directions concerning the Interpretation of Nature; (3) The Phenomena of the Universe, or a Natural and Experimental History for the foundation of Philosophy; (4) The Ladder of the Intellect; (5) The Forerunners, or Anticipations of the New Philosophy; (6) The New Philosophy, or Active Science. Of these parts, the last was to be the work of future ages; for the fourth and fifth only prefaces were written; the first three are represented by considerable works, although in none of them is the original design carried out with completeness. Latin was to be the language of them all. The *Advancement of Learning*, which, in great part, covers the ground of the first division, was not written as part of the plan; but *De Augmentis*, which takes its place in the scheme, is, so far, little more than an extended Latin translation of the *Advancement*. Bacon's last work, *Sylva Sylvarum*, which belongs to the third part, was written in English.

Bacon, as he said himself, took all knowledge as his province; his concern was not so much with particular branches of science as with principles, method, and system. For this purpose he sets out by reviewing the existing state of knowledge, dwelling on its defects and pointing out remedies for them. This is the burden of the first

book of the *Advancement* and of *De Augmentis*. In the second book he proceeds to expound his division of the sciences. The principle with which he starts in his classification is psychological: "The parts of human learning have reference to the three parts of man's understanding, which is the seat of learning: history to his memory, poesy to his imagination, and philosophy to his reason." The subdivisions of these, however, are based on differences in the objects, not in the mental faculty employed. History is divided into natural and civil. To the latter of these, ecclesiastical and literary history are regarded as subordinate (although made coordinate in the *Advancement*). Poetry is held to be "nothing else but feigned history," and is subdivided into narrative, representative, and allusive or parabolical. But it is with the last of the three main divisions of learning that Bacon is chiefly concerned.

"In Philosophy," he says, "the contemplations of man do either penetrate unto God, or are circumferred to nature, or are reflected or reverted upon himself. Out of which several enquiries there do arise three knowledges, Divine philosophy, Natural philosophy, and Human philosophy or Humanity. For all things are marked and stamped with this triple character, of the power of God, the difference of nature, and the use of man." But, as the three divisions all spring from a common root, and certain observations and axioms are common to all, the receptacle for these must constitute "one universal science, by the name of *Philosophia Prima*, Primitive or Summary Philosophy." Among the three divisions of philosophy, Bacon's most important thoughts concern natural philosophy. One of his fundamental ideas is expressed by its distinction into two parts—"the inquisition of causes, and the production of effects; Speculative, and Operative; Natural Science, and Natural Prudence." More subtle is the distinction of natural science into physic and metaphysic. The latter term is not used in its

traditional sense, nor is it synonymous with what Bacon calls summary philosophy, which deals with axioms common to several sciences. Both physic and metaphysic deal with natural objects: physic with their material and efficient causes, metaphysic with their formal and final causes. Thus, "Physic is situate in a middle term or distance between Natural History and Metaphysic. For Natural History describeth the variety of things; Physic, the causes, but variable and respective causes; and Metaphysic, the fixed and constant causes." In elaborating this view, Bacon covers ground traversed again in the *Novum Organum*.

Both for its style and for the importance of the ideas which it conveys, the *Novum Organum* ranks as Bacon's greatest work. To its composition he devoted the most minute care. Rawley tells us that he had seen no less than twelve drafts of it in Bacon's own handwriting, rewritten from year to year. As it was at last published its stately diction is a fit vehicle for the prophetic message it contains. The aphorisms into which the matter is thrown add impressiveness to the leading ideas, without seriously interfering with the sequence of the argument. It is chiefly to it that we must go if we would understand the message and the influence of Bacon. And this understanding will be facilitated if we distinguish, as he himself never did, between certain leading ideas which he, more than anyone else, impressed upon the mind of succeeding ages, and his own more special conception of nature and of the true method for its investigation.

Of those leading and general ideas, two have been already indicated. One of these is the belief in the unity of science. His classification of the sciences had in view not only their differences but also their essential oneness. "The divisions of knowledge," he says, "are like branches of a tree that meet in one stem (which stem grows for some distance entire and continuous, before it divides itself into arms and boughs)." They are to be

accepted " rather for lines to mark or distinguish, than sections to divide and separate[1]."

The second of these leading ideas is the practical aim of knowledge. This is a constantly recurring thought, and is, in his own mind, the most fundamental; it is the first distinction which he draws between his own new logic and the old, and it was meant to characterise the new philosophy of which he claims to have made only the beginning. And he enforces it in memorable words: " The matter in hand is no mere felicity of speculation, but the real business and fortunes of the human race, and all power of operation. For man is but the servant and interpreter of nature: what he does and what he knows is only what he has observed of nature's order in fact or in thought; beyond this he knows nothing and can do nothing. For the chain of causes cannot by any force be loosed or broken, nor can nature be commanded except by being obeyed. And so those twin objects, human knowledge and human power, do really meet in one; and it is from ignorance of causes that operation fails[2]."

Bacon's object was to establish or restore the empire of man over nature. This empire depends upon knowledge; but, in the mind of man, there are certain obstacles to knowledge which predispose it to ignorance and error. The doctrine of the tendencies to error inherent in the human mind is another of his fundamental thoughts. These tendencies to error he called *idola mentis*—images or phantoms by which the mind is misled. The name is taken from Plato and contrasted with the Platonic 'idea'; and emphasis is laid on the difference between the idols of the human mind, which are abstractions that distort and misrepresent reality, and the ideas of the divine mind, which are "the creator's own stamp upon reality, impressed and defined in matter by true and exquisite lines[3]." This doctrine had long occupied Bacon's thought; it was

[1] *De Augmentis*, III, i; IV, i; *Works*, I, pp. 540, 580.

[2] *Novum Organum*, ' distributio operis.'

[3] *N.O.*, I, 124.

stated in the *Advancement*, where, however, the last of the four classes of idols is wanting; and it was completely set forth for the first time in the *Novum Organum*.

In the latter work four classes of idols are distinguished: idols of the tribe, idols of the cave, idols of the market-place, and idols of the theatre. Under these graphic titles Bacon works out a doctrine which shows both originality and insight. The originality is conspicuous in what he says concerning the idols of the tribe. They are deceptive tendencies which are inherent in the mind of man as such and belong to the whole human race. The understanding, he says, is like a false mirror that distorts and discolours the nature of things. Thus, it supposes more order and regularity in the world than it finds, as when it assigns circular motion to the celestial bodies; it is more moved and excited by instances that agree with its preconceptions than by those that differ from them; it is unquiet, and cannot rest in a limit without seeking to press beyond it, or in an ultimate principle without asking for its cause; it "is no dry light, but receives an infusion from the will and affections"; it depends on the senses, and they are "dull, incompetent, and deceptive"; and it is "prone to abstractions and gives a substance and reality to things which are fleeting." The idols of the cave belong not to the race but to the individual. They take their rise in his peculiar constitution, and are modified by education, habit, and accident. Thus some minds are apt to mark differences, others resemblances, and both tend to err, though in opposite ways; or again, devotion to a particular science or speculation may so colour a man's thoughts that everything is interpreted by its light. The idols of the market-place are those due to the use of language, and they are the most troublesome of all. "For men believe that their reason governs words; but it is also true that words react on the understanding; and this it is that has rendered philosophy and the sciences sophistical and inactive." Finally, the idols of the theatre are due to

"philosophical systems and the perverted rules of demonstration." In this connection Bacon classifies "false philosophies" as sophistical, empirical, and superstitious. In his amplification of this division, his adverse judgment upon Aristotle may be discounted; his want of appreciation of Gilbert is a more reasonable matter of regret; but, at bottom, his view is sound that it is an error either to "fashion the world out of categories" or to base a system on "the narrowness and darkness of a few experiments."

This criticism of the sources and kinds of error leads directly to an explanation of that "just and methodical process" of arriving at truth which Bacon calls the interpretation of nature. The process is elaborate and precisely defined; and it rests on a special view of the constitution of nature. Neither this view nor the details of the method have exerted much influence upon the progress of science. But underlying them both was the more general idea of the importance of an objective attitude to nature and of the need of systematic experiment; and of this general idea Bacon was, not indeed the originator, but the most brilliant and influential exponent. In the study of nature all preconceptions must be set aside; we must be on our guard against the tendency to premature "anticipations" of nature: "the subtlety of nature is greater many times over than the subtlety of argument"; men must be led back to the particular facts of experience, and pass from them to general truths by gradual and unbroken ascent; "we must begin anew from the very foundation," for "into the kingdom of nature as into the kingdom of grace entrance can only be obtained *sub persona infantis*[1]."

These general but fruitful ideas do not exhaust Bacon's teaching. He looked forward to the speedy establishment of a new philosophy which should be distinguished from the old by the completeness of its account of reality and by the certainty of its results. His new method seemed to give him a key to the subtlety of nature; and this

[1] *N.O.*, I, 68.

method would, incidentally, tend to equalise intellectual capacities[1] so that all minds who followed it with care and patience would be able to find truth and use it for fruitful works.

"It is a correct position," says Bacon, "that true knowledge is knowledge by causes." But the way in which he understands this position is significant. He adopts the Aristotelian division of causes into four kinds: material, formal, efficient, and final. Physic deals with the efficient and material causes; but these, apart from their relation to the formal cause, "are but slight and superficial, and contribute little, if anything, to true and active science." The enquiry into the other two belongs to that branch of natural philosophy which he calls metaphysic. "But of these the final cause rather corrupts than advances the sciences, except such as have to do with human action," and "the discovery of the formal is dispaired of[2]." Yet forms must be investigated if nature is to be understood and controlled. Thus the second book of the *Novum Organum* opens with the aphorism, "On a given body to generate and superinduce a new nature is the work and aim of human power. Of a given nature to discover the form ... is the work and aim of human knowledge."

What, then, does Bacon mean by 'form'? He gives many answers to this question, and yet the meaning is not altogether easy to grasp. Form is not something mental; it is not an idea, nor is it a mere abstraction; it is itself physical. According to Bacon, nothing really exists in nature except individual bodies. But the 'forms of substances' are so complicated that their investigation, if possible at all, must be postponed until enquiry has been made into forms of a simpler kind—those of the qualities or 'natures' possessed by substances[3]. The form is the condition or ground of these natures: its presence determines the presence of the relative nature;

[1] *N.O.*, I, 61. [2] *N.O.*, II, 2; cp. *Works*, I, p. 364, IV, p. 360.
[3] *De Augmentis*, III, 4; *Works*, I, p. 365.

with its absence the nature vanishes; further, a true form deduces the given nature from some source of being or essence which is inherent in many different things[1]. Thus the form would seem to be expressed by a definition *per genus et differentiam*. This explanation, however, is supplemented by another which identifies form with law. "When I speak of forms," he says, "I mean nothing more than those laws and determinations of absolute actuality which govern and constitute any simple nature, as heat, light, weight, in every kind of matter and subject that is susceptible of them. Thus the form of heat or the form of light is the same thing as the law of heat or the law of light[2]." And again, "The form of a thing is the very thing itself, and the thing differs from the form no otherwise than as the apparent differs from the real, or the external from the internal, or the thing in reference to man from the thing in reference to the universe[3]."

The complexity of the physical universe is due to the combination, in varied ways, of a limited number of forms which are manifested to us in sensible qualities. If we know the form, we know what must be done to superinduce the quality upon a given body. Hence the practical character of Bacon's theory. Here also is brought out an idea that lies at the basis of his speculative doctrine—the idea that the forms are limited in number. They are, as it were, the alphabet of nature; when they are understood, the whole language will be clear. Philosophy is not an indefinite striving after an ever-receding goal. Its completion may be expected in the near future, if only the appropriate method is followed.

The new method leads to certainty. Bacon is almost as contemptuous of the old induction, which proceeded from a few experiments to general laws, as he is of the syllogism. His new induction is to advance by gradual

[1] *N.O.*, II, 4; cp. Fowler's edition, 2nd ed., pp. 54 ff.
[2] *N.O.*, II, 17. [3] *N.O.*, II. 13.

stages of increasing generality, and it is to be based on an exhaustive collection of instances. This collection of instances is the work of what Bacon called natural history, and he laboured to give specimens of the collections required. He always recognised that the collaboration of other workers was needed for their completion and that the work would take time. His sense of its magnitude seems to have deepened as it progressed; but he never realised that the constant process of development in nature made an exhaustive collection of instances a thing impossible.

Given the requisite collection of instances, the inductive method may be employed without risk of error. For the form is always present where the nature (or sensible quality) is present, absent where it is absent and increases or decreases with it. The first list of instances will consist of cases in which the nature is present: this is called the table of essence and presence. Next come the instances most akin to these in which nevertheless the nature is absent: this is called the table of absence in proximity. Thirdly, a list is made of instances in which the nature is found in different degrees, and this is the table of degrees or comparison. True induction begins here, and consists in a 'rejection or exclusion' of the several natures which do not agree in these respects with the nature under investigation. The non-essential are eliminated; and, provided our instances are complete and our notions of the different natures adequate, the elimination will proceed with mechanical precision. Bacon saw, however, that the way was more intricate than this statement suggests—especially owing to the initial difficulty of getting sound and true notions of simple natures[1]. Aids therefore must be provided. In the first place, he will allow the understanding to essay the interpretation of nature on the strength of the instances given. This " commencement of interpretation," which, to some extent, plays the part of

[1] *N.O.*, II, 19.

hypothesis (otherwise absent from his method), receives the quaint designation of First Vintage. Other helps are then enumerated which Bacon proposes to treat under nine heads: prerogative instances; supports of induction; rectification of induction; varying the investigation according to the nature of the subject; prerogative natures (or what should be enquired first and what last); limits of investigation (or a synopsis of all natures in the universe); application to practise; preparations for investigation; ascending and descending scale of axioms. Only as regards the first of these is the plan carried out. The remainder of the *Novum Organum* is taken up with the discussion of twenty-seven kinds of prerogative instances; and here are to be found many of his most valuable suggestions, such as his discussion of solitary instances and of crucial instances.

Although the new method was never expounded in its completeness, it is possible to form a judgment on its value. In spite of the importance and truth of the general ideas on which it rests, it has two serious defects, of which Bacon himself was not unaware. It gives no security for the validity and accuracy of the conceptions with which the investigator works, and it requires a complete collection of instances, which, in the nature of things, is impossible. Coupled with these defects, and resulting from them, are Bacon's misunderstanding of the true nature and function of hypothesis, upon which all scientific advances depend, and his condemnation of the deductive method, which is an essential instrument in experimental verification. The method of scientific discovery and proof cannot be reduced to the formulae of the second book of the *Novum Organum*.

In spite of the width of his interests, especially in the domain of science, Bacon himself did not make any new discovery. His suggestions sometimes show insight, but also a certain crudity of conception which is connected with his inadequate general view of nature. The exposi-

tion of his method in the second book of the *Novum Organum* is illustrated throughout by an investigation into the form or cause of heat. The result at which he permits himself to arrive as the 'first vintage' of the enquiry exhibits this combination of insight and crudity. He reaches the conclusion that heat is a particular case of motion. The specific differences which distinguish it from its genus are that it is an expansive motion; that its direction is towards the circumference of the body, provided the body itself has a motion upwards; that it is a motion in the smaller parts of the body; and that this motion is a rapid motion of fine (but not the finest) particles of the body. This and other investigations of his own were abandoned without reaching a clear result. His knowledge of science was also deficient, especially in the region of the exact sciences. He looked for an increase of astronomical knowledge from Galileo's telescope, but he appears to have been ignorant of the work of Kepler; he ignored Napier's invention of logarithms and Galileo's advances in mechanical theory; and his judgment on the Copernican theory became more adverse at the very time when that theory was being confirmed by Galileo and Kepler[1]. These defects in his own scientific equipment were closely connected with some of the peculiarities in detail of the method he recommended. And the two things together may explain the sneer of his contemporary Harvey, that he wrote philosophy like a lord chancellor. Nor is it very difficult to understand the attitude of most subsequent men of science, who have honoured him as the originator of the experimental method but silently ignored his special precepts. His method was not the method of the laboratory. When the objects investigated can be observed only directly as they occur in nature, greater importance must be assigned to the exhaustive enumeration of facts upon which Bacon insisted. Darwin, for example, has recorded that, in

[1] Compare Spedding, in Bacon's *Works*, III, pp. 511, 725.

starting his enquiry, he " worked on true Baconian principles, and, without any theory, collected facts on a wholesale scale[1]." But Bacon did not recognise that, in investigations of this sort also, the enumeration must be guided by an idea or hypothesis, the validity of which is capable of being tested by the facts. He overlooked the function of the scientific imagination—a power with which he himself was richly endowed.

According to Bacon, " human knowledge and human power meet in one "; and the stress which he laid upon this doctrine lends interest to his discussions on practical principles. His views on ethical and political theory, however, were never set forth systematically or with completeness. They are to be found in the second book of the *Advancement* and in the seventh and eighth books of *De Augmentis*, as well as in the *Essays* and in some of his occasional writings. His observations on private and public affairs are full of practical wisdom, for the most part of the kind commonly called ' worldly.' He was under no illusions about the ordinary motives of men, and he thought that " we are much beholden to Machiavel and others, that write what men do and not what they ought to do." Fundamental principles are dealt with less frequently, but they are not altogether neglected. A preference is expressed for the active over the contemplative life, for " men must know that in this theatre of man's life it is reserved only for God and angels to be lookers on." Aristotle's reasons for preferring the contemplative life have respect to private good only. But the " exemplar or platform of good " discloses a double nature: " the one, as everything is a total or substantive in itself; the other, as it is a part or member of a greater body; whereof the latter is in degree the greater and the worthier, because it tendeth to the conservation of a more general form (*formae amplioris*)[2]." In this way Bacon introduced

[1] *Charles Darwin: his life told in an autobiographical chapter* (1902), p. 40.

[2] *De Augmentis*, VII, I; *Advancement*, II; *Works*, I, p. 717, III, p. 420.

into English ethics the distinction, on which many controversies have turned, between private and public good. But the nature of this good is not subjected to philosophical analysis.

A similar remark has to be made regarding Bacon's contributions to political theory. There is much discussion of matters of detail, but first principles are barely mentioned. The 'arts of government' are said to contain three duties: the preservation, the happiness and prosperity, and the extension, of empire; but only the last is discussed. Bacon maintained the independence of the civil power, and, at the same time, defended the royal prerogative; nevertheless, his ideal of the state was not arbitrary government but the rule of law. In the *Advancement* he had noted that "all those which have written of laws have written either as philosophers or as lawyers, and none as statesmen. As for the philosophers, they make imaginary laws for imaginary commonwealths; and their discourses are as the stars, which give little light because they are so high. For the lawyers, they write according to the states where they live, what is received law, and not what ought to be law." And he goes on to say that "there are in nature certain fountains of justice, whence all civil laws are derived but as streams." To this subject he returns in the eighth book of *De Augmentis*, which closes with a series of aphorisms on universal justice. In these aphorisms all civil authority is made to depend on "the sovereign power of the government, the structure of the constitution, and the fundamental laws"; law does not merely protect private rights; it extends to "everything that regards the well-being of the state"; its end is or should be the happiness of the citizen; and "that law may be set down as good which is certain in meaning, just in precept, convenient in execution, agreeable to the form of government, and productive of virtue in those that live under it."

Bacon's contributions to 'human philosophy' do not

rank in importance with his reforming work in natural philosophy; and his influence on the moral sciences was later in making itself felt, though it was similar in character to his influence on natural science. He often appealed for help in carrying out his new philosophy; but neither in natural science, nor in moral science, nor in philosophy generally, did he found a school. The philosophical writings which belong to the period following Bacon's death show but slight traces of his influence. His genius was recognised, and he was quoted now and again on special points; but his leading doctrines were generally ignored. No new logic appeared on the lines described in his *Novum Organum*. The writers of logical treatises followed the traditional scholastic method or adopted the modifications of it introduced by Ramus. Even Milton's logic, which is founded on that of Ramus, pays no attention to the Baconian revolution. Harvey's unfavourable judgment on his work has been already quoted. Hobbes, who acted for a time as his secretary, does not seem to have been influenced by him in any important manner. And yet it is the leading thinkers—men such as Leibniz and Hume and Kant—who acknowledge most fully the greatness of Bacon. His real contribution to intellectual progress does not consist in scientific discoveries or in philosophical system; nor does it depend on the value of all the details of his method. But he had the insight to discover, the varied learning to illustrate, and the eloquence to enforce, certain principles regulative of the mind's attitude to the world which, once grasped, became a permanent possession. He did more than anyone else to help to free the intellect from preconceived notions and to direct it to the unbiased study of facts, whether of nature, of mind, or of society; he vindicated an independent position for the positive sciences; and to this, in the main, he owes his position in the history of modern thought.

CHAPTER III

HERBERT OF CHERBURY AND OTHERS

WHILE Bacon was engaged upon his plan for the renewal of the sciences, his younger contemporary Edward Herbert was at work upon a similar problem. But the two men had little in common except their vaunted independence of tradition and their interest in the question of method. And their thinking diverged in result. Bacon is claimed as the father of empirical or realistic philosophy; Herbert influenced, and to some extent anticipated, the characteristic doctrines of the rationalist or intellectualist school of thought.

Edward Herbert, the representative of a branch of the noble Welsh family of that name, and elder brother of George Herbert the poet, was born at Eyton in Shropshire on 3 March 1583, matriculated at University College, Oxford, in 1595, married in 1599, and continued to reside at Oxford till about 1600, when he removed to London. He was made a Knight of the Bath soon after the accession of King James. From 1608 to 1618 he spent most of his time on the continent, as a soldier of fortune: seeking occasionally the society of scholars, in the intervals of the campaign, the chase, or the duel. In 1619 he was appointed ambassador at Paris; after his recall in 1624 King James rewarded him with an Irish peerage. He was created an English peer as Baron Herbert of Cherbury in 1629. The civil war found him unprepared for decision; but he ultimately saved his property by siding with the parliament. He died in London on 20 August 1648.

His works were historical, literary, and philosophical. His account of the Duke of Buckingham's expedition to Rhé and his history of Henry VIII were written with a

view to royal favour. The latter was published in 1649; a Latin version of the former appeared in 1658, the English original not till 1860. His literary works—poems and autobiography—are of much higher merit. The former were published by his son in 1665; the latter was first printed by Horace Walpole in 1764. His philosophical works give him a distinct and interesting place in the history of thought. His greatest work, *De Veritate*, was, he tells us, begun in England and "formed there in all its principal parts." Hugo Grotius, to whom he submitted the manuscript, advised its publication; but it was not till this advice had been sanctioned (as he thought) by a sign from heaven that he had the work printed (Paris, 1624). To the third edition (London, 1645) he added a short treatise *De Causis Errorum*, a dissertation entitled *Religio Laici*, and an *Appendix ad Sacerdotes*. In 1663 appeared his *De Religione Gentilium*—a treatise on what is now called comparative religion. A popular account of his views on religion was published in 1768 under the title *A Dialogue between a Tutor and his Pupil, by Edward Lord Herbert of Chirbury*; and, although the external evidence is incomplete, it may have been from his pen.

Herbert does not stand in the front rank of speculative thinkers; but his claims as a philosopher are worthy of note. Like Bacon he was occupied with the question of method; and his enquiry went deeper, though it was less effective upon philosophical opinion. Bacon, it may be said, investigated the criteria and canons of evidence, whereas Herbert sought to determine the nature and standard of truth. Descartes soon afterwards referred to the question and put it aside, saying of Herbert[1]: "he examines what truth is; for myself, I have never doubted about it, as it seems to me to be a notion so transcendentally clear that it is impossible to ignore it." The problem which Herbert put before himself concerned the conditions of knowledge; and it has a bearing upon later

[1] In a letter of 16 Oct. 1639; *Oeuvres*, ed. Adam and Tannery, II, pp. 576 f.

thought, though it arises out of traditional views. In the end of the following century Kant said that his own new point of view was due to discarding the belief that "all our cognitions must conform to objects," which had been "hitherto assumed." This was, indeed, the prevailing doctrine. Perception was held to be a 'passio mentis' produced by the activity of the object which impressed its image (or, to use the term which Descartes and Locke made familiar, an idea) upon the mind. This view was rejected by Herbert as decidedly as by Kant, though he did not anticipate the Kantian revolution by assuming that "objects must conform to our cognition."

The distinction between mind and body had not yet been sharpened and turned into antagonism by the Cartesian dualism. Man is a complex of mind and body, and, according to Herbert, all that is passive in him is body[1]—though body itself is not purely passive. Mind, however, is never passive. It acts but is not acted upon[2]. Things do not act upon it but are put within the sphere of its operation[3]. Nevertheless, it requires an occasion, or the presence of objects, to awaken its activity, even in its highest operations[4]. Herbert's expressions are not quite consistent, for this awakening of mental activity is itself an effect upon mind; but perhaps he might have defended his doctrine by appealing to the harmony which exists between faculty and object. For in this lies his fundamental conception—different alike from the traditional view that cognition must conform to objects, and from the Kantian view that objects must conform to cognition. The mental faculty supplies a form analogous to the object as it exists[5]; the object, again, neither undergoes an alteration of nature nor produces one, but only enters, as it were, into the faculty's range of view. The whole process is only intelligible on the supposition of a harmony

[1] *De Veritate*, 3rd ed., p. 72.
[2] *Ibid.* p. 91.
[3] *Ibid.* p. 95.
[4] *Ibid.* p. 27.
[5] *Ibid.* p. 95.

between the world and man's mind. In this harmony the human body, fashioned out of the material of the external world and containing the sense-apparatus which lead to the 'inner court' of consciousness, forms the bond of union.

Herbert's doctrine of the nature of truth rests on this conception of harmony. "Truth," he says, "is a certain harmony between objects and their analogous faculties[1]." Four kinds or degrees of truth are distinguished by him: truth of the thing; truth of appearance; truth of concept; and truth of intellect. These seem to be arranged in an ascending scale. The first does not exclude the others; the last includes all the preceding, being the 'conformity' of the several 'conformities' they involve. The conditions of truth are also made to explain the possibility of error, for the causes of error lie in the intermediate stages between the thing and the intellect. The root of all error is in confusion—in the inappropriate connection of faculty and object—and it is for the intellect to expose the inappropriate connection and so to dissipate the error.

The doctrine arrived at is summed up in seven propositions[2]; and all these hinge upon the postulate that mind corresponds with things not only in their general nature but in all their differences of kind, generic and specific. Every object is cognate to some mental power or faculty, and to every difference in the object there corresponds a different faculty. Herbert attempts no account of nature, and his psychology is only introduced in the interests of his doctrine of truth; but it is clear that there cannot be fewer faculties than there are differences of things. A faculty is defined as any internal force which unfolds a different mode of apprehension (*sensus*) to a different object[3]; and faculties are spoken of as *radii animae*, which perceive objects, or rather the images given out by objects, in accordance with mutual analogy. These images

[1] *De Veritate*, p. 68. [2] *Ibid.* pp. 8–12.
[3] *Ibid.* p. 30.

may be conveyed by the same sense-apparatus and yet be apprehended by different faculties, as is the case with figure and motion[1]. Hence countless faculties; but their very multiplicity suggests that Herbert cannot have attributed to them the same degree of independence as did the 'faculty-psychologists' of a recent generation. They may be said to be simply modes of mental operation; and mind operates differently as different kinds of objects are brought before it, showing always an aspect of its cognitive power analogous to the object.

Reflecting upon the various modes of mental activity, we may arrange these faculties into four classes: natural instinct, internal sense, external sense, and discourse or reasoning. These are not separate powers; and, although Herbert may have sometimes spoken of them as such, another doctrine may be found in his writings. According to this doctrine all mental faculty is regarded as informed in less or greater measure by the intellect, which is itself a manifestation in man of the universal divine providence. "Our mind," he says, "is the highest image and type of the divinity, and hence whatever is true or good in us exists in supreme degree in God. Following out this opinion, we believe that the divine image has also communicated itself to the body. But, as in the propagation of light there is growing loss of distinctness as it gets farther from its source, so that divine image, which shines clearly in our living and free unity, first communicates itself to natural instinct or the common reason of its providence, then extends to the numberless internal and external faculties (analogous to particular objects), closes into shade and body, and sometimes seems as it were to retreat into matter itself[2]."

The name 'natural instinct' is badly chosen; but it is not difficult to see what Herbert means by it. In particular, it is the home of those 'common notions' (as he calls them) which may be said to underlie all experience

[1] *De Veritate*, p. 78. [2] *Ibid.* p. 70.

and to belong to the nature of intelligence itself. Some of these common notions are formed without any assistance from discourse or the ratiocinative faculty; others are only perfected by the aid of discourse. The former class is distinguished by certain tests or marks. Some of these tests are logical (such as independence, certainty, and necessity); others are psychological (such as priority in time and universality). But it is the last-named mark or "universal consent" that is made by him "the highest rule of natural instinct[1]," and "the highest criterion of truth[2]."

This appeal to universal consent makes Herbert a precursor of the philosophy of Common Sense, and lays him open to the criticism urged by Locke that there are no truths which can satisfy the test, there being nothing so certain or so generally known that it has not been ignored or denied by some. Herbert made little if any use of the tests by which he might have shown that certain common notions are presupposed in the constitution of experience, and thus failed to carry out the theory of knowledge of which at times he had a clear view.

The common notions are practical as well as theoretical —yield the first principles of morals as well as those of science. But he attempted no complete account of them and limited his investigation to the common notions of religion. To this portion of his work his direct influence as a thinker is chiefly due, for it determined the scope and character of the English Deistical movement. The common notions of religion are, he holds, the following: (1) that there is a supreme Deity; (2) that this Deity ought to be worshipped; (3) that virtue combined with piety is the chief part of divine worship; (4) that men should repent of their sins and turn from them; (5) that reward and punishment follow from the goodness and justice of God, both in this life and after it. These five articles contain the whole doctrine of the true catholic church,

[1] *De Veritate*, p. 60. [2] *Ibid.* p. 39.

that is to say, of the religion of reason. They also formed the primitive religion before the people "gave ear to the covetous and crafty sacerdotal order." What is contrary to the 'five points' is contrary to reason and therefore false; what is beyond reason but not contrary to it may be revealed: but the record of a revelation is not itself revelation but tradition; and the truth of a tradition depends upon the narrator and can never be more than probable.

A separate work—*De Religione Gentilium*—was devoted to the verification of these results on the field of what is now called comparative religion. In respect of this work the claim may be justly made for Herbert that he was one of the first—if not the first—to make a systematic effort after a comparative study of religions. But he had no idea of the historical development of belief, and he looked upon all actual religions—in so far as they went beyond his five articles—as simply corruptions of the pure and primitive rational worship.

Religion is as powerful a stimulus to philosophical thought as science is, and it is apt to lead more directly to the study of ultimate problems. It was the chief interest in the speculative writings of Herbert of Cherbury, and the same interest is even more directly obvious in other writings. In 1599 Sir John Davies had published his philosophical poem *Nosce Teipsum*, in which a view of the nature of the soul and arguments for its immortality are "expounded in two elegies." Utilising Platonic, as well as Aristotelian, ideas, the author worked out a spiritual philosophy in which the soul is regarded as akin to the universal order,

> For Nature in man's heart her lawes doth pen;
> Prescribing *truth* to *wit*, and *good* to *will*,
> Which doe *accuse*, or else *excuse* all men,
> For euery thought or practise, good or ill:

and therefore the soul can find no true satisfaction in earthly things:

Wit, seeking *Truth*, from cause to cause ascends,
And never rests till it the *first* attaine:
Will, seeking *Good*, finds many middle ends,
But neuer stayes, till it the *last* doe gaine.

The same influence led to work of a philosophical kind among theologians, usually conveyed in a scholastic manner. In his *Atheomastix* (1622), Martin Fotherby, bishop of Salisbury, relied chiefly on St Thomas Aquinas in his demonstration of the being of God, and maintained that there is a 'natural prenotion' that there is a God. The work of George Hakewill, archdeacon of Surrey, entitled *An Apologie or Declaration of the Power and Providence of God* (1627), touches on philosophy without being genuinely philosophical in character. Bacon is referred to for his "noble and worthy endeavour...so to mix and temper practice and speculation together, that they may march hand in hand"; but his new method is not spoken of, though both Ramus and Lully are referred to in the section on advances in logic. Nor does the discussion on truth contain any observations beyond the ordinary commonplaces: it does not show any knowledge of Herbert of Cherbury's enquiry, and can hardly have suggested ideas to Lord Brooke. The real importance of the book lies in the fact that the author's eyes are turned to the future, not to the past. It is an elaborate argument against the view that the history of the world is a record of deterioration from an earlier golden age. As described on the title-page, it is "an examination and censure of the common error touching nature's perpetual and universal decay."

Much more important is the work of Lord Brooke, in whom the puritan temper was combined with the mystic. Robert Greville, cousin and adopted son of Fulke Greville, first Lord Brooke, was born in 1608, and entered parliament in 1628. In the civil war he acted as a general of the parliamentary army, gained the victory of Kineton in 1642, took Stratford-on-Avon in February 1643, and was

killed at the attack on Lichfield a few weeks later. He was an ardent puritan, and in 1641 wrote *A Discourse opening the nature of that Episcopacie which is exercised in England*, aimed at the political power of the bishops. In the same year was published his philosophical work *The Nature of Truth*. In this work he refuses to distinguish between philosophy and theology. "What is true philosophy but divinity?" he asks, "and if it be not true, it is not philosophy." He appeals to reason and reflection alone for an answer to his question; but his method differs from that of Herbert of Cherbury in dealing with the same subject: it is less logical and thorough, and more mystical. He had 'dived deep," his editor says, "into prophetic mysteries." He was also well read in speculative, especially Neoplatonic, writings.

The revival of Platonism had already affected English literature; its influence may be seen in the works of Sir Thomas More and in Davies's *Nosce Teipsum*, and it had coloured the Aristotelianism of Everard Digby; but Brooke was the first Englishman to present in an original treatise the fundamental ideas which, later in the same century, bore riper fruit in the works of the Cambridge Platonists. The two doctrines of the unity of reality and the emanation of all things from God rule his thought; and he thinks that difficulties about truth are solved when we see that the understanding, the soul, light, and truth are all one: all being is but one emanation from above, diversified only in our apprehension. Faith and reason differ in degree only, not in nature; knowledge and affection are but several shapes under which truth is present to our view: "what good we know, we are; our act of understanding being an act of union." The author goes on to explain that all the diversities of things—even space and time themselves—are without reality and are only appearances to our apprehension. The whole physical world, accordingly, is merely phenomenal; in it there is no true being, nor are there any true causes, though it

is allowable, " when you see some things precede others," to "call the one a cause the other an effect." In these expressions have been found anticipations of the idealism of Berkeley and of Hume's theory of causation. In presenting his doctrine Brooke wrote like a seer, rather than as a logician who has tested its consistency and adequacy. But he had the seer's vision, and the vision gave him courage, " for if we knew this truth," he says, " that all things are one, how cheerfully, with what modest courage, should we undertake any action, reincounter any occurrence, knowing that that distinction of misery and happiness, which now so perplexeth us, has no being except in the brain."

The doctrine of a law of nature was commonly relied upon by the more philosophical writers who dealt with the details of moral duty. Among the moralists of this class may be reckoned William Perkins, author of *Armilla aurea* (1590) (Englished as *A Golden Chaine*, 1600), and of *The Whole Treatise of the Cases of Conscience* (1608); William Ames, a Calvinistic theologian, who wrote *De Conscientia et ejus jure vel casibus* (1630); and Robert Sanderson, bishop of Lincoln, who wrote not only a Latin compendium of logic (Oxford, 1615), but many works besides, including *De juramenti promissorii obligatione* (1647), and *De obligatione conscientiae*. The former of these is said to have been translated into English by King Charles during his imprisonment. Joseph Hall, bishop of Norwich and satirist, was the author of *Characters of Vertues and Vices* (1608) and of *Decisions of diverse Practical Cases of Conscience* (1649). But the greatest work of the kind in English, and perhaps the greatest treatise on casuistry ever written by a protestant theologian, is the *Ductor Dubitantium* of Jeremy Taylor (1660). Publishing shortly after the Restoration, and dedicating his book to the king, the author rejoices that "now our duty stands on the sunny side." He professes to open out a way

untrodden before. He will not collect individual cases of conscience, for they are infinite; but he seeks to provide a "general instrument of moral theology, by the rules and measures of which the guides of souls may determine the particulars that shall be brought before them." The work opens with a description of conscience as a reflection of the divine law—"the brightness and splendour of the eternal light, a spotless mirror of the divine majesty, and the image of the goodness of God." It proceeds to describe the characteristics of individual consciences when brought into contact with the problems of conduct; it passes on to an enquiry into the nature of law in general, and of particular laws, divine and human; and it closes with a discussion of the nature and causes of good and evil. The whole forms a comprehensive treatise on Christian ethics, based undoubtedly on traditional scholastic doctrines, but holding firmly to the inwardness of morality, and illustrated by an extraordinary wealth of concrete examples.

It is only to a small extent that the writings of John Selden, historian, jurist, and political writer, fall within the scope of this work. His treatise *De Dis Syris* (1617), his *Historie of Tithes* (1618), and most of his other works lie beyond its range. But, in his treatment of the law of nature, he entered upon topics which are common to him and the philosophers. In his *Mare Clausum* (1635) he maintained two propositions against Grotius: first, that, by the law of nature, the sea is not common to all men but is capable of private sovereignty or proprietorship, equally with the earth; and, secondly, that the king of Great Britain is sovereign of the surrounding seas, as an individual and perpetual appanage of the British empire. As was usual in his day and for long afterwards, he identified the law of nature with international law. This identification is seen in the title of his work *De jure naturali et gentium juxta disciplinam Hebraeorum* (1640). But here he has in view not the law or custom which regulates the

relation of state to state, but the natural or moral law which is common to all men independently of positive enactment divine or human. With the wealth of learning in which he was without a rival in his day, he traces the opinions of the Jews on the subject of moral obligation, and, at the same time, brings out his own view of the law of nature. He holds, with most jurists, that law requires an authority to prescribe it, and that therefore reason cannot be the source of law. At the same time, he allows that God has imprinted certain moral rules in the minds of all men.

Speculation on these and kindred topics was soon to enter upon a new stage under the impulse derived from the original mind of Hobbes. Before his work is dealt with, two other writers may be mentioned. Sir Kenelm Digby, remarkable in many departments of life and letters, was also a philosopher, and wrote a treatise on the immortality of the soul (1644). In 1655 Thomas Stanley, well known as a classical scholar, published the first *History of Philosophy* written in the English language.

CHAPTER IV

THOMAS HOBBES

THOMAS HOBBES was born at Westport, adjoining Malmesbury in Wiltshire, on 5 April 1588. His father, the vicar of the parish (so Aubrey[1] tells us), "was one of the ignorant Sir Johns of Queen Elizabeth's time, could only read the prayers of the church and the homilies, and valued not learning, as not knowing the sweetness of it." His mother came of yeoman stock. Of her we know nothing beyond the story of her dread of the Spanish Armada: the air was full of rumours of its approach; and her terror led to the premature birth of her second son. As he put it long afterwards, "she brought forth twins—myself and fear." The expression is significant, used, as it was, when he could look back on more than eighty years of life, begun amidst the terror of invasion and afterwards harassed by civil war and unstable government. To seek peace and follow it became, in his view, the fundamental law of nature; and the philosopher was himself (to use his own phrase) a "man of feminine courage." "The first of all that fled" at the threat of civil war, he was afterwards quick to return when the French government seemed likely to offer less protection than the Commonwealth. But the importance of these events for his life and doctrine has sometimes been exaggerated. He had passed his fiftieth year before the threat of danger touched him, and, by that time, he had already completed a work which contains in outline the essential features of his philosophy. Throughout the long years of preparation which fitted him to take his place among the greatest of

[1] John Aubrey (1626–97), *Letters written by eminent persons . . . and Lives of eminent men*, 1813; *Brief Lives*, ed. by A. Clark, 1898.

modern philosophers, Hobbes led a sheltered and leisured life, and it is not to be supposed that dreams of the Armada disturbed his quiet. His education was provided for by an uncle, a solid tradesman and alderman of Malmesbury. He was already a good Latin and Greek scholar when, not yet fifteen, he was sent to Magdalen Hall, Oxford. The studies of the university were then at a low ebb; and no subsequent reforms affected his low opinion of them. Yet he seems to have learned the logic and physics of Aristotle, as they were then taught, though he preferred to "lie gaping on maps" at the stationers' shops. On leaving Oxford, in 1608, he became companion to the eldest son of Lord Cavendish of Hardwicke (afterwards created Earl of Devonshire), and his connection with the Cavendish family lasted (although not without interruptions) till his death. Through this connection he gained security and leisure for his own work, opportunities of travel, and ready admission to the society of statesmen and scholars.

Three times in his life Hobbes travelled on the continent with a pupil. His first journey was begun in 1610, and in it he visited France, Germany, and Italy, learning the French and Italian languages, and gaining experience, but not yet conscious of his life's work. On his return (the date is uncertain), he settled down with his young lord at Hardwick and in London. His secretarial duties were light, and he set himself to become a scholar; with the society and books at his command, he did not "need the university" (he said); he read the historians and poets, both Greek and Latin, and taught himself a clear and accurate Latin style. To these studies his first published work bears witness—an English translation of Thucydides, sent to press in 1628, but completed some years earlier. To this period, also, belongs his acquaintance with Bacon, Herbert of Cherbury, Ben Jonson, and other leading men of the time. Of his association with Bacon (probably sometime in the years between 1621 and 1626) we know

little beyond what Aubrey tells us—that he translated some of Bacon's essays into Latin, that, on occasion, he would attend with ink and paper and set down Bacon's thoughts when he contemplated and dictated "in his delicious walks at Gorhambury," and that "his lordship would often say that he better liked Mr Hobbes's taking his thoughts, than any of the others, because he understood what he wrote." There is no evidence, however, that their discourse turned on strictly philosophical questions; nor does it appear that philosophical interest had, as yet, become dominant in Hobbes's mind; certainly, he was never a pupil of Bacon; and it is an error to attempt, as has sometimes been done[1], to affiliate his philosophy to the Baconian. They agreed in their opposition to medievalism, and both attempted to elaborate a comprehensive scheme; the vague term 'empirical' may also be applied to both; but Hobbes set small store by experiment[2], and his system differed fundamentally from Bacon's in method, temper, and scope. One important point only was common to both—their acceptance of the mechanical theory; and for this theory there is ample evidence, external as well as internal, that Hobbes was indebted not to Bacon but directly to Galileo.

Hobbes's pupil and friend died in 1628, two years after the death of the first earl; his son and successor was a boy of eleven; his widow did not need the services of a secretary; and, for a time, there was no place in the household for Hobbes. In 1629 he left for the continent again with a new pupil, returning from this second journey in 1631 to take charge of the young earl's education. Little is known of his travels, but this period of his life is remarkable for two things—his introduction to the study of geometry, and his first effort towards a philosophy. As regards the former, there is no reason for doubting Aubrey's story, which throws light both on his

[1] E.g., by Kuno Fischer, cp. *Ges. d. neuern Phil.*, Jubiläumsausg., x, p. 355.
[2] *English Works*, ed. Molesworth, vol. IV, pp. 436–7; vol. VII, p. 117.

early education and on the controversies of his later years. "He was forty years old before he looked on geometry, which happened accidentally; being in a gentleman's library in... Euclid's Elements lay open, and it was the 47 prop. lib. 1. So he reads the proposition, 'By G—,' says he, 'this is impossible!' So he reads the demonstration of it, which referred him back to another, which also he read, et sic deinceps, that at last he was demonstratively convinced of that truth. This made him in love with geometry." About this time also, or soon afterwards, his philosophical views began to take shape. Among his manuscripts there is a *Short Tract on First Principles*[1], which has been conjectured to belong to the year 1630 and cannot have been much later. It shows the author so much impressed by his reading of Euclid as to adopt the geometrical form (soon afterwards used by Descartes) for the expression of his argument. It shows further that he had already fixed on the conception of motion as fundamental for the explanation of things, but also that he had not yet relinquished the scholastic doctrine of species in explaining action and perception.

When Hobbes made his third visit to the continent, which lasted from 1634 to 1637 and on which he was accompanied by the young Earl of Devonshire, he is found taking his place among philosophers. At Paris he was an intimate of Mersenne, who was the centre of a scientific circle that included Descartes and Gassendi; and at Florence he held discourse with Galileo. There is an earlier record, in January 1633, of Hobbes searching the shops in London for a copy of Galileo's *Dialogue*[2], and searching vainly, as the small supply had been sold out. And now he seems to have arrived at the view that not only is motion the fundamental conception for explaining the physical world, but that man and society also can be explained on the same mechanical theory. After his

[1] See Hobbes's *Elements of Law*, ed. Tönnies, 1889, pp. 193–210.

[2] *Dialogo dei due massimi sistemi del mondo*, 1632.

return to England he wrote, with a view to publication, a sketch of his new theory, to which he gave the title *Elements of Law natural and politic*. The physical doctrine of which he had taken firm hold lies at the basis of this work, but it deals in detail only with the mind of man and the principles of social order. The introduction to his *Thucydides* had already shown his interest in the latter subject, and the side of politics to which he leaned himself, by the emphasis he laid on the historian's preference for the monarchical form of government. In his dedication of *The Elements* (dated 9 May 1640), Hobbes says that his object is to reduce the doctrine of justice and policy in general to "the rules and infallibility of reason" after the fashion of mathematics. This volume is the "little treatise in English" to which he afterwards referred as written in the days of the Short Parliament. He says that "Of this treatise, though not printed, many gentlemen had copies, which occasioned much talk of the author: and had not his majesty dissolved the parliament, it had brought him into danger of his life." The treatise was never published by Hobbes, nor did it appear as a connected whole until 1889, although in 1650, probably with his consent, its first thirteen chapters were issued with the title *Human Nature*, and the remainder of the volume as a separate work *De Corpore Politico*. In November 1640, when the Long Parliament began to show signs of activity, Hobbes fled to France, where he remained for the next eleven years.

These years were fruitful in many ways. From the beginning he was in constant intercourse with Mersenne and the brilliant group of men of science who frequented his monastery. Soon too he was followed to Paris by other English emigrants of the royalist party, among whom was the Marquis of Newcastle, a member of the Cavendish family, to whom the unpublished *Elements of Law* had been dedicated. By his influence Hobbes was appointed to teach mathematics to Charles, Prince of

Wales, who arrived in Paris in 1646. His position in the exiled court was ultimately rendered impossible by the suspicions of its clerical members; but Charles's friendship was of importance to him in later years, after the restoration of the monarchy. It was Newcastle's desire to hear both sides of a question that led, during his residence in France, to discussion, and afterwards to a somewhat acrimonius controversy on the problem of free-will, with John Bramhall, bishop of Derry. Of greater interest is another literary correspondence which followed close upon his arrival in Paris. Mersenne was then collecting the opinions of scholars on the forthcoming treatise by Descartes, *Meditationes de prima philosophia*, and in January 1641 Hobbes's objections were ready and forwarded to his great contemporary in Holland. These, with the replies of Descartes, afterwards appeared as the third set of *Objectiones* when the treatise was published. Further communications followed on the *Dioptrique* which had appeared along with the famous *Discours de la méthode* in 1637. Descartes did not discover the identity of his two critics; but he did not approve of either; and indeed, as regards the subject-matter of the *Meditationes*, the thinking of the two philosophers moved in such different worlds that mutual understanding was almost impossible. To Descartes, mind was the primal certainty and independent of material reality. Hobbes, on the other hand, had already fixed on motion as the fundamental fact, and his originality consisted in his attempt to use it for the explanation not of nature only, but also of mind and society. Two or three years after his correspondence with Descartes, Hobbes contributed a summary of his views on physics and a *Tractatus Opticus* to works published by Mersenne.

At latest by the beginning of his residence in Paris in 1640 Hobbes had matured the plan for his own philosophical work. It was to consist of three treatises, dealing respectively with matter or body, with human nature, and

with society. It was his intention, he says, to have dealt with these subjects in this order, but his country "was boiling hot with questions concerning the rights of dominion, and the obedience due from subjects, the true forerunners of an approaching war," and this cause, as he said, "ripened and plucked from me this third part" of the system—the book *De Cive*, published at Paris in 1642. Hobbes's first political publication was thus directly occasioned by the troubles of the time. Only a small edition seems to have been printed. Gassendi spoke of the difficulty of procuring a copy, and expressed his satisfaction when the author allowed a new and enlarged edition to be printed at the Elzevir press in Amsterdam in 1647. In this edition the description of the book as the third part of a philosophical system was removed, at the publisher's request, from the title-page, and a new preface was added in which the author explained his plan. The book was a tract for the times as well as a philosophical treatise; but it was not till four years later, when stable government seemed to have been re-established by the Commonwealth, that he had it published in London, in an English version from his own hand, as *Philosophical Rudiments concerning Government and Society*. The same year, 1651, saw the publication, also in London, of his greatest work, *Leviathan*, and his own return to England, which now promised a safer shelter to the philosopher than France, where he feared the clergy and was no longer in favour with the remnant of the exiled English court. In the case of *De Cive*, and still more in that of *Leviathan*, the political situation led to greater fulness of detail and also to a more fervid manner of utterance than had been shown in his earliest treatise. In particular, the danger arising from the claim to independence or to direction on the part of the ecclesiastical power gave occasion for a much more comprehensive treatment of the subject of religion. As early as 1641 he had expressed the opinion that the dispute "between the spiritual and

civil power has of late, more than any other thing in the world, been the cause of civil wars in all places of Christendom," and had urged that "all church government depend on the state and authority of the kingdom, without which there can be no unity in the church." This was not palatable doctrine to any of the sects, and there was much more to cause them alarm in the theological discussions contained in his *Leviathan*. But, after the Restoration, in a dedication to the king, he was able to claim that all had been "propounded with submission to those that have the power ecclesiastical," holding that he had not given any ground of offence "unless it be for making the authority of the church [depend] wholly upon the regal power; which I hope your majesty will think is neither atheism nor heresy."

The last twenty-eight years of Hobbes's long life were spent in England; and there he soon returned to the house of his old pupil the Earl of Devonshire, who had preceded him in submitting to the Commonwealth and like him welcomed the king on his return. For a year or two after his home-coming Hobbes resided in London, busied with the completion of his philosophical system, the long-delayed first part of which, *De Corpore*, appeared in 1655, and the second part, *De Homine*, in 1656. The latter work contains little or nothing of importance that Hobbes had not said already; but the former deals with the logical, mathematical, and physical principles which were to serve as foundation for the imposing structure he had built. A new world had been revealed to him, many years ago, when, at the age of forty, he had first chanced upon Euclid's *Elements*. He had designed that his own philosophy should imitate the certainty of mathematics. In the dedication to his first treatise he had called mathematics the one branch of learning that is "free from controversies and dispute." Yet, strangely enough, when we remember how provocative of controversy were all his leading views, it was disputes about the most certain of

all subjects that filled and harassed the last five and twenty years of his life.

The author of *Leviathan* could hardly have expected to escape controversy, and he did not do anything to avoid it. The views of human nature set forth in the book became for generations the favourite battle-ground for contending philosophies; its political theory was not fitted to please either party; and, on its religious doctrine, the clergy would have something to say when they came to their own again. His dispute with Bramhall on the question of free-will began in his Paris days and has been already recorded. But it was not allowed to be forgotten. In 1654 the tract *Of Liberty and Necessity*, which he had written eight years before in reply to the bishop's arguments, was published by some person unnamed into whose hands it had fallen. Not suspecting Hobbes's innocence in the matter of the publication, Bramhall replied with some heat on the personal question and much fulness on the matter in hand in the following year; and this led to Hobbes's elaborate defence in *The Questions concerning Liberty, Necessity, and Chance*, published in 1656.

By this time, however, the storm of controversy had already broken out in another quarter. Hobbes remembered Oxford as it was in his student days and made little allowance for altered manners and the reform of studies. In the fourth part of *Leviathan*, which is devoted to "the kingdom of darkness," he had taken occasion to pronounce judgment on the universities: they are a bulwark of papal power; their philosophy is but "Aristotelity"; for them, "till very late times," geometry was but an "art diabolical." But Oxford had undergone a change since the days when Hobbes could afford to despise its learning. In particular, the Savilian professorships, founded in the interval, were held by two men of eminence, Seth Ward and John Wallis—the latter a mathematician of the first rank. They were acknowledged masters of a science in which Hobbes seems to have been

only a brilliant and capricious amateur—the greatest of circle-squarers. The dispute began, mildly enough, in a vindication of the university by Ward against another critic, Hobbes being dealt with in an appendix. This was in 1654; but next year Hobbes's own mathematical discoveries were published with much parade in *De Corpore*. The opportunity was then seized by Wallis, who, in a few months, was ready with a reply in which the pretended demonstrations were torn to shreds. From this time onwards the war of pamphlets raged unremittingly. Hobbes maintained his opinions with a tenacity which would have been wholly admirable if they had been better grounded; and he was bold enough to carry the war into the enemy's camp, though with unfortunate results, and to engage other adversaries, such as Robert Boyle, but with no better success. It is unnecessary to follow the controversy in detail[1], but incidentally it produced one document of great personal interest—a defence of his own reputation in the form of a letter to Wallis written in 1662.

In addition to these and connected controversies, more serious trouble threatened the philosopher's later years. After the Restoration, he was well received by the king, who took pleasure in his conversation. But he had an enemy in the clergy; his opinions were notorious; it was easy to connect them with the moral licence shown in high places; and, after the great Plague and the great Fire, at a time when recent disaster made men's consciences sensitive and their desires welcome a scape-goat, Hobbes was in no little danger. A bill aimed at blasphemous literature actually passed the Commons in January 1667, and *Leviathan* was one of two books mentioned in it. The bill never passed both houses; but

[1] A lucid and admirable sketch of its successive stages is given in Croom Robertson's monograph on Hobbes (1886). It should be added, however, that Tönnies (*Hobbes*, 1896, p. 55, 2nd ed., p. 230) thinks that Robertson has dealt too hardly with Hobbes in his account of the controversy.

Hobbes was seriously frightened; he is said to have become more regular at church and communion; he studied the law of heresy also, and wrote a short treatise on the subject, proving that there was no court by which he could be judged. But he was not permitted to excite the public conscience by further publications on matters of religion. A Latin translation of *Leviathan* (containing a new appendix bringing its theology into line with the Nicene creed) was issued at Amsterdam in 1668. Other works, however, dating from the same year, were kept back—the tract on *Heresy*, the answer to Bramhall's attack on *Leviathan*, and *Behemoth: the History of the Causes of the Civil Wars of England.* About the same time was written his *Dialogue between a Philosopher and a Student of the Common Laws of England.* His *Historia Ecclesiastica*, in elegiac verse, dates from about his eightieth year. When he was eighty-four he wrote his autobiography in Latin verse. Neither age nor controversy seemed to tire him. Although controversy had the last word—he published *Decameron Physiologicum* at the age of ninety—he turned in old age for solace and employment to the literature which had been his first inspiration. In 1673 he published a translation in rhymed quatrains of four books of the *Odyssey*; and he had completed both *Iliad* and *Odyssey* when, in 1675, he left London for the last time. Thereafter he lived with the Cavendish family at one of their seats in Derbyshire. He died at Hardwick on 4 December 1679.

Hobbes is one of a succession of English writers who are as remarkable for their style as for the originality of their thought. Bacon, Hobbes, Berkeley, and Hume—to mention only the greatest names—must be counted amongst the masters of language, wherever language is looked upon as conveying a meaning. And, in each case, the style has an individual quality which suits the thought and the time. Bacon's displays a wealth of imagery and allusion significant of the new worlds which man's mind

was to enter into and to conquer; it has the glamour not of enchantment but of discovery; greater precision and restraint of imagery would not have befitted the pioneer of so vast an adventure. The musical eloquence of Berkeley is the utterance of a soul rapt in one clear vision and able to read the language of God in the form and events of the world. Hume writes with the unimpassioned lucidity of the observer, intent on technical perfection in the way of conveying his meaning, but with no illusions as to its importance. Hobbes differs from all three and, in his own way, is supreme. There is no excess of imagery or allusion, though both are at hand when wanted. There is epigram; but epigram is not multiplied for its own sake. There is satire; but it is always kept in restraint. His work is never embellished with ornament: every ornament belongs to the texture of the argument. There is never a word too many, and the right word is always chosen. His materials are of the simplest; and they have been formed into a living whole, guided by a great thought and fired by the passion for a great cause.

Aubrey tells us something of his method of work. "He had read much, if one considers his long life, but his contemplation was much more than his reading. He was wont to say, that if he had read as much as other men, he should have continued still as ignorant as other men. The manner of writing [*Leviathan*] was thus. He walked much and contemplated, and he had in the head of his cane a pen and ink-horn, carried always a note-book in his pocket, and as soon as a thought darted, he presently entered it into his book, or otherwise might have lost it." This careful forethought for idea and phrase was always controlled by the dominant purpose, which was to convince by demonstration. How the method worked may be seen from a characteristic passage. Speaking of undesigned trains of thought, he says: "And yet in this wild ranging of the mind, a man may oft-times perceive the way of it, and the dependance of one thought upon another. For in a dis-

course of our present civil war, what could seem more impertinent, than to ask (as one did) what was the value of a Roman penny? Yet the coherence to me was manifest enough. For the thought of the war introduced the thought of the delivering up the king to his enemies; the thought of that brought in the thought of the delivering up of Christ; and that again the thought of the 30 pence, which was the price of that treason; and thence easily followed that malicious question; and all this in a moment of time; for thought is quick." Here the illustration strikes home; the sarcasm hits the party he hated most; and the last four words clinch the whole and bring back the discourse to the matter in hand. Attention is arrested, not diverted, so that the single paragraph in which these sentences occur may be taken as having started the line of thought which issued in the theory of association, for a long time dominant in English psychology.

To understand the underlying ideas of Hobbes's philosophy, portions of his Latin work *De Corpore* must be kept in view; but his lasting fame as a writer rests upon three books: *Elements of Law*, *Philosophical Rudiments concerning Government and Society* (the English version of *De Cive*), and *Leviathan*. The first of these books is a sketch, in clear outline and drawn with unfaltering hand, of the bold and original theory which he afterwards worked out and applied but never altered in substance. It contains less illustration and less epigram than the later works, but it yields to neither of them in lucidity or in confidence. The circumstances which led to its issue in two fragments, arbitrarily sundered from one another, have hindered the general recognition of its greatness. Nor did it appear at all till *De Cive* was well known and *Leviathan* ready for press. The latter works are less severe in style: they have a glow from the "bright live coal" which (we are told) seemed to shine from Hobbes's eye when he spoke. *De Cive* is restricted to the political theory; but his whole view of human life and the social order is comprehended in *Leviathan*.

The title-page of *Leviathan* depicts its purpose. The upper half of the page has, in the foreground, a walled town with tall church spires; behind, the country rises towards a hill out of which emerges the figure of a man from the waist upwards; a crown is on his head; his right hand wields a sword, his left grasps a crosier; his coat of mail consists of a multitude of human figures, with their faces turned to him, as in supplication. On the lower half of the page, on either side the title, are represented a castle and a church, a coronet and a mitre, a cannon and lightning, implements of war and weapons of argument, a battle-field and a dispute in the schools. Over all runs the legend *Non est potestas super terram quae comparetur ei.* This is the design "of that great Leviathan, or rather (to speak more reverently) of that mortal God," whose generation and power Hobbes sets out to describe.

The figure of the leviathan dominates the whole book, and Hobbes argues over and over again that there is no alternative between absolute rule and social anarchy. Its lurid picture of the state of nature, contrasted with the peace and order instituted by sovereign power, undoubtedly reflects the troubles and emotions of the time; but it is no mere seventeenth century version of *In Darkest England and the Way Out.* Far less is Hobbes's whole philosophy to be put down to the fear of civil tumult and the desire to think out a theory of government adequate to its restraint. *Leviathan* is a work of great and enduring importance just because it is not a mere political pamphlet. It owes life and colour to the time at which it was written; but another force also contributed to its making—a conception of larger scope, which gives it the unity of a philosophical masterpiece.

This underlying conception and all the author's most striking ideas are to be found in the treatise completed in 1640—when political troubles were obviously at hand but as yet no personal danger threatened. In logic and lucidity this earlier treatise is not surpassed by the later

work, though it fails to give the same constant impression of reality. It is a text-book such as philosophers have sometimes written for statesmen, to instruct them in the principles of their craft; and it did not entirely escape the usual fate of such efforts. Before Hobbes set about writing it the fundamental idea of a philosophy had taken root in his mind; and this idea he owed to the new mechanical theory, and in particular to Galileo's teaching. Motion, he came to think, was the one reality; all other things are but "fancies, the offspring of our brains." He did not now, or indeed afterwards, work out a mechanical theory of the physical universe, as Descartes, for instance, was doing. But he had a bolder—if an impossible—project. Descartes restricted mechanism to the extended world, maintained the independence of mental existence, and held the latter to be of all things most certain. Hobbes did not thus limit the applications of his new idea. He thought he could pass from external motions to "the internal motions of men," and thence to sovereignty and justice. This is his own account, and it agrees with what we know otherwise. Neither the mechanical theory, nor the psychology, is an afterthought introduced to bolster up a foregone political conclusion. They have their roots too deep in Hobbes's mind. It is true that the desired transitions could not logically be made, and Hobbes found out the difficulty later. But, when civil disturbance forced his hand and led to the elaboration of his ethical and political doctrine, this doctrine was found to be in harmony with the idea from which his view of the universe started. The external and mechanical character of the political theory is an indication of its unreality, but it bears witness also to the unity of conception that dominates the whole philosophy.

All things, according to Hobbes, "have but one universal cause, which is motion." But for him, as for other writers of his day, 'motion' is not a merely abstract conception; it includes movement of masses or of particles.

From geometry, which treats of abstract motion, he thus passes without a break to physics, and thence to moral philosophy; for the "motions of the mind" have physical causes. And, by this synthetical method, proceeding from principles, we "come to the causes and necessity of constituting commonwealths." This method he always kept in view, and it gives unity to his theory. But he never carried out the impossible task of applying it in detail. He admits that there is another and an easier way: "For the causes of the motions of the mind are known, not only by ratiocination, but also by the experience of every man that takes the pains to observe those motions within himself." If he "will but examine his own mind," he will find " that the appetites of men and the passions of their minds are such that, unless they be restrained by some power, they will always be making war upon one another." By adopting this method Hobbes thinks he can appeal to each man's experience to confirm the truth of his doctrine.

Leviathan is divided into four parts, which treat, respectively, of Man, of a Commonwealth, of a Christian Commonwealth, and of the Kingdom of Darkness. Man comes first, for he is both the matter and the artificer of the Leviathan; and, at the outset, he is considered alone, as an individual thing played upon by external forces; "for there is no conception in a man's mind which hath not at first, totally or by parts, been begotten upon the organs of sense." Diverse external motions produce diverse motions in us; and, in reality, there is nothing else; "but their appearance to us is fancy," though this name is commonly restricted to "decaying sense." The thoughts thus raised succeed one another in an order sometimes controlled by a "passionate thought," sometimes not. By "the most noble and profitable invention of speech, names have been given to thoughts, whereby society and science have been made possible, and also absurdity: for words are wise men's counters, they do but reckon by

them; but they are the money of fools." Reason is but reckoning; addition and subtraction are its processes; logic is "computation." So far, man is regarded as if he were a thinking being only. But he is also active. The internal motions set up by the action of objects upon the senses become reactions upon the external world; and these reactions are all of the nature of tendencies towards that which "helps the vital motion," that is, ministers to the preservation of the individual, or tendencies away from things of an opposite nature. Thus we have appetite or desire for certain things, and these we are said to love, and we call them good. In a similar way we have aversion from certain other things, which we hate and call evil. Pleasure is "the appearance or sense of good"; displeasure, "the appearance or sense of evil." Starting from these definitions, Hobbes proceeds to describe the whole emotional and active nature of man as a consistent scheme of selfishness. The following characteristic summary comes from *The Elements of Law*:

> The comparison of the life of man to a race, though it holdeth not in every point, yet it holdeth so well for this our purpose, that we may thereby both see and remember almost all the passions before mentioned. But this race we must suppose to have no other goal, nor other garland, but being foremost; and in it:
>
> To endeavour, is appetite.
> To be remiss, is sensuality.
> To consider them behind, is glory.
> To consider them before, humility.
> To lose ground with looking back, vain glory.
> To be holden, hatred.
> To turn back, repentance.
> To be in breath, hope.
> To be weary, despair.
> To endeavour to overtake the next, emulation.
> To supplant or overthrow, envy.
> To resolve to break through a stop foreseen, courage.
> To break through a sudden stop, anger.
> To break through with ease, magnanimity.
> To lose ground by little hindrances, pusillanimity.

To fall on the sudden, is disposition to weep.
To see another fall, disposition to laugh.
To see one out-gone whom we would not, is pity.
To see one out-go we would not, is indignation.
To hold fast by another, is to love.
To carry him on that so holdeth, is charity.
To hurt one's-self for haste, is shame.
Continually to be out-gone, is misery.
Continually to out-go the next before, is felicity.
And to forsake the course, is to die.

Out of this contention of selfish units Hobbes, in some way, has to derive morality and the social order. Yet in the state of nature there are no rules for the race of life—not even the rule of the strongest, for Hobbes thinks that there is little difference between men's faculties, and at any rate "the weakest has strength enough to kill the strongest." Thus for gain, for safety, and for reputation (which is a sign of power) each man desires whatever may preserve or enrich his own life, and indeed by nature "every man has a right to everything, even to one another's body." Thus the natural state of man is a state of war, in which "every man is enemy to every man." In this condition, as he points out, there is no place for industry, or knowledge, or arts, or society, but only "continual fear and danger of violent death; and the life of man solitary, poor, nasty, brutish, and short." Nor, in this state, is there any difference of right and wrong, mine and thine; "force and fraud are in war the two cardinal virtues."

Hobbes betrays some hesitation in speaking of the historical reality of this state of universal war. But the point, perhaps, is not fundamental. What is essential is the view of human nature as so constituted as to make every man his neighbour's enemy. The view was not entirely new; he was not the first satirist of the 'golden age.' His originality lies in the consistency of his picture of its anarchy, and in the amazing skill with which he makes the very misery of this state lead on to social order:

the freedom of anarchy yields at once and for ever to the fetters of power. The transition is effected by the social contract—an instrument familiar to medieval philosophers and jurists. So long as the state of nature endures, life is insecure and wretched. Man cannot improve this state, but he can get out of it. The fundamental law of nature is to seek peace and follow it; and from this emerges the second law, that, for the sake of peace, a man should be willing to lay down his right to all things, when other men are also willing to do so. From these two are derived all the laws of nature of the moralists.

The laws of nature are immutable and eternal, says Hobbes, and in so saying conforms to the traditional view—but with one great difference. Hooker, who followed the older theory, had said that the laws of nature "bind men absolutely, even as they are men, although they have never any settled fellowship, never any solemn agreement amongst themselves." This is not Hobbes's view. He says indeed that "the laws of nature oblige *in foro interno*," but this means simply that "they bind to a desire they should take place"; on the other hand they do not always bind "*in foro externo*, that is, to the putting them in act." "For he that should be modest, and tractable, and perform all he promises, in such time and place where no man else should do so, should but make himself a prey to others, and procure his own certain ruin, contrary to the ground of all laws of nature, which tend to nature's preservation." As defined by Hobbes, the law of nature (*lex naturalis*) is as egoistic in its reference as the right of nature (*jus naturale*). The latter is "the liberty each man hath to use his own power, as he will himself, for the preservation of his own nature, that is to say of his own life." And the law of nature "is a precept or general rule, found out by reason, by which a man is forbidden to do that which is destructive of his life, or taketh away the means of preserving the same, and to omit that by which he thinketh it may be best preserved." The one

asserts a liberty, the other imposes an obligation. But what is permitted and what is required are equally, for each man, his own preservation. Justice, gratitude, etc., are among Hobbes's laws of nature; but their authority is not absolute; it is strictly conditional on other men being willing to obey them; and this requires an agreement of wills—a contract. Contracts, again, require a power to enforce them: "covenants of mutual trust where there is a fear of not performance on either part are invalid"; and the only way to obtain such a common power is for all men to give up their rights to one man, or one assembly of men, and to acknowledge his acts as their own "in those things which concern the common peace and safety." This man, or assembly, will thus bear the 'person' of the whole multitude. They have contracted with one another to be his subjects. But the sovereign himself is under no contract: he has rights but no duties.

From this it follows logically that sovereignty cannot be limited, divided, or forfeited. The conduct of the commonwealth in peace and war, and the rights of subjects against one another, are decided by the sovereign. He is sole legislator, supreme ruler, and supreme judge. And this holds whether the sovereignty lie in one man or in an assembly. Hobbes always maintained the superiority of monarchy to other forms of government; but he never thought that this superiority was capable of the demonstrative proof that he claimed for his general theory. There is a story that, before leaving Paris, Hobbes told Edward Hyde (afterwards Earl of Clarendon) that he was publishing *Leviathan* because he "had a mind to go home." If he was serious in making the remark reported by Clarendon, he must have been referring to the 'Review and Conclusion,' with which the work closes, and in which he speaks of the time at which submission to a conqueror may lawfully be made. The book in no way modifies his earlier views on the merits of monarchy.

A man cannot serve two masters: "mixed government" is no government; nor can the spiritual power be independent of the temporal. The doctrines "that every private man is judge of good and evil actions," and "that whatsoever a man does against his conscience is a sin," are seditious and repugnant to civil society. By living in a commonwealth a man takes the law for his conscience. These positions may seem to complete the political theory, and few readers now care to pursue the matter further. But Hobbes's commonwealth professes to be a Christian commonwealth. He must show the place which religion occupies in it, and also expose the errors which have led to nations being overshadowed by the spiritual power. His theory is Erastianism pushed to its extremest limits. The inner life—the true home of religion for the religious man—shrinks to a point; while its external expression in doctrine and observance is described as part of the order that depends on the will of the sovereign. Hobbes can cite Scripture for his purpose; he anticipates some of the results of modern Biblical criticism; and he has theories about God, the Trinity, the atonement, and the last judgment—all of them in harmony with his general principles. His doctrine of God is, in modern phrase, agnostic. The attributes we ascribe to him only signify our desire to honour him: "we understand nothing of what he is, but only that he is." In this Hobbes follows the doctrine of negative attributes, worked out by some medieval theologians. But his doctrine of the Trinity is surely original. It is "in substance this: that God who is always one and the same was the person represented by Moses, the person represented by his Son incarnate, and the person represented by the apostles." Again, the kingdom of God is a real kingdom, instituted by covenant or contract: which contract was made by Moses, broken by the election of Saul to the kingship, restored by Christ, and proclaimed by the apostles. But the kingdom of Christ "is not of this world"; it is of the world to come after the

general resurrection; "therefore neither can his ministers (unless they be kings) require obedience in his name."

There are two things specially opposed to this theory. On the one hand, there is the enthusiasm which results from the claim either to personal illumination by the spirit of God or to private interpretation of Scripture. On the other hand, there is the claim to dominion on the part of the organised spiritual power. Both claims were rampant in Hobbes's day, and he seeks to undermine them both by criticism. There is no argument, he says, by which a man can be convinced that God has spoken immediately to some other man, "who (being a man) may err, and (which is more) may lie." And, as regards Scripture, it is for sovereigns as the sole legislators to say which books are canonical, and therefore to them also must belong the authority for their interpretation. Of all the abuses that constitute what Hobbes calls the Kingdom of Darkness, the greatest arise from the erroneous tenet "that the present church now militant on earth is the kingdom of God." Through this error not only the Roman, but also the presbyterian, clergy have been the authors of darkness in religion, and encroached upon the civil power. The Roman Church alone has been thorough in its work. The pope, in claiming dominion over all Christendom, has forsaken the true kingdom of God, and he has built up his power out of the ruins of heathen Rome. For "the papacy is no other than the ghost of the deceased Roman empire, sitting crowned upon the grave thereof."

Taken as a whole, Hobbes's *Leviathan* has two characteristics which stamp it with the mark of genius. In the first place, it is a work of great imaginative power, which shows how the whole fabric of human life and society is built up out of simple elements. And, in the second place, it is distinguished by a remarkable logical consecutiveness, so that there are very few places in which any lack of coherence can be detected in the thought. It is true that the social order, as Hobbes presents it, pro-

duces an impression of artificiality; but this is hardly an objection, for it was his deliberate aim to show the artifice by which it had been constructed and the danger which lay in any interference with the mechanism. It is true also that the state of nature and the social contract are fictions passed off as facts; but, even to this objection, an answer might be made from within the bounds of his theory. It is in his premisses, not in his reasoning, that the error lies. If human nature were as selfish and anarchical as he represents it, then morality and the political order could arise and flourish only by its restraint, and the alternative would be, as he describes it, between complete insecurity and absolute power. But, if his view of man be mistaken, then the whole fabric of his thought crumbles. When we recognise that the individual is neither real nor intelligible apart from his social origin and traditions, and that the social factor influences his thought and motives, the opposition between self and others becomes less fundamental, the abrupt alternatives of Hobbism lose their validity, and it is possible to regard morality and the state as expressing the ideal and sphere of human activity, and not as simply the chains by which man's unruly passions are kept in check.

The most powerful criticism of Hobbes's political theory which appeared in his lifetime was contained in the *Oceana* of James Harrington, published in 1656; and the criticism gained in effectiveness from the author's own constructive doctrine. This he set forth under the thin disguise of a picture of an imaginary commonwealth. The device was familiar enough at the time. More and Bacon in England, and Campanella[1] in Italy, had already followed the ancient model by describing an ideal state, which both More and Bacon placed in some unknown island of the west. The *Utopia* of Sir Thomas More was published in 1516 and Englished by Ralph Robynson in

[1] *Realis philosophiae epilogisticae partes* IV (containing *civitas solis*), 1623.

1551. The work is a political romance. The spirit of the Renaissance was still fresh when the author wrote, and it made him imagine a new world to which the old order might conform and, by conforming, escape the evils of its present condition. There is not in it any attempt at a philosophical analysis of the nature of the state, but only an account of a government and people devoted to the cause of social welfare. Supreme power is in the hands of a prince, but he and all other magistrates are elected by the people; and it is in its account of the life of the people that the interest of the work lies. They detest war "as a thing very beastly" and "count nothing so much against glory as glory gotten in war." Their life is one of peace and freedom, of justice and equality. There is no oppression, industrial or religious; but work and enjoyment are shared alike by all: "In other places, they speak still of the commonwealth, but every man procureth his own private gain. Here, where nothing is private, the common affairs be earnestly looked upon....Nothing is distributed after a niggish sort, neither is there any poor man or beggar. And though no man have any thing, yet every man is rich."

Bacon's fable *New Atlantis* (1627) is only a fragment, and has little of the charm that distinguishes More's romance. Its interest lies in the description of Solomon's House, which may be taken as Bacon's ideal of the public endowment of science. We are told that "his lordship thought also in this present fable to have composed a frame of laws, or of the best state or mould of a commonwealth"; but, unfortunately, he preferred to work at his natural history, so that we learn nothing about the government of his ideal community, and little about the social characteristics of the people, though he descants on the dignity of their manners and on the magnificence of their costumes.

Harrington's *Oceana* is a work of a different kind. It has none of the imaginative quality of *Utopia* or even of

New Atlantis. Much of it reads like a state paper or the schedules of a budget. The reference to present affairs is too thinly disguised for any artistic purpose. 'Oceana' is of course England, and the Lord Archon pervades the book as his prototype, Oliver, pervaded the English government. In all the councils of Oceana he has always the last word, and his speeches are long, convincing, and wearisome; he will even digress into sketching the history of the world. The author was probably ill-advised when he threw his work into the romantic form. He has a real insight into politics, and can see some things which were concealed from Hobbes's vision. He never loses sight of the important fact that government is only one factor in social life. The form of government, he holds, will follow the distribution of property: "where there is inequality of estates there must be inequality of power; and where there is inequality of power there can be no commonwealth." The commonwealth should exhibit equality both in its foundation and in the superstructure. The former is to be secured by an agrarian law limiting the amount of property which can be held by one man, so that "no one man or number of men, within the compass of the few or aristocracy, can come to overpower the whole people by their possessions in land"; and Harrington explained the recent change in the government of the country by the gradual shifting of the balance of property from king and lords to the commons. Equality in the superstructure will be attained by means of a rotation or succession to the magistracy secured by "the suffrage of the people given by the ballot." In this way will be constituted the three orders: "the senate debating and proposing, the people resolving, and the magistracy executing." The need for distinguishing the orders is emphasised in Harrington's *Political Aphorisms*, where he says that "a popular assembly without a senate cannot be wise," and that a "senate without a popular assembly will not be honest." A commonwealth thus rightly instituted, so he

thinks, can never swerve from its principles, and has in it no "principle of mortality." Yet the constitution which he proposed comes short of consistent democracy, and falls in with the spirit of the time. The function of the one great man is recognised: "a parliament of physicians would never have found out the circulation of the blood, nor would a parliament of poets have written Virgil's Aeneis." Thus the great man is right to aim at the sovereignty when the times are out of joint, so that he may set them right and establish the reign of law; and the book ends with his proclamation as Lord Archon for life. The nobility or gentry have also their place: "there is something first in the making of a commonwealth, then in the governing of it, and last of all in the leading of its armies, which...seems to be peculiar only to the genius of a gentleman." Like Milton, Harrington argues for liberty of conscience in matters of religion—though he would disallow "popish, Jewish, or idolatrous" worship. Unlike Milton, however, he does not exclude the state from the sphere of religion: "a commonwealth is nothing else but the national conscience. And if the conviction of a man's private conscience produces his private religion, the conviction of the national conscience must produce a national religion."

Sir Robert Filmer was also among the critics of Hobbes's politics, though he owes his fame to the circumstance that he was himself criticised by Locke. He maintained the doctrine of absolute power as strongly as Hobbes did, and like him thought that limited monarchy meant anarchy; and he had written on these topics in King Charles's time. But he would not admit that this power could rest on contract, and, in his *Original of Government* (1652), attacked Hobbes as well as Milton and Grotius. His own views are set forth in his *Patriarcha, or the Natural Power of Kings*, first published in 1680, twenty-seven years after his death. Filmer was by no means devoid of critical insight. He saw that the doctrine that all men are by

nature free and equal is not true historically and, therefore, is no good ground for making popular consent the origin of government. "Late writers," he says, "have taken up too much upon trust from the subtle schoolmen who, to be sure to thrust down the king below the pope, thought it the safest course to advance the people above the king." He thinks that "a great family, as to the rights of sovereignty, is a little monarchy," and Hobbes had said the same; but Filmer traces all kingship to the subjection of children to their parents, which is both natural and a divine ordinance. There has never been a more absolute dominion than that which Adam had over the whole world. And kings are Adam's heirs. In developing this thesis, the author diverges into a reading of history more fantastic than anything suggested by Bellarmine or Hobbes, and delivers himself up an easy prey to Locke's criticism.

Edward Hyde, Earl of Clarendon, is also to be counted among the critics of Hobbes's political theory. His *Brief Survey of the dangerous and pernicious Errors to Church and State in Mr Hobbes's book* (1674) is a protest against the paradoxes of *Leviathan*, but is lacking in any element of constructive criticism.

John Bramhall, bishop of Derry, and afterwards archbishop of Armagh, was one of the most vigorous and persistent of Hobbes's critics. His first work was in defence of the royal power (1643). Afterwards he engaged in a discussion of the question of freewill with Hobbes when they were both in France. When the controversy was renewed and became public, he wrote *A Defence of the True Liberty of Human Actions from Antecedent and Extrinsical Necessity* (1655). Hobbes replied, and Bramhall followed in 1658 with *Castigations of Mr Hobbes*, to which there was an appendix called "The Catching of Leviathan the Great Whale." In this appendix, more famous than the rest of the treatise, he attacked the whole religious and political theory of Hobbes,

and gave rise to the complaint of the latter that the bishop "hath put together diverse sentences picked out of my *Leviathan*, which stand there plainly and firmly proved, and sets them down without their proofs, and without the order of their dependance one upon another; and calls them atheism, blasphemy, impiety, subversion of religion, and by other names of that kind."

Two younger polemical writers may be mentioned along with Bramhall. Thomas Tenison, a future archbishop of Canterbury, was one of the young churchmen militant who must needs try their arms "in thundering upon Hobbes's steel-cap." In *The Creed of Mr Hobbes examined* (1670), he selected a number of Hobbes's confident assertions and set them together so as to show their mutual inconsistencies. In two dialogues, published in 1672 and 1673, John Eachard, afterwards master of St Catharine's Hall, Cambridge, adopted a similar method, and showed no little wit and learning in his criticism.

These writers are the most notable of a number of early critics of Hobbes who made no independent contributions of their own to philosophy. And their criticism dealt with results rather than with principles. A satisfactory criticism of Hobbes has to penetrate to the principles of the mechanical philosophy which he adopted, and to the view of human nature which he set forth in conformity with those principles. Criticism of this more fundamental kind was attempted by certain of the Cambridge Platonists, especially by Cudworth and More; and they were fitted for the task by their sympathetic study of the spiritual philosophy of Plato in the ancient world and of Descartes in their own day—two thinkers for whom Hobbes had no appreciation.

CHAPTER V

THE CAMBRIDGE PLATONISTS

'THE CAMBRIDGE PLATONISTS' is the name given to a group of religious thinkers who flourished at Cambridge in the middle and latter half of the seventeenth century. They are referred to by Gilbert Burnet, who had visited Cambridge in 1663, as a "set of men" who had prevented the Church of England from having "quite lost her esteem over the nation." "These," he says, "were generally of Cambridge, formed under some divines, the chief of whom were Drs Whichcote, Cudworth, Wilkins, More, and Worthington." Other names are commonly included in the list—John Smith, Nathaniel Culverwel, George Rust, Edward Fowler, and Simon Patrick. But there is no good ground for counting Wilkins among them. He was an Oxford man who held the mastership of Trinity College, Cambridge, for a year before the Restoration; he was eminent as a man of science[1] and was one of the founders of the Royal Society; but his theological leanings do not seem to have been the same as those of the Cambridge school.

The writers enumerated were not all Platonists or even all philosophers. It was their religious attitude that led, in the first instance, to their being spoken of as a school and receiving a common name. And so they were called 'latitude men.' They appeared when the High Church system of Laud was in the ascendant; they flourished under the rule of the presbyterians and of the independents; and the Restoration scarcely disturbed them. They did not take sides with any existing parties; and it is to the

[1] And author of *An Essay towards a real Character and a Philosophical Language*, 1668.

credit of all parties that they were allowed to carry on their work at the university. Whichcote alone lost his office—the provostship of King's College—at the Restoration, and retired to a parish where he was not interfered with. Their doctrine was equally removed from Calvinism and from High Churchism. They avoided the subtleties of the prevailing theologies, opposed credulity and enthusiasm (or the claim to private inspiration), held that true religion must harmonise with rational truth, and laid stress on the moral and spiritual factors in religion.

Benjamin Whichcote (1610–83) is regarded as the originator of the movement. Burnet says that he "set young students much on reading the ancient philosophers, chiefly Plato, Tully, and Plotin"; and, in the university, his former tutor blamed him for setting Plato and Plotinus above the gospel and reason above the spirit. Burnet's statement was made long after the days of which he wrote and cannot be counted strong evidence; and the contemporary criticism shows a theological animus of the kind which often loses touch with accuracy. It is doubtful how far Whichcote guided the reading of his pupils into Platonic or even philosophical channels, and it is not likely that he would have described himself as a philosopher. But there can be no doubt that he encouraged a more rational and spiritual view of Christian doctrine than was prevalent at the time. The more famous Cambridge Platonists (with the notable exception of More) were students at Emmanuel College during the period (1632–44) of his tutorship there; and for twenty years (1636–56) he lectured each week in Trinity Church, where the members of the university generally flocked to hear him.

A few sermons, discourses, and aphorisms, the first publication of which was in 1698, are all that remain to us of these discourses, and form almost the only record of his thought. They contain few references to Platonic philosophers, such as filled the pages of his followers, and it would be vain to read a system of philosophy into

them. But they show an attitude of mind, never too common and rare in those troubled times, which combines spiritual religion with intellectual reflection. "Religion," he holds—and this, after all, is very near the central doctrine of the Platonists—"is the introduction of the divine life into the soul of man"; and the mind must be free from passion in order to admit it: "there is no genuine and proper effect of religion where the mind of man is not composed, sedate, and calm." "The first operation in religion is mental and intellectual." It banishes credulity and 'enthusiasm.' In words which remind us of those used by Hobbes[1] in the interest of a far different view of the world, Whichcote writes, "If you say you have a revelation from God, I must have a revelation from God too before I can believe you." God indeed reveals himself in the mind of man "more than in any part of the world besides"; but this revelation cannot conflict with the universal reason of mankind. Nor does it favour corporate authority any more than private 'enthusiasm': "the sense of the Church is not a *rule* but a thing *ruled*." And the revelation does not extend to intricacies of theological doctrine: "truth lies in a little compass and narrow room." One thing, however, is unalterable and final, and that is the moral part of religion; it remains certain and binding whatever controversy there may be about particular doctrines of theology. "I will not," he said, "break the certain laws of charity for a doubtful doctrine or of uncertain truth."

There may be little philosophy in all this; but it is teaching which is well fitted to be the basis of philosophical reflection and to give it stimulus. At least it reveals the atmosphere which the Cambridge Platonists breathed. Inspired by it they set to work to build up a system of thought which would refute and replace the naturalism of Hobbes; and the main doctrines of their system were derived from the school of Plato. The most important of

[1] Cp. above, p. 68.

these philosophical writers are More, Cudworth, Smith, and Culverwel.

Henry More, the son of a country gentleman in Lincolnshire, was born at Grantham in 1614 and educated at Eton and Christ's College, Cambridge. He entered Christ's in December 1631, six months before Milton left, and he made his home in the college till his death in 1687. Even as an undergraduate, he says, "the knowledge of natural and divine things seemed to me the highest pleasure and felicity imaginable." He took no part in affairs, and passed through Civil War, Commonwealth, and Restoration without disturbance. But he was keenly interested in all that concerned the life of mind, and followed the scientific investigations of the day as well as its theological controversies. His father was a Calvinist in theology; but this creed he seems never to have accepted, and he early discovered an affinity for the doctrines of Plato and his school. He was also immediately attracted by the writings of Descartes. In his first publication (*A Platonical Song of the Soul*, 1642, afterwards included in his *Philosophical Poems*, 1647) he professed himself a follower of Plato and Plotinus; and his first letter to Descartes (dated 7 December 1648) expressed an almost equal admiration for the modern author. He was a prolific writer and would return again and again to his books, adding prefaces and scholia, but doing little or nothing in the way of revision or condensation. His chief works are *An Antidote against Atheism*, 1653; *Conjectura Cabbalistica*, 1653; *Enthusiasmus Triumphatus*, 1656; *The Immortality of the Soul*, 1659; *The Grand Mystery of Godliness*, 1660; *The Mystery of Iniquity* [anti-papal and prophetic], 1664; *Enchiridion Ethicum*, 1666; *Divine Dialogues*, 1668; *Philosophiae Teutonicae Censura*, 1670; *Enchiridion Metaphysicum*, 1671. In 1662 he published *A Collection of Philosophical Writings*, and he afterwards issued a Latin translation of his works: *Opera Theologica* in 1675, and *Opera Philosophica* (two volumes) in 1679.

More's thought was rooted in the Christian religion; but there were other formative influences at work. In the first place that of Plato: and More was perhaps the earliest writer who can be called, in strictness of language, a Cambridge Platonist. Then there was the influence of Descartes, whose writings are said to have been made known in Cambridge, some years before, by a senior fellow of Christ's who had met the author on the continent[1]. In addition mention must be made of the influence derived from writings and records of experiences which may be brought together under the name 'occult.' Of these influences the Platonist was the most persistent, though that of ocultism seems to have increased, whereas the influence of Descartes waned.

More conceived the Christian religion as "rational throughout," and had proved it so, he thought, in his *Mystery of Godliness*. The design of his philosophical works was "not to theologise in philosophy but to draw an exoteric fence or exterior fortification about theology" by rebutting the arguments against theism and immortality, and to this purpose was due his "interweaving of Platonism and of Cartesianism." Both contributed to the refutation of the materialism which Hobbes was now impressing upon the world. Plato had given a spiritual interpretation of the universe, and Descartes, in working out his mechanical theory, showed the bounds which mechanism could not pass.

In the letters to Descartes More's admiration is expressed in the warmest terms: no other philosophy, he says, unless it be the Platonic, is so opposed to atheism. But he has two objections—to Descartes' identification of extension with body, and to the view that the brutes are automata. From the latter doctrine his mind revolts; he would rather admit the immortality of all animals, if that is the only alternative. Both objections have to do with the range of the mechanical theory, but the former is the

[1] Cp. J. Bass Mullinger, *The University of Cambridge*, III, p. 606.

more fundamental of the two. Descartes, in his reply, urged that true extension is found only in bodies, and further that body, if defined otherwise than as extended, would have to be defined as sensible, that is to say, by its relation to us, and would thus lose its claim to be regarded as an independent substance. The discussion then went on to the question of incorporeal extension—which More attributed to God and the angels and the mind of man, while its possibility was denied by Descartes. The infinity of God—it was argued by the latter—does not consist in his 'existing everywhere,' but in his power: to which More replied that the power of God is a mode of God's essence, so that, if the power of God is everywhere, God is everywhere. The correspondence was broken off by the death of Descartes.

The discussion concerned the limits of mechanism. Descartes' dualism gave a perfectly precise method for determining them, but it led to the paradox that animals were mere machines. More started by trying to draw the line elsewhere, but he was gradually led to see that it could not be drawn by separating reality into two distinct parts, one of which was mechanically determined and the other was not. His contemporary Hobbes saw the same. Both relinquished dualism: Hobbes from the first offering a mechanical interpretation of all reality, whereas More ended with the conclusion "that there is no purely mechanical phenomenon in the whole universe[1]."

With many digressions and much repetition More was working towards a spiritual view of the world as a whole. There is no general principle, he says, which distinguishes his writings from others that "are writ with freedom and reason." He lays down one "royal rule," however: "not to judge of the truth of any proposition till we have a settled and determinate apprehension of the terms thereof"; and to this he adds the caveat that "what will prove anything will prove nothing." But reason itself needs

[1] *Divine Dialogues* (1668), 'to the Reader,' p. x.

something to go upon. According to his view there is "a certain principle more noble and inward than reason itself, and without which reason will falter or at least reach but to mean and frivolous things." He calls this principle Divine Sagacity—though it is of "so retruse a nature" that he hesitates how to name it. It is better than reason, being due to the operation of the divine spirit, and it needs purity in man's spirit for its reception. This intuitive insight (if it may be called so) is afterwards confirmed by the exact methods of reason itself. And so he describes it as "a more inward, compendious, and comprehensive presentation of truth, even antecedaneous to that reason which in theories of greatest importance approves itself afterwards, upon the exactest examination, to be most solid and perfect every way[1]."

More defends the doctrine of innate notions or ideas. That doctrine is questioned, he thinks, because men mistake the 'extrinsecal occasion' of thinking for its 'adequate or principal cause.' External objects are rather "the reminders than the first begetters or implanters" of our knowledge[2]. And he gives an example of his meaning: "Exhibit to the soul through the outward senses the figure of a circle; she acknowledgeth presently this to be one kind of figure, and can add forthwith that if it be perfect, all the lines from some one point of it drawn to the perimeter must be exactly equal... But this accuracy... cannot be set out in any material subject: therefore it remains that she hath a more full and exquisite knowledge of things in herself than the matter can lay open before her." Further, 'relative notions or ideas,' such as cause, effect, whole and part, like and unlike, "cannot be impresses of any material object from without"; but "are from the soul herself within, and are the natural furniture of human understanding[3]." These innate ideas are not sensible but intellectual, "our own modes of con-

[1] *Philosophical Writings*, preface general.
[2] *Antidote against Atheism*, book I, ch. v.
[3] *Ibid.* I, vi.

sidering sensible objects"; they include "many logical, metaphysical, mathematical, and some moral notions[1]."

The argument for Immortality is preceded by a series of axioms. One of these is that the only faculties for determining truth are "common notions, external sense, and evident and undeniable demonstration." Common notions are defined as "whatever is *noëmatically* true, that is to say, true at first sight to all men in their wits, upon a clear perception of the terms, without any further discourse or reasoning." Another axiom is that "the subject, or naked essence or substance of a thing, is utterly unconceivable to any of our faculties." Hence the immediate attributes of a substance are indemonstrable; and further, if some power, property, or operation be discovered which is incompatible to one substance, another substance must exist to which it is compatible.

From his view of knowledge as depending on the nature of the soul itself follows More's first argument for the existence of God. We have an idea of an absolutely perfect being, that is, a spiritual substance, eternal, infinite in essence and goodness, omnipotent, omniscient, and of itself necessarily existent. This is not a fortuitous or arbitrary concept but necessary and natural to the soul, and therefore "true according to the light of nature." More does not confuse essence and existence; but he holds that there is one idea, though only one, in which they cannot be separated. In this respect he follows Anselm; but he is not more successful than Anselm was in establishing that in this one case essence does involve existence. He is aware also that it has been pointed out that existence is not a perfection or any quality; and he tries to meet the objection by the argument that it is better than non-existence[2].

This ontological argument is supported by proofs of the cosmological and teleological varieties—from the final

[1] *Antidote*, appendix, ch. ii, § 5.
[2] *Ibid.* appendix, iv, 1.

cause of the implanting of the idea of God in the soul, from conscience and from mental affections, and from the phenomena of external nature. Under these heads comes a survey of the world from the order of the heavens to the signatures of plants; and this is followed by a collection of ghost stories which More takes as evidence of the reality of spiritual existence. All the evidence confirms the thesis: "the external appearances of things in the world so faithfully seconding the undeniable dictates of the innate principles of our own minds[1]."

God is defined by More as "spiritual substance." His perfection shows that he cannot be corporeal; and the existence of immaterial substance is further proved by the necessity for a cause of motion, seeing that matter cannot move itself, and by reason being required to explain "the order and admirable effect of this motion in the world"—as well, of course, as by the existence of apparitions[2]. More is careful to explain what he means by spirit. All substance, in his view, is extended. Matter is a substance which consists of parts 'discerpible' from one another; its ultimate particles, however, are 'indiscerpible,' although they may be capable of intellectual analysis. These indiscerpible particles are without figure: "as infinite greatness has no figure, so infinite littleness has none either"—although both are extended. Further, matter is impenetrable: no particle of matter can be in the same place as another particle. Body, therefore, may be defined as "a substance impenetrable and discerpible." If we discover, as we do, powers or attributes inconsistent with these, they must belong to a different substance—a "substance penetrable and indiscerpible." And this is Spirit[3].

More labours to make this notion clear. It is only to be expected, he thinks, that "the souls of men, the lowest dregs of all the intellectual orders[4]," should be puzzled by things spiritual and intellectual. So clouded are their

[1] *Antidote*, III, xvi.
[2] *Immortality*, I, xi–xiii.
[3] *Immortality*, I, iii.
[4] *Antidote*, appendix, iii, 1.

fancies, that even the notion of matter—"in which they tumble and wallow"—"seems unimaginable and contradictious." Yet the notion of spirit is neither inconsistent nor inconceivable. Spirit is like matter in this that it is extended, but in this only. The extension of a spiritual being does not imply divisibility or separability into parts. It implies the "absolute powers of self-contraction and dilatation," along with the "relative faculties of penetrating, moving, and altering of the matter." Of this he gives an illustration. "Suppose a point of light from which rays out a luminous orb, according to the known principles of optics. This orb of light does very much resemble the nature of a spirit, which is diffused and extended and yet indivisible." Here then is a symbol of dilatation, in which the central essence of a spiritual substance "spreads out into a secondary substance." Further, the rays from the luminous point may meet an obstacle from which, without losing their virtue or being, they are reflected back towards the shining centre. And this is a symbol of self-contraction. In the exercise of these powers the soul of man is limited: it is so closely united to its terrestrial body that it can neither withdraw itself from any part of the body nor press beyond it, unless the bond of life be loosened.

In the preface to his treatise on *Immortality* More had recommended the reading of Descartes in the universities in order that "students of philosophy may be thoroughly exercised in the just extent of the mechanical powers of matter, how far they will reach and where they fall short." His final view was that there was nothing purely mechanical. Mechanism, as it might be put, is an aspect of nature, but not by itself the explanation of anything in nature. God has not simply created the material world and put it under mechanical laws. The whole physical universe is pervaded by Spirit. This all-pervading spirit is not God himself, but the Spirit of Nature or (to use the old term) *anima mundi*. It is "a substance incorporeal but without

sense and animadversion," which exercises a "plastical power" upon matter, "raising such phenomena in the world, by directing the paths of the matter and their motion, as cannot be resolved into mere mechanical powers[1]." It may be said to do for nature as a whole what the soul of a plant does for the plant; and it is its further business "to lodge every soul according to her rank and merit whenever she leaves the body," and thus to act alone as "the great quarter-master-general of divine providence[2]."

Of subordinate spirits More distinguishes four main species: seminal forms (λογοὶ σπερματικοί), the created spirits which organise duly prepared matter into life and vegetation, proper to this or the other kind of plant; the souls of brutes, which, in addition to this intrinsical power of vegetation, have also that of sensation; the human soul, which, along with the foregoing, has reason as well (its plastic or seminal part being distributed over the body but residing chiefly in the heart, its perceptive part being situated in the brain); and the souls which actuate or inform the vehicles of angels and which cannot, like the human soul, be born in a terrestrial vehicle. He also refers to the "other orders of spirits or immaterial substances, as the νόες and ἑνάδες," of which "the Platonists write"; but he passes their speculations by, as having "more subtlety than either usefulness or assurance."

For the immortality of the soul More does not rely on the metaphysical argument from its indiscerpibility: his doctrine of creation would have placed a difficulty in the way of such an argument. His demonstration rests on the veracity, the justice, and especially the goodness of God. A man's mind must be sympathetic to morality to feel the full force of the argument; "and the noblest and most generous spirit will be the most firmly assured of the immortality of the soul[3]." With the immortality goes the

[1] *Immortality*, III, xii, 1.
[2] *Ibid.* III, xiii, 10.
[3] *Ibid.* II, xviii, 12.

pre-existence of the soul; this doctrine also is "a necessary result of the wisdom and goodness of God[1]." But the soul is never entirely separate from matter: for then it would be out of the world, "the whole universe being so thick set with matter or body that there is not to be found the least vacuity therein[2]." At death the soul is separated from its terrestrial body, but only to inhabit an aerial, from which again it may pass into an ethereal or celestial body. In the aërial vehicle, such as demons also inhabit, the soul is not quite exempt from fate; but in the celestial vehicle it is perfect and secure—"out of the reach of that evil principle whose dominion is commensurable with misery and death." The upward progress of the soul depends on its moral development; and of it More gives a detailed description, although only to show that his hypothesis is intelligible, and not as "solicitous whether things be just so as I have set them down." Of the downward path—if it be a downward path—which leads to incarnation he tells us nothing.

More himself was, he says, incapable of "the least tincture of superstition." By superstition he probably meant the attitude of mind that seeks salvation in rites and ceremonies. He was certainly credulous when alleged facts were recorded that seemed to confirm his spiritual view of the world. Stories of apparitions of all kinds were welcomed by him and embodied in his serious philosophical arguments. He gives the evidence for them—which it is no longer possible to test. And it must be remembered that he was not alone in believing: he belonged to one of the recurring epochs in history in which men's minds turn eagerly to abnormal phenomena as a guide towards the truth of things.

His *Enchiridion Ethicum* is a text-book of ethics which follows traditional lines in the main but has some original features. In three books it deals with happiness and virtue in general; with the several virtues, which are distin-

[1] *Immortality*, II, xii, 7. [2] *Ibid.* III, xix, 8.

guished into principal and derivative; and with the means by which virtue is attained, this last book including a defence of the doctrine of freewill. He holds that virtue is not a habit but a power—an intellectual power of the soul overruling the passions. His treatment of the passions is based upon that of Descartes, but goes on to show their relation to good and evil. Seeing that the passions are antecedent to deliberation and choice, they come from nature and therefore from God; and consequently they are good, if followed according to the law of nature. This law is a "whisper of the divine law," whose voice is most clear and audible in the intellectual state. Passion, therefore, is subject not only to nature but to right reason. Just as the essence of a thing is taken in by the understanding, and a triangle (for instance) is what right reason conceives it to be, so it is in ethics. There are unchangeable ideas of good and evil, concerning which the mind judges. There are certain first truths of morals—ethical noëmata or axioms. In More's statement, these are mainly formal in character, though they include a classification of duties (to self, others, God, and virtue itself) and an assertion of the 'golden rule.' Good is defined as that which is grateful, pleasant, and congruous to a conscious being and contributory to its preservation. At the same time he holds it mere madness to assert that whatever is grateful or pleasant is therefore good, and that this is the measure of human actions[1].

More's doctrine of ethical axioms entitles him to a place among the beginners of the intellectualist tradition in English ethics. He has also been regarded as having anticipated the 'moral sense' school by his doctrine of the 'boniform faculty.' In some respects this is his most characteristic contribution to ethics; but his expressions are misunderstood if held to imply that the boniform faculty is allied to sensibility rather than to intellect. It is true that he says that what is absolutely good is "judged

[1] *Enchiridion Ethicum*, I, v, 7.

by right reason, but its savour and sweetness are perceived by the boniform faculty of the soul," and that by it "we relish or savour what is absolutely best and rejoice in it alone." But it is not, like sense, inferior to intellect and its provider with material. Rather is it super-intellectual. "All moral good, properly so called," says More, "is intellectual and divine: intellectual in so far as its essence and truth are defined and known by the intellect; divine, in so far as its sweetness is most pleasant and most effectually enjoyed in that divine faculty in which we cleave unto God—the most pure and absolute good[1]." The boniform faculty, therefore, would seem to be simply the ethical aspect of the 'divine sagacity' spoken of in the preface to his *Philosophical Writings*. Like divine sagacity, it is not acknowledged by every one, for some are without the sense of God or divine things; and, on this account, his treatise is designed to show that intellect of itself recognises the first principles of morals.

Ralph Cudworth, who is generally regarded as the leading member of the Cambridge school, was born in 1617 and began residence at Emmanuel College in 1632 —the year following that in which More (his senior in age by three years) matriculated at Christ's. He soon gained a great reputation as a scholar and teacher. He became master of Clare Hall in 1644, professor of Hebrew in 1645, and in 1654 master of Christ's College, where he lived till his death in 1688. His intellectual affinity with More was very close, but their modes of life differed. More was a retired scholar who wrote and published book after book, with new editions of them, new prefaces, and copious annotations—in spite of his leisure, careless of literary form. Cudworth, on the other hand, was immersed in the affairs of his college and the duties of his professorship and was consulted on public business. His earlier publications were not numerous and were not philoso-

[1] *Enchiridion Ethicum*, I, v, 1.

phical in character. But he must have been an unwearied worker, as is shown by the masses of manuscript he left behind him as well as by the one philosophical book published in his life-time.

This book is *The True Intellectual System of the Universe*, the first part of which—the only part to be completed—appeared in 1678. It is an impressive monument of the scholarship of the time; and, unwieldy as it is, it shows a systematic plan carried out in a great manner. It is learning in the interests of thought; and, although the reader may easily go astray among its learned digressions, he feels that the author himself kept the reins of his argument well in hand. Cudworth's object, like that of More, is to establish the spiritual nature of reality. The revival of materialism by Hobbes, and the bearing of that theory on the moral life, gave occasion to his endeavour. Hobbes is to be refuted; but Hobbes is a modern exponent of an ancient theory; materialism must be tracked to its source in antiquity and its faults exposed at their origin. Descartes also, having given a mechanical explanation of the physical world, repeated to that extent the error of Democritus. What Cudworth did not see was that both Descartes and Hobbes had got hold of a method of enquiry which was independent of traditional opinion, and that mere learning was wasted upon them. The view has been held that the ancients were somehow nearer the fountain-head of truth than the moderns, and that sound doctrine should be sought in the past. This view was favoured by ecclesiastical tradition and, although Cudworth did not adopt it, its influence may be traced on his method. At the same time, judged by modern standards, his historical method—and the same may be said of More's—was essentially uncritical. And, where the historical matter bulks so largely, it is difficult to disentangle the elements of value in the work as a whole.

When he first started to write, Cudworth had in view "only a discourse concerning liberty and necessity." But

he saw that this took in other things—so many things indeed that he never reached his intended subject. The fatalism which he set out to refute was of three kinds: first, the materialistic and atheistic fatalism, which he calls 'Democritic'; secondly, the "theistic but immoral fatalism," which refers everything to God and makes the distinction between good and evil rest on arbitrary enactment only; and thirdly, another form of theistic fatalism which, although admitting moral attributes in God, leaves no place for liberty anywhere "and therefore no distributive or retributive justice in the world." Now for Cudworth three doctrines form the essentials of true religion: the being of God; the eternal nature of goodness; and the freedom of man. These three things he has to defend against the three forms of fatalism; and to each he had designed to devote a separate book of his great work. But only the first book—that against atheism—was completed and published.

The ancient atomists before Democritus—so Cudworth thinks he can prove—were theists and believed in incorporeal as well as in corporeal substance. The grounds for his statement are interesting as showing what may be taken for historical evidence. According to Strabo, Pythagoras conversed at Sidon with the successors of one Moschus and introduced their doctrine into Greece. This Moschus lived before the Trojan war; he was a Sidonian or Phoenician—a Semite of sorts; and his name bears some resemblance to Moses—with whom therefore he may be identified. His doctrine—the ancient or "Moschical" philosophy—had two parts: "atomical physiology and theology or pneumatology." Democritus, "being atheistically inclined," adopted the former and discarded the latter; Plato took the reverse course.

Cudworth reviews the various arguments urged against theism, and his review is elaborate, subtle, and fair-minded. He distinguishes also four forms of atheism: the "hylopathian or Anaximandrian," which derives all

things from matter in the way of qualities and forms; the "atomical or Democritical, which doth the same thing in the way of atoms and figures"; the "cosmoplastic or Stoical," which refers everything to "one plastic or methodical but senseless nature"; and the "hylozoic or Stratonical," which ascribes to matter as such "a certain living and energetic nature, but devoid of all animality, sense, and consciousness." Cudworth's learning was of course bounded by the opportunities of his time, and it is not surprising that he held that all atheists were materialists or (as he calls them) "corporealists"—that they were afflicted by pneumatophobia or "an irrational but desperate abhorrence from spirits or incorporeal substances." But he shows insight in not limiting materialism to atomism or the mechanical theory. His discussions of hylozoism and of the theory of a plastic nature are of interest by bringing out the critical difficulty for all non-theistic theories—the explanation of the life of mind. On the plastic nature he has a long appendix. He holds that it is a reality, not as taking the place of God, but as a subordinate instrument of the Deity—an incorporeal substance which is the divine art embodied in nature. It acts for ends, but is not conscious of them, and it operates "fatally and sympathetically" according to the laws impressed upon it by perfect intellect. Its business is the orderly disposal of matter, but it works "vitally and magically" and not, like human art, mechanically.

Cudworth's positive argument for theism is prefaced by the postulate that "there must of necessity be something self-existent from eternity." At first he seems to adopt the ontological argument: "the true and proper idea of God, in its most contracted form, is this, a being absolutely perfect; for this is that alone to which necessary existence is essential and of which it is demonstrable[1]." But afterwards he goes more fully into the matter. He sees that it may be urged against the argument that it

[1] *True Intellectual System* (ed. 1845), I, p. 307.

only shows "that if there be anything absolutely perfect, it must exist necessarily and not contingently; but it doth not follow that there must of necessity be such a perfect being existing." He then sets down the best he can on the other side, but thinks it "not very probable that many atheists will be convinced thereby," and so leaves the question to "the intelligent and impartial reader[1]." He has, however, an argument of his own, which is of the same order and which runs somewhat as follows: God is at least possible, seeing that the idea of God does not involve a contradiction; now this idea includes necessary existence in it; and from these two premisses (if not from the latter alone) it follows that God actually is. "A perfect necessarily-existent being, upon the bare supposition of its non-existence, could no more possibly have been than it could possibly hereafter be; because, if it might have been though it be not, then would it not be a necessary existent being": "a necessary existent being, if it be possible, it is[2]."

Cudworth does not rely upon this argument alone. The whole world for him is probative of God. He deals equally with the problems of 'out of nothing' and with the marks of design in nature. He lays stress upon the need for an explanation of motion (taking occasion to dissect the mechanical explanation of things) and especially of the phenomena of life and mind. Were there no other substance than matter, he argues, there could be neither motion nor intellection nor volition, "but all would be a dead lump, nor could any one thing penetrate another[3]." The idea of incorporeal substance is not derived from the 'essences' of the scholastics. These are called eternal, not as being themselves substances, but because the knowledge of them is eternal: there being an Eternal Mind which comprehends them, of which other minds partake[4]. Sensationalism and nominalism are also dismissed. "Just and unjust are greater realities in nature than hard and

[1] *True Intellectual System*, III, pp. 39–41.
[2] *Ibid.* III, p. 49.
[3] *Ibid.* III, p. 225.
[4] *Ibid.* III, p. 226.

soft." There is a scale of being, with God at the head and at the foot inanimate matter[1]. But on the scale of our knowledge God does not come first. The view that knowledge of God is "a praecognitum of all other science" has a "plausibility of piety about it"; but it is self-destructive. Not omnipotence itself can alter the nature of truth. Truth is not *made*, but *is*. "The divine will and omnipotence itself hath no imperium upon the divine understanding: for if God understood only by will, he would not understand at all[2]."

Cudworth's historical insight was not equal to his learning, and he wasted a mass of erudition in trying to show that pagan polytheism had at its back a belief in the one God. In the same connection he entered upon a lengthy comparison of the Platonic trinity—the "three divine hypostases," as Plotinus called them, of monad, mind, and soul—with the Christian. They were opposed in some of their developments, but were in essence at one; and this is not surprising seeing that the Platonic doctrine was probably "at first derived from a divine or Mosaic cabala[3]." Yet this was dangerous ground for Cudworth. Controversialists found heresy in his utterances on this point and neglected the constructive argument of his book. And it has been thought that disappointment with its reception had something to do with his failure to complete his original design.

When More was persuaded to issue a text-book of ethics, Cudworth resented the plan as an intrusion into a field which he had made his own. He had himself, he said, had a "design concerning Good and Evil, or Natural Ethics." The reference may be to a manuscript on Moral Good and Evil of nearly a thousand pages, which has never been printed; or it may be to a shorter work—*A Treatise concerning Eternal and Immutable Morality*—which was published in 1731, forty-three years after the author's

[1] *True Intellectual System*, III, p. 412.
[2] *Ibid.* III, p. 33.
[3] *Ibid.* II, p. 340.

death. The latter treatise begins and ends with ethical conceptions, but, for the most part, it is occupied with questions belonging to the theory of knowledge. It is a striking contribution to epistemology, and, in literary form, it is comparatively free from learned irrelevancies.

Cudworth starts with moral distinctions and contends that they are not relative or arbitrary. But the position is perfectly general and is not limited to morality. "Things are what they are not by will but by nature." God can make a thing exist or not exist; but he cannot make it different from its nature or essence. Nothing can be without a nature, and the natures or essences of all things are immutable. This, however, is not to say that things are independent of God; but they depend upon—or participate in—his eternal and immutable wisdom, and not upon his mere will[1]. In this work the author covers a good deal of ground which he had already traversed, but he goes on to explore anew the nature of knowledge as "an inward and active energy of the mind itself." His fundamental position is that "the intelligible forms by which things are understood or known are not stamps or impressions passively printed upon the soul from without, but ideas vitally protended or actively exerted from within itself." Thus knowledge is not reminiscence of something known before birth, but it does involve "anticipations" of experience. The power of knowing or intellection is not received from the senses; and it implies an object of intellect. Whereas the objects of sense are particular corporeal things, the objects of intellection are the intelligible 'rationes' or reasons of things, and are themselves nothing else than modifications of the knowing mind. Such are concepts like justice, duty, truth, cause, etc.; such also are certain propositions, for example, 'nothing can be and not be at the same time.' Of these things no image or phantasm can be formed; they cannot

[1] *Eternal and Immutable Morality*, book I, ch. iii, § 7.

be derived from sense-perception. It is different with the general ideas of natural objects (e.g., 'rose'). They contain elements both of understanding and of sense: "there is a complication of something noëmatical and something phantasmatical together."

Of innate ideas some are non-relative, as wisdom, knowledge, truth, etc.; others relative, as cause, effect, means, end, order, etc., involving the comparing activity of mind. Neither sort is derived from sense, though sense may be "the outward occasion by which they are excited." Although modifications of intellect, they are not mere 'entia rationis' or subjective (in the modern meaning of the term), and this for two reasons: in the first place because a mode of intellect is a mode of something which is real and has more 'entity' in it than matter or body; and, in the second place, because they are valid for things without us. Thus art and wisdom, for example, beget real and important effects in nature and human life; and relations are "ingredients" in the true nature or essence of things whether natural or artificial. Hence also it follows that the idea of a composite thing cannot be passively stamped upon the mind but is "comprehended only by the large unitive power of the intellect": it requires, as we may put it, using Kantian language, a synthetic act of the understanding.

In some parts of his discussion Cudworth comes very near modern theories, for example, the distinction of perceptual and conceptual space. Sense, he points out (as does More also), does not present us with exact straight lines or circles. The visible appearances can only have been the occasions which induced the mind actively to form the accurate and precise "intelligible ideas" of straight line or circle. He comes also upon the analogy of sense-perception to a "divine language," which was afterwards developed by Berkeley. "Nature," he says, "doth as it were talk with us in the outward objects of sense"; and "the soul, as by a certain secret instinct,... understanding

nature's language,... perceives and takes cognisance of many other things."

"Knowledge," he says again, "doth not begin in individuals but end in them... And if we know as God knows, then do we know or gain knowledge by universals." Only the intelligible natures or essences of things are objects of certain knowledge. Considered formally, they exist only in the mind, but yet they have an immutable nature of their own. Were all finite things and minds annihilated, mathematical and other verities would remain—in the mind of God. An infinite mind therefore necessarily exists, which "always actually comprehendeth himself, the essences of all things, and their verities; or rather, which is the rationes, essences, and verities of all things."

But for Cudworth, as for Descartes, the question arises how we are to distinguish truth from error; and their answers are similar. The immediate objects of intellection exist in the mind itself. We may not measure them by external things; we cannot consult their archetypes in the eternal divine intellect; the criterion of true knowledge is clear intelligibility. "Whatever is clearly conceived is an entity and a truth." But for Cudworth, unlike Descartes, error arises not from bias of will but from obscurity or confusion: falsehood is a non-entity and therefore cannot be clearly conceived, for "omnipotence itself cannot make a non-entity to be an entity."

The result applies to the first principles of morality. Moral good and evil, justice and injustice, signify a reality, either absolute or relative, in the things so denominated; they have natures which cannot be altered by will or opinion. And these moral principles exist in the infinite eternal mind, "whose nature is the first rule and exemplar of morality." With this conclusion Cudworth has established the "eternal and immutable" nature of morality; into its detailed applications he does not enter at all.

John Smith, perhaps the most attractive figure of the

Cambridge group, was born in 1618 and died in 1652. He was the son of a small farmer in Northamptonshire, entered Emmanuel College in 1636, and became a fellow of Queens' College in 1644. He was a scholar ("a living library," it was said) and an independent thinker, and he had also the teacher's gifts of sympathy and utterance: "no less happy in expressing his mind than in conceiving." His short and busy life did not give him time for composing a philosophical treatise; and all that survives of his work is a volume of *Discourses*, published in 1660. "Calmly and closely reasoned, they are at the same time inspired" is Tulloch's judgment upon them[1]. The discourses are ten in number, and their chief topics, in a philosophical regard, are 'the true way or method of attaining to divine knowledge,' 'the immortality of the soul,' 'the existence and nature of God,' and 'the excellency and nobleness of true religion.' They are remarkable discourses to have been preached in a college chapel at any time, but especially in the middle of the seventeenth century. Smith illustrates the Christian life and Christian doctrine by means of the ideas of Plato, Plotinus, and Proclus. His pages are full of quotations from these masters. He is so distinctly and even controversially Platonic that he warns his hearers against Aristotle, who "defaced the sacred monuments of the ancient metaphysical theology," and against Aristotle's "late interpreters," who "are as little sometime acquainted with his meaning and design as they are with that elder philosophy which he so corrupts."

Smith was a Christian Platonist, and among the finest examples of the type. It is not chiefly the doctrine of ideas that attracts him, but rather the spiritual interpretation of life and reality as a whole, which he finds both in Plato and in Plotinus. And the thought is more simply expressed by him than by More or Cudworth. His quotations are

[1] *Rational Theology and Christian Philosophy in England in the Seventeenth Century*, 2nd ed., II, p. 135.

certainly numerous, but they always illustrate his own thought. And his tone must have sounded strange—even if attractive—to hearers nurtured on the prevailing theology of the day. "Salvation," he said, "is nothing else but a true participation of the divine nature. Heaven is not a thing without us, nor is happiness anything distinct from a true conjunction of the mind with God in a secret feeling of his goodness and reciprocation of affection to him." God is to be sought within a man's own soul; and a good life is "the prolepsis and fundamental principle of man's soul." Smith is far from holding the doctrine of the utter depravity of man. The radical principles of knowledge may be darkened, but they cannot easily be obliterated. And knowledge may pass from discourse into an immediacy like that of sense: "that which before was only faith well built upon sure principles (for such our science may be) now becomes vision."

The discourse on Immortality contains his most complete argument. It proceeds from the postulate "that no substantial and indivisible thing ever perisheth," and then goes on, in the first place, to distinguish soul from body. Our notion of body never reaches the clearness of our notion of mind as "something within us that thinks, apprehends, reasons, and discourses." All the operations of mind bring out its nature as distinct from body. Smith (after Proclus) enumerates four degrees of knowledge through which the distinction is made increasingly clear. First comes the naked perception of sensible impressions, without any reason; then the knowledge of opinion, in which impressions are collated with our more obscure ideas; thirdly, discourse or reason, as exemplified in mathematics; and, beyond these, a fourth kind of knowledge—the "naked intuition of eternal truth which is always the same, which never rises nor sets, but always stands still in its vertical, and fills the whole horizon of the soul with a mild and gentle light," thus giving evidence of "some permanent and stable essence in the soul

of man." The soul partakes "of time in its broken and particular conceptions and apprehensions, and of eternity in its comprehensive and stable contemplations." Once on the top of this high Olympus, the soul will no longer "doubt whether any drowsy sleep shall hereafter seize upon it," but will grasp "fast and safely its own immortality and view itself in the horizon of eternity." Thus, in the scale of knowledge, each degree corrects that below it and leads to a higher apprehension till, in the consciousness of eternal truth, the soul cannot doubt its own eternity.

Of Nathanael Culverwel personally little is known. Even the dates of his birth and death are uncertain. He entered Emmanuel College in 1633, the year after Whichcote became tutor, being thus a year junior to Cudworth and three years senior to John Smith. His *Discourse of the Light of Nature* was published posthumously in 1652, and he is said to have died either one or two years previously. Although bred in the very temple of the new school of thought, he did not altogether share its creed. He can scarcely be described as a Platonist. Unlike More, he would not come to terms with the doctrine of the pre-existence of souls, and he even rejected the theory of ideas. The mysticism of Lord Brooke was also alien to him; he had no sympathy with the union of contradictories; and he quotes with approval the criticism of Brooke published, in 1643, by John Wallis, under the title *Truth tried*. Nor can Culverwel be described as a 'latitude man.' He remained constant to Calvinism and, on the whole, to the puritan spirit. But he was far removed from the extremists of his party, of whom he writes that "if you do but offer to make a syllogism, they will straightway cry it down for carnal learning." "The Church," he said, "hath more security in resting upon genuine reason than in relying upon some spurious traditions." The purpose of his book is to show the true relation between faith and reason: "to give faith her full scope

and latitude, and to give reason also her just bounds and limits. This," he says, "is the first-born, but the other has the blessing." Two propositions sum up his doctrine: "(1) That all the moral law is founded in natural and common light, in the light of reason; and (2) That there is nothing in the mysteries of the gospel contrary to the light of reason." The law of nature belongs to reason, not to sense, and is essential to a rational creature. The voice of reason promulgates the law; but its obligation and binding virtue rest "partly in the excellency and equity of the commands themselves; but they principally depend upon the sovereignty and authority of God himself, thus contriving and commanding the welfare of His creature, and advancing a rational nature to the just perfection of its being." As Aquinas holds, the law of nature is a copy of the eternal law, and "this eternal law is not really distinguished from God himself." This view of the laws of nature was not altogether new, even in English. Hooker had already given classical expression to a doctrine essentially the same and drawn from similar sources. But no one had a clearer view than Culverwel of the essence of the doctrine. He never inclines to the theory that all knowledge arises out of sensation, and yet he never lapses into mysticism. His theory is a pure and elevated rationalism, though he holds that our reason needs illumination from the fuller light of faith. His style is worthy of the subject, if perhaps too full of learned references and occasionally oratorical; and it is hardly too much to say of the book that "it is almost a poem in its grandeur and harmony of conception, and the lyrical enthusiasm with which it chants the praise of reason[1]."

Joseph Glanvill was intimately associated with some members of the Cambridge school—in particular, with Henry More—but he was himself educated at Oxford, and he was not a Platonist. He had, however, many points

[1] Tulloch, *Rational Theology*, II, p. 411.

of sympathy with them. He was attracted by the new philosophy of Descartes—he calls it the "best philosophy"—whereas he had nothing but criticism for the Aristotelianism that still ruled the schools of Oxford. He was in sympathy also with the broad and reasonable tone that distinguished the theology of the Cambridge Platonists from the prevailing attitude of the puritan divines. Glanvill's mind was sensitive to all the influences of the time: the new science, the human culture, the contending doctrines in philosophy and theology. The result was a distrust of all dogmatic systems, combined with a certain openness of mind—a readiness to receive light from any quarter. His first and most famous book was *The Vanity of Dogmatizing* (1661), and a revised edition of the same was published in 1665 with the title *Scepsis scientifica: or Confest Ignorance the way to Science*. This was dedicated to the Royal Society, of which he had become a fellow in 1664.

In philosophy Glanvill professed himself a seeker. He discoursed on the defects in our knowledge even of the things nearest to us, such as the nature of the soul and the body: he held that reason is swayed by the emotions, so that "most of the contests of the litigious world pretending for truth are but the bandyings of one man's affections against another's." His chief censures were for the dogmas of the Aristotelians, and this involved him in controversy with "the learned Mr Thomas White," a priest of Douay, collaborator with Sir Kenelm Digby and a voluminous author, who answered *The Vanity of Dogmatizing* in a Latin treatise entitled *Sciri, sive sceptices et scepticorum a jure disputationis exclusio*. It is in his reply to this writer that Glanvill defines his scepticism as a "way of enquiry, which is not to continue still poring upon the writings and opinions of philosophers, but to seek truth in the great book of nature." The Royal Society, realising Bacon's prophetic scheme of Solomon's House, had adopted this method, and had done more for the improvement of

useful knowledge "than all the philosophers of the notional way since Aristotle opened his shop in Greece." Glanvill himself ventured upon a "continuation of the *New Atlantis*" in his essay *Antifanatick Theologie, and Free Philosophy*. His openness of mind and his conviction that authority and sense are our only evidence on such matters led to his belief in supernatural appearances. He thought that "the testimony of all ages" established their reality. And he distrusted the dogmatism of what he called "modern Sadducism": to him, it was a "matter of astonishment that men, otherwise witty and ingenious, are fallen into the conceit that there's no such thing as a witch or apparition."

Other writers of the period showed the influence of the new ideas. From the scholastic point of view, Samuel Parker, bishop of Oxford, criticised both Hobbes and Descartes, a treatise on Cartesianism having been published in England in 1675 by Antoine Legrand, of Douay, a Franciscan friar and member of the English mission. In his *Court of the Gentiles* (1669—77), Theophilus Gale traced all ancient learning and philosophy to the Hebrew Scriptures. John Pordage wrote a number of works, the mysticism of which was inspired by Jacob Boehme.

The treatise *De legibus naturae*, published in 1672, by Richard Cumberland, afterwards bishop of Peterborough, is much more than a criticism of Hobbes. It puts forward a doctrine of morality which is based upon the law of nature, and this is accompanied by a running criticism of Hobbes's views. Cumberland looks upon the law of nature as capable of being inferred from observation of physical and mental phenomena (themselves due to the will of God), and at the same time as pointing out "that possible action of a rational agent which will chiefly promote the common good." 'Good' is defined by him as "that which preserves, or enlarges and perfects, the

faculties of any one thing or of several," but he also uses the term as equivalent to happiness. And he thinks that the 'rules of life' are as plain as the 'art of numbering,' the following propositions being laid down as necessarily true: (1) "that the good of all rational beings is greater than the like good of any part of that aggregate body, that is, that it is truly the greatest good"; (2) "that in promoting the good of this whole aggregate, the good of individuals is contained and promoted"; and (3) "that the good of every particular part requires the introducing and settling of distinct property in such things, and such services of rational agents, as contribute to the common happiness." The work as a whole is heavy in style, weak in its philosophical analysis, and confused in argument. But its insistence on the social nature of man, and its doctrine of the common good as the supreme principle of morality, anticipate the direction taken by much of the ethical thought of the following century.

CHAPTER VI

JOHN LOCKE

JOHN LOCKE may be regarded as, on the whole, the most important figure in English philosophy. Others excelled him in genius; he had not the comprehensive grasp of Hobbes, or the speculative originality of Berkeley, or the subtlety of Hume; but he was surpassed by none in candour, sagacity, and shrewdness. These qualities recommended him to his countrymen, and the width of his interests reconciled them to his philosophy. He was a physician, always on the outlook for new knowledge, an adviser of statesmen, a sufferer in the cause of freedom, and an amateur theologian. His writings on economics, on politics, and on religion expressed the best ideas of the time—the ideas that were about to become dominant. He was the philosopher of the Revolution settlement; and, when the settlement was made, he came home to publish the books which he had prepared in exile. Even his great work, *An Essay concerning Human Understanding*, may have seemed only to show the grounds in the human mind for the lessons of honesty, liberty, and toleration which he constantly inculcated. It is almost with a shock of surprise that one realises that this same *Essay*, by its 'historical plain method,' gave a new direction to European philosophy and provided a new basis for the science of psychology.

Locke was born at Wrington, a village in Somerset, on 29 August 1632. He was the son of a country solicitor and small landowner who, when the civil war broke out, served as a captain of horse in the parliamentary army. "I no sooner perceived myself in the world than I found myself in a storm," he wrote long afterwards,

during the lull in the storm which followed the king's return. But political unrest does not seem to have seriously disturbed the course of his education. He entered Westminster school in 1646, and passed to Christ Church, Oxford, as a junior student, in 1652; and he had a home there (though absent from it for long periods) for more than thirty years—till deprived of his studentship by royal mandate in 1684. The official studies of the university were uncongenial to him; he would have preferred to have learned philosophy from Descartes instead of from Aristotle; but evidently he satisfied the authorities, for he was elected to a senior studentship in 1659, and, in the three or four years following, he took part in the tutorial work of the college. At one time he seems to have thought of the clerical profession as a possible career; but he declined an offer of preferment in 1666, and in the same year obtained a dispensation which enabled him to hold his studentship without taking orders. About the same time we hear of his interest in experimental science, and he was elected a fellow of the Royal Society in 1668. Little is known of his early medical studies. He cannot have followed the regular course, for he was unable to obtain the degree of doctor of medicine. It was not till 1674 that he graduated as bachelor of medicine. In the following January his position in Christ Church was regularised by his appointment to one of the two medical studentships of the college.

His knowledge of medicine and occasional practice of the art led, in 1666, to an acquaintance with Lord Ashley (afterwards, from 1672, Earl of Shaftesbury). The acquaintance, begun accidentally, had an immediate effect on Locke's career. Without severing his connection with Oxford, he became a member of Shaftesbury's household, and seems soon to have been looked upon as indispensable in all matters domestic and political. He saved the statesman's life by a skilful operation, arranged a suitable marriage for his heir, attended the lady in her confine-

ment, and directed the nursing and education of her son—afterwards famous as the author of *Characteristics*. He assisted Shaftesbury also in public business, commercial and political, and followed him into the government service. When Shaftesbury was made lord chancellor in 1672, Locke became his secretary for presentations to benefices, and, in the following year, was made secretary to the board of trade. In 1675 his official life came to an end for the time with the fall of his chief.

Locke's health, always delicate, suffered from the London climate. When released from the cares of office, he left England in search of health. Ten years earlier he had had his first experience of foreign travel and of public employment, as secretary to Sir Walter Vane, ambassador to the Elector of Brandenburg during the first Dutch war. On his return to England, early in 1666, he declined an offer of further service in Spain, and settled again in Oxford, but was soon induced by Shaftesbury to spend a great part of his time in London. On his release from office in 1675 he sought milder air in the south of France, made leisurely journeys, and settled down for many months at Montpellier. The journal which he kept at this period is full of minute descriptions of places and customs and institutions. It contains also a record of many of the reflections that afterwards took shape in the *Essay concerning Human Understanding*. He returned to England in 1679, when his patron had again a short spell of office. He does not seem to have been concerned in Shaftesbury's later schemes; but suspicion naturally fell upon him, and he found it prudent to take refuge in Holland. This he did in August 1683, less than a year after the flight and death of Shaftesbury. Even in Holland for some time he was not safe from danger of arrest at the instance of the English government; he moved from town to town, lived under an assumed name, and visited his friends by stealth. His residence in Holland brought political occupations with it, among the men who were

preparing the English revolution. It had at least equal value in the leisure which it gave him for literary work and in the friendships which it offered. In particular, he formed a close intimacy with Philip van Limborch, the leader of the Remonstrant clergy, and the scholar and liberal theologian to whom *Epistola de Tolerantia* was dedicated. This letter was completed in 1685, though not published at the time; and, before he left for England, in February 1689, the *Essay concerning Human Understanding* seems to have attained its final form, and an abstract of it was published in Leclerc's *Bibliothèque universelle* in 1688.

The new government recognised his services to the cause of freedom by the offer of the post of ambassador either at Berlin or at Vienna. But Locke was no place hunter; he was solicitous also on account of his health; his earlier experience of Germany led him to fear the "cold air" and "warm drinking"; and the high office was declined. But he served less important offices at home. He was made commissioner of appeals in May 1689, and, from 1696 to 1700, he was a commissioner of trade and plantations at a salary of £1000 a year. Although official duties called him to town for protracted periods, he was able to fix his residence in the country. In 1691 he was persuaded to make his permanent home at Oates in Essex, in the house of Sir Francis and Lady Masham. Lady Masham was a daughter of Cudworth, the Cambridge Platonist; Locke had manifested a growing sympathy with his type of liberal theology; intellectual affinity increased his friendship with the family at Oates; and he continued to live with them till his death on 28 October 1704.

With the exception of the abstract of the *Essay* and other less important contributions to the *Bibliothèque universelle*, Locke had not published anything before his return to England in 1689; and by this time he was in his fifty-seventh year. But many years of reflection and preparation made him ready now to send forth books

from the press in rapid succession. In March 1689 his *Epistola de Tolerantia* was published in Holland; an English translation of the same, by William Popple, appeared later in the same year, and in a corrected edition in 1690. The controversy which followed this work led, on Locke's part, to the publication of a *Second Letter*, and then of a *Third Letter*, in 1690 and 1692 respectively. In February 1690 the book entitled *Two Treatises of Government* was published, and in March of the same year appeared the long expected *Essay concerning Human Understanding*, on which he had been at work intermittently since 1671. It met with immediate success, and led to a voluminous literature of attack and reply; young fellows of colleges tried to introduce it at the universities, and heads of houses sat in conclave to devise means for its suppression. To one of his critics Locke replied at length. This was Edward Stillingfleet, bishop of Worcester, who, in his *Vindication of the Doctrine of the Trinity* (1696), had attacked the new philosophy. It was the theological consequences which were drawn from the doctrines of the *Essay*, not so much by Locke himself as by Toland, in his *Christianity not Mysterious*, that the bishop had chiefly in view; in philosophy for its own sake he does not seem to have been interested. But his criticism drew attention to one of the least satisfactory (if also one of the most suggestive) doctrines of the *Essay*—its explanation of the idea of substance; and discredit was thrown on the "new way of ideas" in general. In January 1697 Locke replied in *A Letter to the Bishop of Worcester*. Stillingfleet answered this in May; and Locke was ready with a second letter in August. Stillingfleet replied in 1698, and Locke's lengthy third letter appeared in 1699. The bishop's death, later in the same year, put an end to the controversy. The second edition of the *Essay* was published in 1694, the third in 1695, and the fourth in 1700. The second and fourth editions contained important additions. An abridgment of it appeared in 1696, by John

Wynne, fellow of Jesus College, Oxford; it was translated into Latin and into French soon after the appearance of the fourth edition. The later editions contain many modifications due to the author's correspondence with William Molyneux, of Trinity College, Dublin, a devoted disciple, for whom Locke conceived a warm friendship. Other correspondents and visitors to Oates during these years were Sir Isaac Newton and Anthony Collins, a young squire of the neighbourhood, who afterwards made his mark in the intellectual controversies of the time.

Other interests also occupied Locke during the years following the publication of his great work. The financial difficulties of the new government led in 1691 to his publication of *Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money*, and of *Further Considerations* on the latter question, four years later. In 1693 he published *Some Thoughts concerning Education*, a work founded on letters written to a friend, and in 1695 appeared *The Reasonableness of Christianity*, and later *A Vindication* of the same against certain objections; and this was followed by a second vindication two years afterwards. Locke's religious interest had always been strongly marked, and, in the later years of his life, much of his time was given to theology. Among the writings of his which were published after his death are commentaries on the Pauline epistles, and a *Discourse on Miracles*, as well as a fragment of a *Fourth Letter for Toleration*. The posthumously published writings include further *An Examination of Father Malebranche's Opinion of Seeing all things in God*, *Remarks on Some of Mr Norris's Books*, and—most important of all—the small treatise on *The Conduct of the Understanding*, which had been originally designed as a chapter of the *Essay*.

Locke opened a new way for English philosophy. Stillingfleet saw dangers ahead in that way; but its discovery was Locke's title to fame. It was no new thing, certainly, to lay stress upon method. Herein he followed

the example of Bacon and Hobbes and other pioneers of modern philosophy. Bacon had done more: he had found dangers and defects in the natural working of men's minds, and had devised means to correct them. But Locke went a step further, and undertook a systematic investigation of the human understanding with a view to determining something else—namely, the truth and certainty of knowledge, and the grounds of belief, on all matters about which men are in the habit of making assertions. In this way he introduced a new department, or a new method, of philosophical enquiry, which has come to be known as theory of knowledge or epistemology; and, in this respect, he was the precursor of Kant and anticipated what Kant called the critical method.

We have Locke's own account of the origin of the problem in his mind. He struck out a new way because he found the old paths blocked. Five or six friends were conversing in his room, probably in London and in the winter of 1670—1, "on a subject very remote from this"; the subject, as we learn from another member of the party, was the "principles of morality and revealed religion"; but difficulties arose on every side, and no progress was made. Then, he goes on to say, "it came into my thoughts that we took a wrong course, and that before we set ourselves upon inquiries of that nature, it was necessary to examine our own abilities, and see what objects our understandings were, or were not, fitted to deal with." At the request of his friends, Locke agreed to set down his thoughts on this question against their next meeting; and he expected that a single sheet of paper would suffice for the purpose. So little did he realise the magnitude of the issues which he raised and which were to occupy his leisure for nearly twenty years.

Locke's interest centres in the traditional problems—the nature of self, the world, and God, and the grounds of our knowledge of them. We reach these questions only in the fourth and last book of the *Essay*. But to them the

enquiry of the first three books is preliminary, though it has, and Locke saw that it had, an importance of its own. His introductory sentences make this plain: "Since it is the understanding that sets man above the rest of sensible beings, and gives him all the advantage and dominion which he has over them; it is certainly a subject, even for its nobleness, worth our labour to inquire into. The understanding, like the eye, while it makes us see and perceive all other things, takes no notice of itself; and it requires art and pains to set it at a distance and make it its own object. But whatever be the difficulties that lie in the way of this inquiry; whatever it be that keeps us so much in the dark to ourselves; sure I am that all the light we can let in upon our minds, all the acquaintance we can make with our own understandings, will not only be very pleasant, but bring us great advantage, in directing our thoughts in the search of other things."

Locke will not "meddle with the physical consideration of the mind"; he has no theory about its essence or its relation to the body; at the same time, he has no doubt that, if due pains be taken, the understanding can be studied like anything else: we can observe its objects and the ways in which it operates upon them. All the objects of the understanding are described as *ideas*, and ideas are spoken of as being in the mind[1]. Locke's first problem, therefore, is to trace the origin and history of ideas, and the ways in which the understanding operates upon them, in order that he may be able to see what knowledge is and how far it reaches. This wide use of the term 'idea' is inherited from Descartes. The term in modern psychology which corresponds with it most nearly is 'presentation.' But presentation is, strictly, only one variety of Locke's idea, which includes also representation and image, percept, and concept or notion. His usage of the term thus differs so widely from the old Platonic meaning that the danger of confusion between them is not great. It suited

[1] Cp. *Essay*, introduction, § 2; book II, ch. i, § 5; book II, ch. viii, § 8.

the author's purpose also from being a familiar word in ordinary discourse as well as in the language of philosophers. Herein, however, lay a danger from which he did not escape. In common usage 'idea' carries with it a suggestion of contrast with reality; and the opposition which the "new way of ideas" excited was due to the doubt which it seemed to cast on the claim of knowledge to be a knowledge of real things.

The *Essay* is divided into four books; the first is a polemic against the doctrine of innate principles and ideas; the others deal with ideas, with words, and with knowledge respectively. The first book is remarkable for the way in which the author brings to bear upon the question all the facts that could then be ascertained regarding the ideas and beliefs of primitive and savage races. He points to the variety of human experience, and to the difficulty of forming general and abstract ideas, and he ridicules the view that any such ideas can be antecedent to experience. It is in its most extreme form that the doctrine of innate ideas is attacked; but he cannot see any alternative between that form and his own view that all ideas have their origin in experience.

Locke wishes to avoid any presupposition about matter, or mind, or their relation. It is not difficult to see that the notions which he has expelled often re-enter unbidden. But the peculiar value of his psychology consists in his attempt to keep clear of them. He begins neither with mind nor with matter, but with ideas. Their existence needs no proof: "everyone is conscious of them in himself, and men's words and actions will satisfy him that they are in others." His first enquiry is "how they come into the mind"; his next business is to show that they constitute the whole material of our knowledge. In his answer to the former question we discover the influence of traditional philosophy, or rather of ordinary common-sense views of existence, upon his thought. All our ideas, he says, come from experience. The mind has no innate

ideas, but it has innate faculties: it perceives, remembers, and combines the ideas that come to it from without; it also desires, deliberates, and wills; and these mental activities are themselves the source of a new class of ideas. Experience is therefore twofold. Our observation may be employed either about external sensible objects, or about the internal operations of our minds. The former is the source of most of the ideas which we have, and, as it depends "wholly upon our senses," is called "sensation." The latter is a source of ideas which "every man has wholly in himself," and it might be called "*internal* sense"; to it he gives the name "reflection."

Hence the peculiarity of Locke's position. There are no innate ideas "stamped upon the mind" from birth; and yet impressions of sense are not the only source of knowledge: "the mind," he says[1], "furnishes the understanding with ideas." No distinction is implied here between "mind" and "understanding," so that the sentence might run, "the mind furnishes itself with ideas." As to what these ideas are, we are not left in doubt: they are "ideas of its own operations." When the mind acts, it has an idea of its action, that is, it is self-conscious. Reflection, therefore, means self-consciousness, and, as such, is assumed to be an original source of our knowledge. Afterwards both Hume and Condillac refused to admit reflection as an original source of ideas, and both, accordingly, found that they had to face the problem of tracing the growth of self-consciousness out of a succession of sensations. According to Locke, reflection is an original, rather than an independent, source of ideas. Without sensation mind would have nothing to operate upon, and therefore could have no ideas of its operations. It is "when he first has any sensation" that "a man begins to have any ideas[2]." The operations of the mind are not themselves produced by sensation, but sensation is required to give the mind material for working on.

[1] II, i, 5. [2] II, i, 23.

The ideas which sensation gives "enter by the senses simple and unmixed[1]"; they stand in need of the activity of mind to bind them into the complex unities required for knowledge. The complex ideas of substances, modes, and relations are all the product of the combining and abstracting activity of mind operating upon simple ideas, which have been given, without any connection, by sensation or reflection. Locke's doctrine of knowledge has thus two sides. On the one side, all the material of knowledge is traced to the simple idea. On the other side, the processes which transform this crude material into knowledge are activities of mind which themselves cannot be reduced to ideas. Locke's metaphors of the *tabula rasa*, "white paper[2]," and "dark room" misled his critics and suggested to some of his followers a theory very different from his own. The metaphors only illustrate what he had in hand at the moment. Without experience, no characters are written on the "tablets" of the mind; except through the "windows" of sensation and reflection, no light enters the understanding. No ideas are innate; and there is no source of new simple ideas other than those two. But knowledge involves relations, and relations are the work of the mind; it requires complex ideas, and complex ideas are mental formations. Simple ideas do not, of themselves, enter into relation and form complex ideas. Locke does not, like Hobbes before him and Hume and Condillac after him, look to some unexplained natural attraction of idea for idea as bringing about these formations. Indeed, his treatment of 'the association of ideas' is an afterthought, and did not appear in the earlier editions of the *Essay*.

Starting from the simple ideas which we get from sensation, or from observing mental operations as they take

[1] II, ii, 1.

[2] The same metaphor was used by Hooker, *Ecclesiastical Polity*, book I, ch. vi: "The soul of man being therefore at the first as a book, wherein nothing is, and yet all things may be imprinted."

place, Locke has two things to explain: the universal element, that is, the general conceptions with which knowledge is concerned or which it implies; and the reference to reality which it claims. With the former problem Locke deals at great length; and the general method of his exposition is clear enough. Complex ideas arise from simple ideas by the processes of combination and abstraction carried out by the mind. It would be unfair to expect completeness from his enterprise; but it cannot be denied that his intricate and subtle discussions left many problems unsolved. Indeed, this is one of his great merits. He raised questions in such a way as to provoke further enquiry. Principles such as the causal relation, apart from which knowledge of nature would be impossible, are quietly taken for granted, often without any enquiry into the grounds for assuming them. Further, the difficulty of accounting for universals is unduly simplified by describing certain products as simple ideas, although thought has obviously been at work upon them.

In this connection an important inconsistency becomes apparent in his account of the primary data of experience. It is, indeed, impossible even to name the mere particular—the 'this, here, and now' of sense—without giving it a flavour of generality. But, at the outset, Locke tries to get as near it as possible. Simple ideas (of sensation) are exemplified by yellow, white, heat, cold, soft, hard, and so forth[1]. But, towards the end of the second book[2], a very different list is given: extension, solidity, and mobility (from sensation); perceptivity and motivity (from reflection); and existence, duration, and number (from both sensation and reflection). These are said to be "our original ideas," and the rest to be "derived" from or to "depend" on them. It is difficult to compare the two lists, instance by instance; but one example may be taken. According to the first list, *hard* is a simple idea; according to the second list, *solidity* is the original (and therefore

[1] II, i, 3. [2] II, xxi, 75.

simple) idea, and *hard* will be derived from it and depend on it. It is clear that, in making the former list, Locke was trying to get back to the primary data of our individual experience; whereas, in the second list, he is rather thinking of the objective reality on which our experience depends and which, he assumes, it reveals. But he does not observe the difference. He seems to forget his view that the original of all knowledge is to be found in the particular, in something "simple and unmixed." Thus he says[1] without hesitation, "If any one asks me, *what this solidity is*, I send him to his senses to inform him. Let him put a flint or a football between his hands, and then endeavour to join them, and he will know." But he will not know without going a long way beyond the simple idea. The simple ideas in the case are certain muscular and tactual sensations; and he interprets these by other means (including knowledge of external objects and his own organism) when he says that the flint or the football is solid.

His doctrine of modes is also affected by this same oblivion of the fact that a simple idea must be really simple. Thus he holds that 'space or extension' is a simple idea given both by sight and by touch[2]. One would expect, therefore, that the original and simple idea of space would be the particular patch seen at any moment or the particular 'feel' of the exploring limb. But we are told that "each idea of any different distance, or space, is a simple mode" of the idea of space[3]. Here again the simple idea is unwittingly generalised. He professes to begin with the mere particulars of external and internal sense, and to show how knowledge—which is necessarily general—is evolved from them. But, in doing so, he assumes a general or universal element as already given in the simple idea.

Having gone so far, he might almost have been expected to take a further step and treat the perceptions of

[1] II, iv, 4. [2] II, v.
[3] II, xiii, 4.

particular things as modes of the simple idea substance. But this he does not do. Substance is an idea regarding which he was in earnest with his own fundamental theory (although perplexed about the origin of the idea of "substance in general" as well as of the ideas of "particular sorts of substances"[1]); and the difficulties in which his theory involved him on this head were both provocative of criticism and fruitful for the progress of thought. He admits that substance is a complex idea; that is to say, it is formed by the mind's action out of simple ideas. Now, this idea of substance marks the difference between having sensations and perceiving things. Its importance, therefore, is clear; but there is no clearness in explaining it. We are told that there is a "supposed or confused idea of substance" to which are joined (say) "the simple idea of a dull whitish colour, with certain degrees of weight, hardness, ductility and fusibility," and, as a result, "we have the idea of *lead*." A difficulty might have been avoided if substance could have been interpreted as simply the combination by the understanding of white, hard, etc., or some similar cluster of ideas of sensation. But it was not Locke's way thus to ignore facts. He sees that something more is needed than these ideas of sensation. They are only *joined to* "the supposed or confused idea of substance," which is there and "always the first and chief[2]." He holds to it that the idea is a complex idea and so made by the mind; but he is entirely at a loss to account for the materials out of which it is made. We cannot imagine how simple ideas can subsist by themselves, and so "we accustom ourselves to suppose some substratum wherein they do subsist," and this we call substance. In one place, he even vacillates between the assertions that we have no clear idea of substance and that we have no idea of it at all[3]. It is "a supposition of he knows not what." This uncertainty, as will appear presently, throws its shadow over our whole knowledge of nature.

[1] Cp. II, xxiii, 1–3. [2] II, xii, 6. [3] I, iii, 19.

The 'new way of ideas' is thus hard put to it in accounting for the universal element in knowledge; it has even greater difficulties to face in defending the reality of knowledge. And, in the latter case, the author does not see the difficulties so clearly. His view is that the simple idea is the test and standard of reality. Whatever the mind contributes to our ideas removes them further from the reality of things; in becoming general, knowledge loses touch with things. But not all simple ideas carry with them the same significance for reality. Colours, smells, tastes, sounds, and the like are simple ideas, yet nothing resembles them in the bodies themselves; but, owing to a certain bulk, figure, and motion of their insensible parts, bodies have "a power to produce those sensations in us." These, therefore, are called "secondary qualities of bodies." On the other hand, "solidity, extension, figure, motion or rest, and number" are also held by Locke to be simple ideas; and these are resemblances of qualities in body; "their patterns do really exist in the bodies themselves"; accordingly, they are "primary qualities of bodies[1]." In this way, by implication if not expressly, Locke severs, instead of establishing, the connection between simple ideas and reality. The only ideas which can make good their claim to be regarded as simple ideas have nothing resembling them in things. Other ideas, no doubt, are said to resemble bodily qualities (an assertion for which no proof is given and none is possible); but these ideas have only a doubtful claim to rank as simple ideas. Locke's prevailing tendency is to identify reality with the simple idea, but he sometimes comes within an ace of the opposite view that the reference to reality is the work of thought.

[1] A similar distinction between qualities of body was formulated by Galileo, Hobbes, and Descartes; its origin may be traced to Democritus; and the words 'primary' and 'secondary' were occasionally used in this connection by Robert Boyle, *Origine of Formes and Qualities* (1666), pp. 10, 43, 100–1; cp. *Tracts* (1671), introduction, p. 18.

In the fourth book of his *Essay*, Locke proceeds to apply these results so as to determine the nature and extent of knowledge. As ideas are the sole immediate objects of the mind, knowledge can be nothing else than "the perception of the connexion of and agreement, or disagreement and repugnancy, of any of our ideas." This agreement or disagreement is said to be of four sorts: identity or diversity; relation; co-existence or necessary connection; real existence. Each of these kinds of knowledge raises its own questions; but, broadly speaking, one distinction may be taken as fundamental. In the same paragraph in which he restricts knowledge to the agreement or disagreement of our ideas, he admits one kind of knowledge which goes beyond the ideas themselves to the significance which they have for real existence. When the reference does not go beyond the ideas 'in the mind,' the problems that arise are of one order; when there is a further reference to real things, another problem arises. The preceding books have prepared the way for the solution of both sets of problems.

When ideas are together in the mind, we can discover their relations to one another; so long as they are not taken to represent archetypes outside the mind, there is no obstacle to certainty of knowledge. "All relation terminates in, and is ultimately founded on, those simple ideas we have got from sensation or reflection"[1]; but "general and certain truths, are only founded in the habitudes and relations of abstract ideas[2]." In this way Locke vindicates the certainty of mathematics: although instructive, the science is merely ideal, and its propositions do not hold of things outside the mind. He thinks also that "morality is capable of demonstration as well as mathematics." But, in spite of the entreaties of his friend Molyneux, he never set out his ethical doctrine in detail. In the second book he had reduced moral good and evil to the pleasure and pain which—as reward and punish-

[1] II, xxviii, 18. [2] IV, xii, 7.

ment—come to us from some lawgiver; thus they point to a source outside the mind. But his ground for maintaining the demonstrative character of morality is that moral ideas are "mixed modes," and therefore mental products, so that their "precise real essence...may be perfectly known." He ventures upon two examples only of this demonstrative morality; and neither of them is more than verbal or gives any information about good or evil. Yet the doctrine is significant as showing the influence upon Locke of another type of thought, of which there are many traces both in the *Essay* and in his other works.

The real existences to which knowledge extends are self, God, and the world of nature. Of the first we have, says Locke, an intuitive knowledge, of the second a demonstrative knowledge, of the third a sensitive knowledge. This view he proceeds to explain and defend. Locke holds that the existence of the self is known by immediate intuition. Like Descartes, he thinks that doubt on this head is excluded. But he fails to point out how self can be an idea and thus belong to the material of knowledge. An idea of self cannot come from sensation; and the simple ideas of reflection are all of mental operations, and not of the subject or agent of these operations. On the other hand, when he had occasion to discuss personal identity, he followed his new way of ideas, and made it depend on memory. His proof of the existence of God belongs to the order called by philosophers cosmological. It starts with the existence of a thinking self or mind, and argues from this position to the necessity for an intelligent first cause. Locke assumes, without question, the validity of the causal principle even beyond the range of possible experience. It was left for David Hume to take the momentous step of questioning this principle.

Regarding self and God, therefore, Locke does not show any special originality of view. It is when he faces the question of the real existence of external bodies that

his doctrine of ideas as the sole immediate object of the understanding comes into play, and casts uncertainty upon the propositions of natural science. He does not, indeed, question the transition from the presence of an idea of sensation to the existence "at that time" of a thing which causes the idea in us[1]. Here, he thinks, we have "an assurance that deserves the name of knowledge[2]," although he admits that it is "not altogether so certain as our intuitive knowledge, or the deductions of our reason employed about the clear abstract ideas of our own minds." Knowledge of this sort is merely sensitive; it does not extend beyond "the present testimony of our senses employed about particular objects that do then affect them[3]." Necessary connection here is beyond our reach. Any assertion about things, except in respect of their immediate presence to the senses—all the generalisations of natural science, therefore—fall short of knowledge strictly so called. "God has set some things in broad daylight[4]"; but the science of nature is not one of them; there, as in many other matters, we have only "the twilight of probability"; but probability is sufficient for our purposes. This sober practical note marks the outcome of the whole enquiry: "our faculties being suited not to the full extent of being, nor to a perfect, clear, comprehensive knowledge of things free from all doubt and scruple; but to the preservation of us, in whom they are; and accommodated to the use of life[5]."

In his other works Locke's practical interests find ample scope; he deals with most of the questions that attracted the mind of the day, and he left upon them the mark of his thought. In *Two Treatises of Government* he has two purposes in view: to refute the doctrine of absolute power, as it had been put forward by Sir Robert Filmer, and to

[1] IV, xi, 2.
[2] IV, xi, 3.
[3] IV, xi, 9.
[4] IV, xii, 1.
[5] IV, xi, 8.

establish a theory which would reconcile the liberty of the citizen with political order. The criticism of Filmer is complete. His theory of the absolute sovereignty of Adam, and so of kings as Adam's heirs, has lost all interest; and Locke's argument has been only too effective: the exhaustive reply to so absurd a thesis becomes itself wearisome. There is little direct reference to the more enduring work of Hobbes; but this work seems to have been in Locke's mind when he argued that the doctrine of absolute monarchy leaves sovereign and subjects in the state of nature towards one another.

The constructive doctrines which are elaborated in the second treatise became the basis of social and political philosophy for many generations. Labour is the origin and justification of property; contract or consent is the ground of government and fixes its limits. Behind both doctrines lies the idea of the independence of the individual man. The state of nature knows no government; but in it, as in political society, men are subject to the moral law, which is the law of God. Men are born free and equal in rights. Whatever a man "mixes his labour with" is his to use. Or, at least, this was so in the primitive condition of human life in which there was enough for all and "the whole earth was America." Locke sees that, when men have multiplied and land has become scarce, rules are needed beyond those which the moral law or law of nature supplies. But the origin of government is traced not to this economic necessity, but to another cause. The moral law is always valid, but it is not always kept. In the state of nature all men equally have the right to punish transgressors: civil society originates when, for the better administration of the law, men agree to delegate this function to certain officers. Thus government is instituted by a 'social contract'; its powers are limited, and they involve reciprocal obligations; moreover, they can be modified or rescinded by the authority which conferred them. Locke's theory is thus no

more historical than the absolutism of Hobbes. It is a rendering of the facts of constitutional government in terms of thought, and it served its purpose as a justification of the Revolution settlement in accordance with the ideas of the time.

Locke's writings on economic subjects do not rank in importance with his treatises on government. They deal with particular questions raised by the necessities of the political situation. No attempt had yet been made to isolate the fact of wealth and make it the subject of a special science[1]. The direction of industry and commerce was held to be part of the statesman's duty; but, in the seventeenth century, it began to be carried out with less thoroughness than before; and at the same time new problems were opened up by the growth of the national life. The American colonies, the enterprise of the East India Company, the planting of Ireland, the commercial rivalry with Holland and with France, as well as questions regarding the rate of interest and the currency, occupied the attention of a crowd of writers in the second half of the century. Locke's own contributions were occasioned by the financial problems which faced the new government after the revolution. His reflections on the rate of interest show the growing disfavour with which appeals for state interference were beginning to be met. He points out the obstacles to trade that are caused when the rate of interest is fixed by law, and he argues in favour of freedom for what he calls, in words which suggest Adam Smith, "the natural interest of money." Money "turns the wheels of trade"; therefore its course should not be stopped. At the same time, he holds no general brief against the interference of the state in matters of commerce; nor is the language of the mercantilists foreign to him. Riches consist in plenty of gold and silver, for these command all the conveniences of life. Now, "in a country not furnished with mines, there are but two ways

[1] Cp. Cunningham, *Growth of English Industry and Commerce*, § 206.

of growing rich, either conquest or commerce." For us commerce is the only way; and Locke condemns "the amazing politics of some late reigns" which had "let in other competitors with us for the sea." In the concluding portion of *Some Considerations of the Consequences of the Lowering of Interest and Raising the Value of Money* (1691), Locke laid stress on the importance of a uniform and stable measure of values; four years later, in his *Further Considerations*, he defended his view against the proposals, involving a depreciation of the standard, which William Lowndes, secretary of the treasury, had set forth in *An Essay for the amendment of the silver coins* (1695).

Locke's plea for toleration in matters of belief has become classical. His *Common-Place Book* shows that his mind was clear on the subject more than twenty years before the publication of his first *Letter*. The topic, indeed, was in the air all through his life, and affected him nearly. When he was a scholar at Westminster, the powers of the civil magistrate in religious matters were the subject of heated discussion between presbyterians and independents in the assembly of divines that held its sessions within a stone's throw of his dormitory; and, when he entered Christ Church, John Owen, a leader of the independents, had been recently appointed to the deanery. There had been many arguments for toleration before this time, but they had come from the weaker party in the state. Thus Jeremy Taylor's *Liberty of Prophesying* appeared in 1646, when the fortunes of his side had suffered a decline. For Owen the credit has been claimed that he was the first who argued for toleration "when his party was uppermost[1]." He was called upon to preach before the House of Commons on 31 January 1649, and performed the task without making any reference to the tragic event of the previous day; but to the published sermon he appended a remarkable discussion on toleration. Owen did not take

[1] W. Orme, 'Memoirs of John Owen,' prefixed to the latter's *Works*, 1826, I, p. 76.

such high ground as Milton did, ten years later, in his *Treatise of Civil Power in Ecclesiastical Causes*—affirming that "it is not lawful for any power on earth to compel in matters of religion." He abounds in distinctions, and indeed his position calls for some subtlety. He holds that the civil magistrate has duties to the church, and that he ought to give facilities and protection to its ministers, not merely as citizens but as preachers of 'the truth'; on the other hand he argues that civil or corporal penalties are inappropriate as punishments for offences which are purely spiritual.

The position ultimately adopted by Locke is not altogether the same as this. He was never an ardent puritan; he had as little taste for elaborate theologies as he had for scholastic systems of philosophy; and his earliest attempt at a theory of toleration was connected with the view that, in religion, "articles in speculative opinions [should] be few and large, and ceremonies in worship few and easy." The doctrines which he held to be necessary for salvation would have seemed to John Owen a meagre and pitiful creed. And he had a narrower view also of the functions of the state. "The business of laws," he says, "is not to provide for the truth of opinions, but for the safety and security of the commonwealth, and of every particular man's goods and person. And so it ought to be. For truth certainly would do well enough, if she were once left to shift for herself. She seldom has received, and I fear never will receive, much assistance from the power of great men, to whom she is but rarely known, and more rarely welcome. She is not taught by laws, nor has she any need of force, to procure her entrance into the minds of men. Errors, indeed, prevail by the assistance of foreign and borrowed succours. But if truth makes not her way into the understanding by her own light, she will be but the weaker for any borrowed force violence can add to her."

A church, according to Locke, is "a free and voluntary society"; its purpose is the public worship of God; the

value of this worship depends on the faith that inspires it: "all the life and power of true religion consist in the inward and full persuasion of the mind"; and these matters are entirely outside the jurisdiction of the civil magistrate. Locke therefore (to use later language) was a voluntary in religion, as he was an individualist on questions of state interference. There is an exception, however, to his doctrine of the freedom of the individual in religious matters. The toleration extended to all others is denied to papists and to atheists; and his inconsistency in this respect has been often and severely blamed. But it is clear that Locke made the exception not for religious reasons but on grounds of state policy. He looked upon the Roman Catholic as dangerous to the public peace because he professed allegiance to a foreign prince; and the atheist was excluded because, on Locke's view, the existence of the state depends upon a contract, and the obligation of the contract, as of all moral law, depends upon the divine will.

Locke's theological writings exhibit the characteristic qualities which his other works have rendered familiar. The traditions of theologians are set aside in them much as philosophical tradition was discarded in the *Essay*. He will search the Scriptures for religious doctrine just as he turned to experience for his philosophy, and he follows a method equally straightforward. Locke does not raise questions of Biblical criticism, such as Hobbes had already suggested and some of his own followers put forward soon afterwards; and the conclusions at which he arrives are in harmony with the Christian faith, if without the fulness of current doctrine. At the same time, his work belongs to the history of liberal theology and is intimately connected with the deism which followed; it treats religion like any other subject, and interprets the Bible like any other book; and, in his view of the nature of religion, he tends to describe it as if it consisted almost entirely in an attitude of intellectual belief – a tendency

which became more prominent in the course of the eighteenth century.

Locke's *Thoughts concerning Education* and his *Conduct of the Understanding* occupy an important place in the history of educational theory, though only a scanty reference can be made to them here. The subject had a right to prominence in his thought. The stress he laid on experience in the growth of mind led him to magnify, perhaps overmuch, the power of education. He held that "the minds of children [are] as easily turned, this way or that, as water itself." He underrated innate differences: "we are born with faculties and powers, capable almost of anything"; and, "as it is in the body, so it is in the mind, practice makes it what it is." Along with this view went a profound conviction of the importance of education, and of the breadth of its aim. It has to fit men for life—for the world, rather than for the university. Instruction in knowledge does not exhaust it; it is essentially a training of character.

Locke had the gift of making philosophy speak the language of ordinary life. As a consequence, his writings were followed by a whole literature of attack and defence. Of his critics Stillingfleet was the most prominent; he breathed an atmosphere of controversy, and his powers were displayed on many fields; he was not Locke's equal in intellectual fence; but he was a formidable opponent, and the difficulties in Locke's doctrine were pressed home by him with no little power.

Another critic, who made some stir at the time, was John Sergeant (1622—1707), a convert to Roman Catholicism and an ardent controversialist. In *The Method to Science* (1696), he maintained that all inference can be reduced to a single type and that all truths are identical propositions; cause and effect are really identical, and knowledge of one fact implies knowledge of all. 'That things are what they are' is, he held, the fundamental

principle of all knowledge[1]. This book was nearly finished, he tells us, before he became acquainted with Locke's *Essay*. A "cursory look" raised his hopes, but these were dashed by a "fuller view"; and, in 1697, he published *Solid Philosophy asserted against the Fancies of the Ideists*. It consists of two parts: first a number of preliminaries, and then a series of reflections on separate portions of the *Essay*. Sergeant's fundamental contention is against Locke's view of the idea as the representative or semblance of a reality other than itself. With 'idea' in this sense he will have nothing to do; we must beware of 'phantasms'—and of philosophising by fancy instead of by reason. He urges that we could never have a right to assert that an idea resembles the reality: "the thing resembled must be known, not only besides the idea, but by other means than by it, which can be no way but by the thing itself existing in the understanding." This he calls 'notion,' and "a notion is the very thing itself existing in my understanding." He recognises that people will regard this as a paradox, but "unless this thesis be as true as it is strange, it is impossible any man living should know anything at all." And therefore he will put the paradox clearly. "When I say 'the glass is in the window,'...the very glass itself which is in the window must be also in my mind." But the paradox is lessened when we find that "the self-same thing may have both a natural and an intellectual manner of existing." Things existed in the divine understanding before they were created, and still exist there; and a similar truth holds of the soul which knows any thing: it "is intellectually that thing." Notion, we might therefore say, is the thing known, *qua* intellectual; and the question arises whether this intellectual existence or 'being in the understanding' means anything more than simply 'being known.' Sargeant anticipated the objections to the theory of representative perception made by the realists who criticised

[1] Cp. Adamson, *Short History of Logic*, pp. 147–8.

Hume; but he did not adopt their theory of immediate perception, nor would he have been content with it. Yet his own doctrine does not explain knowledge.

Among the critics of Locke, mention may also be made of Henry Lee, William Sherlock, Archbishop King, John Broughton, and Thomas Burnet (author of *Sacra telluris theoria*). Another Thomas Burnet, of Kemnay in Aberdeenshire, was the intermediary through whom Locke received the *Réflexions* of Leibniz upon the *Essay*. The *Nouveaux Essais* of Leibniz, in which the doctrines of the *Essay* were criticised section by section, were ready for publication when Locke's death occurred, but, owing to this event, their appearance was postponed indefinitely. Amongst the writers who sided with Locke were Samuel Bold, Vincent Perronet, and Mrs Catherine Cockburn. Also of note is an anonymous work entitled *Two Dissertations concerning Sense, and the Imagination. With an Essay on Consciousness* (1728), which has been ascribed to Zachary Mayne[1]. The *Essay* investigates the functions of consciousness and self-consciousness, and is, as the author claims, the first independent enquiry into the subject. The *Dissertations* maintain that understanding is distinct from both sense and imagination. Although it is not easy, he says, "so to express a perception of sense as that some intellectual notion shall not unawares creep in," sense-perception and notion have different characteristics and are due to different faculties: the former supplies the matter; the latter, the form of our knowledge.

Two other writers of the period deserve further mention on their own account. These are Richard Burthogge and John Norris.

Burthogge had no great reputation in his own day, and

[1] A writer, chiefly on religion, who died in 1694. The ultimate authority (so far as I can trace) for ascribing the book to him is R. Watt, *Bibliotheca Britannica* (1824); but the preface "to the Reader" seems to me to imply that the book was not posthumously published. Noah Porter (Ueberweg's *Hist. of Phil.*, E.T., II, p. 368) suggests that it was by a son of Mayne; but the son referred to was not named Zachary, and the suggestion appears to be merely a guess. The only copy of the book known to me is in the British Museum.

was almost entirely forgotten afterwards, till recent historians drew attention to his merits. His chief work, *An Essay upon Reason and the Nature of Spirits*, was published in 1694 and dedicated to Locke "as to a person . . . acknowledged by all the learned world for one of the greatest masters of reason." But he cannot be counted either as a follower or as a critic of Locke. His characteristic doctrines had been expressed in an earlier work, *Organum vetus et novum*, published in 1678. He had come into contact independently with the Cartesian reform; he was acquainted (though he did not sympathise) with the work of Malebranche; and he may have been influenced directly by Geulincx, who was lecturing in the University of Leyden when Burthogge studied medicine there and, in 1662, graduated M.D. Burthogge's object was to reconcile the experimental or mechanical with the scholastic method. His most striking doctrine, however, concerns the subjective factor in knowledge, and this led to his assertion of the relativity of all knowledge. What Descartes and Locke had said of the secondary qualities is generalised. The understanding apprehends things only by its own notions: these are to it what colours are to the eye or sounds to the ear; whole and part, substance and accident, cause and effect are but "entities of reason conceived within the mind," and "have no more of any real true existence without it, than colours have without the eye, or sounds without the ear." With this radical doctrine of relativity Burthogge combined a Neoplatonic metaphysic. He held that there is one spirit that actuates and acts in all, in men as well as in nature, and that the spirit of nature is not (as Henry More taught) an incorporeal substance, but simply the "plastic faculty" of the spirit of God.

John Norris, fellow of All Souls College, Oxford, and rector of Bemerton, was a man of much greater and more enduring reputation. He was a voluminous author of discourses, letters, and poems, as well as of the longer and more systematic work on which his fame depends,

An Essay towards the Theory of the Ideal or Intelligible World, the first part of which was published in 1701, and the second in 1704. In temper of mind Norris may be regarded as the antithesis of Locke. He represents mysticism as against the latter's critical empiricism. But it would be a mistake to regard him as lacking in clearness of logical faculty. He was diffuse, and his argument would sometimes break off into devotional reflection, or into verse; but, from these digressions, he would return to the argument refreshed and ready to abide by its logic. Different as he is from Locke, both exhibit the powerful influence that swept over European thought from the mind of Descartes. But Locke was critical of the more speculative elements in the philosophy of Descartes, whereas these were the thoughts that appealed most strongly to Norris. The course of his studies, especially in Plato and St Augustine, and the tone of his mind, made him welcome the speculative, if mystical, development of Cartesianism due to Father Malebranche. Malebranche had a number of followers in England at this time; and two translations of the *Recherche de la Vérité* appeared in the year 1694; but Norris was the only writer of note who adopted his views; and his importance is due to the fact that he was no mere follower. He had thought out—one may even say, he had lived—the theory for himself. In his work he considers the ideal theory, first, as it is in itself, and then in its relation to our knowledge. He holds that the very nature or essences of things (as distinguished from their existence) are divine ideas or "degrees of being in the divine nature[1]"; and by the same theory he explains our perception of things. "'Tis generally allowed that the things without us are not perceived immediately by themselves, but by their ideas. The only question is, by what ideas, or what these ideas are?" His answer to this question is, that they are the divine ideas, or, in the words of Malebranche, that we "see all things in God[2]."

[1] *Ideal or Intelligible World*, I, p. 232.

[2] *Ibid.* II, pp. 442–3.

CHAPTER VII

BERKELEY AND HIS CONTEMPORARIES

THE period of English thought which followed Locke's death was fruitful both in great writers and in important movements. Locke's own influence was felt everywhere. His new way of approaching the subject, his freedom from the traditional technicalities of the schools, and his application of his method to a wide range of human interests, made philosophy count for more with reflective writers generally, and determined the line of thought taken by the greater minds. Speculation turned mainly upon three problems—the problem of knowledge, the problem of religion, and the problem of morality. The treatment of each problem led to striking developments; and Locke's influence affected them all, though in unequal degrees. The idealism of Berkeley followed directly from his fundamental positions; the leaders of the deists professed themselves his disciples, though they arrived at conclusions different from his; the work of the moralists was less fully determined by his speculations, though his ethical views were perhaps seldom far from their minds. In the present chapter, this division of problems will be followed; it will treat, in succession, of the metaphysicians, the deists, and the moralists. Most writers, indeed, did not limit their interests to a single problem; and their place here will have to be determined by a view of the permanent importance of their work in different departments. Strict chronological order also, to some extent, will be sacrificed. In this way, consideration of the writings of Samuel Clarke—although he was a prominent figure in the whole philosophical movement, and one of the earliest to attain eminence—will be postponed till the last section of the chapter.

I. METAPHYSICIANS

George Berkeley was born at Dysert castle, county Kilkenny, Ireland, on 12 March 1685, and educated at Kilkenny school and Trinity College, Dublin, which he entered in 1700 and where he remained, first as a scholar, afterwards as fellow and tutor, till January 1713. These early years are the most remarkable in Berkeley's literary career. He published, anonymously, two mathematical tracts in 1707; his *Essay towards a New Theory of Vision* appeared in 1709, his *Principles of Human Knowledge, Part I*, in 1710; and when, in 1713, he got leave of absence from his college and set out for London, it was "to print his new book"—*Three Dialogues between Hylas and Philonous*—as well as "to make acquaintance with men of merit." These three books reveal the new thought which inspired his life; and the evidence of his *Commonplace Book* (discovered and published by Campbell Fraser in 1871) shows that he was barely twenty years of age when this new thought took hold of him. Berkeley was absent from Ireland for eight years, spending his time in London, France, and Italy (where, on a second visit, he resided four years). During this period he did little literary work; he made some progress, indeed, with the second part of his *Principles*, but the MS. was lost in his travels, and the work was never resumed; his Latin treatise *De motu* was written as he was on his way home in 1720, and published in 1721; he collected materials for a natural history of Sicily, but this MS. also was lost; a journal written in Italy, however, and many letters remain to show his appreciation of the beauties of nature and art.

His return to England gave a new direction to his energy. The country was going through the period of collapse which follows a speculative mania; and Berkeley saw the true cause of the national decadence in the decline of religion, the decay of public spirit, and the prevalent

corruption of manners. One hundred and forty years later, Mark Pattison described the period as "an age whose poetry was without romance, whose philosophy was without insight, and whose public men were without character[1]." A similar judgment forms the burden of Berkeley's *Essay towards preventing the ruin of Great Britain*, published anonymously in 1721. He returned to Ireland and to Trinity College later in the same year, and was presented to the deanery of Dromore. The office attracted him because it would give him leisure for reflection and for philanthropic work; but a legal question arose as to the right of presentation, and his hopes received a check. Berkeley is one of the most perfect characters among men of letters; but his perfection was not colourless. He threw himself with energy into the defence of his rights, and at least had the satisfaction of a protracted lawsuit. While the case was still pending, in 1724, he was appointed to a much more valuable preferment—the deanery of Derry. "It is said to be worth £1500 a year," he wrote, "but I do not consider it with a view to enriching myself. I shall be perfectly contented if it facilitates and recommends my scheme of Bermuda."

This scheme seems to have taken hold of Berkeley's mind about two years previously[2]; to it he devoted his fortune and ten years of his life. His plan was to found a college in the Bermudas, with the twofold object of "the reformation of manners among the English in our western plantations, and the propagation of the gospel among the American savages." Berkeley spent four years in London in endeavouring to extract a charter and grant of money from a reluctant government and subscriptions from an unbelieving generation; he had to frequent the

[1] *Essays and Reviews*, 1860, p. 254.

[2] "It is now about ten months since I have determined with myself to spend the residue of my days in the Island of Bermuda, where I trust in Providence I may be the mean instrument of doing good to mankind." Letter of 4 March 1723, in Rand, *Berkeley and Percival* (1914), p. 203.

court and dispute twice a week with Samuel Clarke before Queen Caroline, then Princess of Wales; he listened to the banter of the wits of the Scriblerus Club, and then replied with such eloquence and enthusiasm that they "rose all up together, with earnestness exclaiming, 'Let us set out with him immediately'"; he canvassed every member of parliament with such effect that, in the Commons, there were only two opponents of the vote; even Walpole subscribed to the scheme, though he secretly determined that the government grant of money should never be paid. Bermuda became the fashion, and Berkeley was idolised. But he grudged the waste of time, and at last —with only a promise from Walpole that the grant would be paid—he set sail from Greenwich in September 1728 with his newly-married wife. In January 1729 he landed at Newport, Rhode Island. There he remained for nearly three years, waiting vainly for the government to fulfil its promises. This it never did; he never reached Bermuda, and his college was never founded. But he left his impress upon the early efforts of American philosophy; his interpretation of the material world modified the thinking of Jonathan Edwards, the metaphysician and theologian of New England; and the memory of his visit has been treasured by the American mind. The new world also affected Berkeley's imagination and led to a set of *Verses on the prospect of planting arts and learning in America*. One of his lines—"Westward the course of empire takes its way"—has come to be looked upon as prophetic; but his idea was not geographical; it was that better times would follow better morals, "where nature guides and virtue rules."

Berkeley remained in London for more than two years after his return to England; and a new period of authorship began, during which he joined in the controversies of the age. In *Alciphron, or the Minute Philosopher* (1732), written in the seclusion of his home in Rhode Island, he applied his general principles in defence of religion

against the free-thinkers. In 1733 appeared his *Theory of Vision, or Visual Language Vindicated and Explained*; and in the following year he published *The Analyst*, in which he criticised the positions of the new mathematics which, in his view, were connected with a materialistic conception of the world. This bold attempt to carry the war into the enemy's country called forth many pamphlets on the other side. In the same year Berkeley returned to Ireland as bishop of Cloyne; and henceforth his literary work was divided between questions of social reform and religious reflection. The reform is represented by *The Querist* (1735), a work full of penetrating remarks; both subjects are combined in *Siris: a Chain of Philosophical Reflexions* (1744), which begins by expounding the medicinal virtues of tar-water, and ends in an exposition of idealism in which the Lockean strain has given place to the Platonic. *A Miscellany containing several tracts* was published in October 1752. Two months earlier he had left Cloyne that he might spend the remainder of his days at Oxford; and there he died on 14 January 1753.

When Berkeley launched his idealism upon an unsympathetic world, he had read Descartes and Malebranche and been attracted by the philosophy of Plato; he was also acquainted with the works of the nathematicians and natural philosophers, and suspected a trend to materialism in their theories; but his thought had been formed under the influence of Locke, whose *Essay* found earlier recognition from the academic authorities at Dublin than from those of English universities. At the time when Berkeley entered Trinity College and for ten years afterwards, the provost was Peter Browne, afterwards bishop of Cork, a student and critic of the *Essay*. He had already attracted attention by an *Answer* to Toland (1697). His more original works followed after a long interval—*The Procedure, extent and limits of human understanding*, in 1728, and the work called, for short, *Divine Analogy*, in 1733. These two books are connected with Berkeley's later

work, for the theory of our knowledge of God propounded in the former is criticised in one of the dialogues of *Alciphron*, and the criticisms are replied to in Browne's *Divine Analogy*. Browne could not accept Locke's account of knowledge by means of ideas, when it came to be applied to mind. Mind and body, he held, are not known in the same way. We have, indeed, ideas of our mental operations as these are connected with the body; but minds or spirits—whether divine or human—can be known only by analogy. This view Berkeley, in later life, attacked; but it points to a difficulty in his own theory also—a difficulty which he came to see, without fully resolving it. There is, however, no sufficient evidence for saying that Browne had any direct influence upon Berkeley's early speculation.

Berkeley's theory emerges full-grown, if not fully armed. Even in his *Common-place Book* there is no hesitation in the references to "my doctrine," "the immaterial hypothesis." Only persons exist: "all other things are not so much existences as manners of the existence of persons." He knows that "a mighty sect of men will oppose me," that he will be called young, an upstart, a pretender, vain; but his confidence is not shaken: "Newton begs his principles; I demonstrate mine." He did not, at first, reveal the whole truth to the world. *An Essay towards a New Theory of Vision* deals with one point only—the relation between the objects of sight and those of touch. Molyneux had once set the problem to Locke, whether a man born blind, if he recovered his sight, would be able by sight alone to distinguish from one another a cube and a sphere, with both which he had been previously acquainted by touch. Molyneux answered his own question in the negative, and Locke expressed agreement with his solution and admiration for the insight which it showed. Berkeley was of one mind with them about the answer to the query, but for a more fundamental reason. If extension be an idea common to sight

and touch (as Locke held), then visible squareness must be the same as, or have something in common with, tangible squareness. In virtue of this, the man born blind, so soon as he is made to see, should be able to distinguish between a visible square and a visible circle, and to identify this distinction with the distinction between the square and the circle already known by touch. If he is unable to do so, it is because there is nothing in common between the visible object and the tangible. And this is Berkeley's view. "The objects of sight and touch," he says, "make, if I may so say, two sets of ideas which are widely different from each other....A man born blind, being made to see, would at first have no idea of distance by sight: the sun and stars, the remotest objects as well as the nearer, would all seem to be in his eye, or rather in his mind."

A great part of the *Essay* is devoted to an explanation of the apparent immediateness with which the distance of an object is seen. But the essence of the whole consists in two propositions—that the objects (or ideas) of sight have nothing in common with the objects of touch, and that the connection of sight and touch is 'arbitrary' and learned by experience only. The connection is arbitrary; but it is regular and constant. What we see suggests to us what we may expect to touch and handle. The whole visible world—as was further enforced in his *Theory of Vision or Visual Language*—consists of a set of signs which, like a language, have for their purpose to convey a meaning; though, like the words in a language, they neither resemble nor cause that meaning, nor have any necessary connection with it. In using sight to guide our movements we interpret the language of God.

Some of the details of Berkeley's *Essay* need revision in the light of modern study of the senses. But this does not obscure its merit as one of the most brilliant pieces of psychological analysis in the English language. A more serious objection to it is that the author pushes too far his war against abstractions. It is true, as he urges, that sight

and touch have no common element that can be separated from both and become an independent presentation. Against 'abstract ideas' of this sort, his polemic was fully justified. But the different senses are not disconnected either in genesis or in function, and reflection may discover certain lines of similarity among their processes. Berkeley decides too quickly that the connection is arbitrary, because of the striking difference in their contents, and because one cannot be called cause and another effect; and he argues too easily from this arbitrary connection to divine volition. He never gave the same close attention to the conceptual factor in knowledge as he gave to sense and imagination, and in his early work the conceptual factor is almost entirely ignored.

The *Essay* did not disclose all that was in Berkeley's mind. It kept to its topic, the relation of the objects of sight to those of touch, and it did not question the views commonly held about the latter. The full revelation came, a year afterwards, in *A Treatise concerning the Principles of Human Knowledge*. This small volume, more talked about than read at the time—it took twenty-four years to reach a second edition—is one of the works which have had a critical influence upon the course of European thought. Its importance, in this respect, ranks it with Locke's *Essay* and Hume's *Treatise of Human Nature*. The fresh step which Berkeley took was short and simple and easy; when taken, it shows us the whole world from a new point of view. Locke had said that all the objects of knowledge are ideas, and he had thus much difficulty—as indeed Descartes had had before him—in defending the reality of the things which he supposed to be represented by the ideas. Berkeley solves the difficulty by denying the distinction. The ideas *are* the things. "It is indeed an opinion strangely prevailing amongst men, that houses, mountains, rivers, and in a word all sensible objects, have an existence, natural or real, distinct from their being perceived by the understanding." But the opinion needs

only to be called in question to show the contradiction it involves; for these objects are the things we perceive by sense, and we perceive nothing but our own ideas. With magnificent confidence he passes at once to the assertion: "Some truths there are so near and obvious to the mind that a man need only open his eyes to see them. Such I take this important one to be, viz. that all the choir of heaven and furniture of the earth, in a word all those bodies which compose the mighty frame of the world, have not any subsistence without a mind; that their *being* is to be perceived or known."

As regards material things, therefore, a single phrase expresses Berkeley's thought: "their *esse* is *percipi*." Theirs is a passive, dependent existence. Active, independent existence can belong to minds or persons only. From this position he never wavered, though there is a good deal of difference between his earlier and his later views. He saw that, as the existence of ideas consists in being perceived, so mind must be regarded as perceiving. "Existence. . . is *percipi* or *percipere*" is one of his earliest statements; and, as men may sleep or be rendered unconscious, he is willing, at first, to accept the consequence that "men die or are in a state of annihilation oft in a day." But this solution seemed too dangerous and was soon relinquished, and thus he held it "a plain consequence that the soul always thinks." As there is no material substance, so also there can be no material cause. Material things, being our ideas and altogether passive, are related to one another not as cause and effect but only as sign and thing signified. We learn to understand their grouping, and thus one idea suggests others, the like of which have followed it in previous experience; while further experience confirms the anticipation. What we call laws of nature, therefore, are simply a statement of the orderly sequences in which the ideas of the senses occur in our minds. The material substance to which philosophers refer these ideas as their cause is, he labours

to prove, an unmeaning and self-contradictory abstraction. Certain ideas—those which we call ideas of imagination—are constructed by the individual mind; but the ideas of sense, or sensible things, though they exist only in the mind, are not caused by my mind or by any other finite mind. There must, therefore, be "an *omnipresent eternal Mind*, which knows and comprehends all things, and exhibits them to our view in such a manner, and according to such rules, as he himself hath ordained, and are by us termed the *laws of nature*."

Berkeley's works, for the most part, are of the nature of introductions, vindications, and polemics. He explained his new principle and defended it and applied it to current controversies with wonderful resource of argument and beauty of language, and with the power that came from intense conviction. In *Hylas* and in *Alciphron* he used the dialogue form, with a skill never excelled in English philosophical literature, to bring out the difficulties in his view and to set forth their triumphant solution. But he did not work out his spiritual interpretation of reality into a system. He would answer an objection without following out the bearing of his answer upon other portions of his philosophy. He began, like Locke, by asserting that all the objects of our knowledge are ideas; and he divided ideas into three classes: those of sense, those of mental operations, and those of memory or imagination. To which class then (we may ask) do knowledge of self, of other finite spirits, of God, and of the laws of nature belong? The question does not seem to have occurred to Berkeley when, with all the ardour of a discoverer, he wrote his *Principles*. But he raises it in *Hylas*, and says that, in reflection, we have an immediate knowledge of self as an active being and, by inference therefrom, of other finite spirits and of God. This knowledge, as well as our knowledge of laws of nature, is not through ideas, and he calls it *notion*. We have, therefore, not merely ideas of sensible things and of mental opera-

tions and of remembered or imagined objects, but also notions of spirits and of laws. The terminology was used again when he came to issue the second edition of the *Principles*; but he did not see that it required a modification of the first sentence of that work, which declares that *all* the objects of human knowledge are ideas. How idea and notion are related to one another in knowledge, we cannot gather from him. But this is clear: that ideas are inert and fleeting, and that it is through notion that we become acquainted with the permanent active forces of the real universe.

Berkeley stood at a parting of the ways in thought, though he was hardly conscious of their divergence. On the one hand, his principles that all knowledge is of ideas, and that all ideas are of one or other of the three kinds enumerated by him, lead to a view which excludes from knowledge not only material substance, but mind also and the reign of law in nature. At times, especially in his *Common-place Book*, he seems on the verge of drawing this conclusion, and thus of anticipating Hume. Afterwards, he sees it only as something to be guarded against. He could not think of the idea as, so to speak, self-supporting. It exists only in so far as it is "in the mind": mind is the true reality, the only agency; ideas exist only in minds, finite or infinite; and the laws of nature are the order in which ideas are produced in us by the infinite Mind. Spiritual agency, spiritual reality, is thus his fundamental thought; and in *Siris*, the last of his philosophical works, this thought emerges from the midst of reflections on empirical medicine and old-fashioned physiology. No longer dominated by the Lockean heritage of the sensitive origin of knowledge, his idealism is assimilated to the Platonic. The work is full of comments on Neoplatonic writers, ancient and modern; and there is an absence of the simplicity and clearness of his earlier writings; systematic development of his theory is still absent; but there is hardly a page without remarks of

pregnant insight, and he is everywhere loyal to the vision of truth with which his career opened.

In 1713, three years after the appearance of Berkeley's *Principles*, Arthur Collier, rector of Langford Magna near Salisbury, published a work entitled *Clavis Universalis* and professing to be "a demonstration of the non-existence or impossibility of an external world." Collier was born in 1680, and, like Berkeley, seems to have formed his conclusions at an early age: for he says that it was "after a ten years' pause and deliberation" that he decided to put his arguments before the reader. His results are almost identical with Berkeley's; but he arrived at them in a different way. He seems to have been uninfluenced by Locke; Descartes, Malebranche, and Norris were his favourite authors; and there was enough in their writings to raise the question. Collier writes in a straightforward and simple style; he has none of Berkeley's imagination or eloquence; he does not contend that he has the plain man on his side, nor does he apply his results to current controversy. But he has no less confidence than Berkeley had in the truth of his views; and his arguments are clearly put. Often they resemble Berkeley's; though greater use is made of traditional metaphysical discussions. Among these the most notable is the argument from the antinomies of philosophical thought. The external world, conceived as independent of mind, has been held infinite in extent, and also it has been held to be finite; and equally good and conclusive reasons can be given for either alternative. Similarly, it is "both finitely and infinitely divisible." But a thing cannot have two contradictory predicates. External matter, therefore, does not exist.

II. Deists

The first half of the eighteenth century was the period of the deistical controversy in English theology. The writers commonly classed together as deists are Charles

Blount, John Toland, Anthony Collins, Matthew Tindal, Thomas Woolston, Thomas Morgan, Thomas Chubb, Peter Annet and Henry Dodwell the younger. Among deists are also reckoned Bolingbroke and the third Earl of Shaftesbury, who differed from the rest in paying little attention to the details of theological controversy, and differed from one another in their philosophical interest and importance.

The works of Charles Blount belong to the last quarter of the seventeenth century. He accepted the 'five points' of Lord Herbert of Cherbury[1]. This marked him as a deist, and he did not reject the name. In his *Anima Mundi* (1679) he defended the system of natural religion, and, at the same time, emphasised the comparative merits of the heathen religions. His *Great is Diana of the Ephesians* (1680) is an attack on priestcraft. In the same year he published an English translation of *The two first books of Philostratus, concerning the Life of Apollonius Tyaneus.* On each chapter of this followed "illustrations" by the translator, in which it was easy to find an attack on the Christian miracles and on the doctrine of the divinity of Christ. "Faith," he says, is "like a piece of blank paper whereon you may write as well one miracle as another"; whereas his own Christianity was founded exclusively on reason. Blount committed suicide in 1693 because he was prevented from marrying his deceased wife's sister. Two years afterwards his *Miscellaneous Works* (including *The Oracles of Reason*) were published by his disciple Charles Gildon. Gildon defended both the doctrine and the suicide of his master; but, not long after, was himself converted to the orthodox belief by reading Charles Leslie's *Short and Easy Method with the Deists* (1698).

So far as Blount was concerned, the controversy might have ended here. For, despite his learning and ability, he was something of a free-lance; he could not match himself with his opponents in Christian theology or in biblical learning; his criticism and his own doctrines revealed an

[1] See above, p. 40.

outside point of view. There were, however, many sympathisers with his general attitude among wits, and perhaps also among scholars: Leslie's reply is a testimony to the prevalence of deism. And, shortly before the publication of that triumphant reply, there appeared a work by a new author—Toland's *Christianity not Mysterious*—with which the controversy entered upon a fresh phase. Within the English church the Roman controversy had died down, and the protestant faith had been firmly established. The time was ripe for the discussion of the content and basis of protestant theology; and the great trinitarian controversy followed. At this point, the chief stimulus to theological thought came from within the church, indeed, but from outside the ranks of professional theologians. Locke's *Reasonableness of Christianity* appeared in 1695, and marked out the ground to be occupied by almost all controversialists for a long time to come. In his straightforward way Locke went to the Scriptures: miracles and prophecy convinced his reason of their authority; the same reason was used for understanding the doctrines they revealed. He did not linger over the former—the external evidences, as they were called, of religion. His interest was in the content of the faith. The same interest dominates the controversies of the first half of the eighteenth century; it was only afterwards that the question of the external evidences came to the front. Throughout the whole century, however, and by both parties, the question was debated in the court of reason. The controversy was not between rationalists and those who distrusted reason. The question was what, on rational grounds, ought to be believed. And, as Clarke and Tillotson and Butler appealed to reason not less than Toland and Collins and their successors did, so too there was another point of agreement between the orthodox and the leaders of the deists. The latter also, for the most part, and in the earlier stages of the dispute, at any rate, professed to accept the Christian faith. The problem was as

to its content: what was its genuine meaning and the significance of its essential doctrines?

This much must be borne in mind by anyone who would understand Toland, especially in his earliest and most celebrated work. Toland was born near Londonderry in Ireland in 1670 and died at Putney near London in 1722. His education was varied. He was at school in Ireland, went to the University of Glasgow, took his degree at Edinburgh, afterwards studied at Leyden, and spent some time at Oxford, where he wrote *Christianity not Mysterious* (1696). He led a strenuous and varied life, with somewhat uncertain means of livelihood. He was the object of bitter attack by the controversialists opposed to him; and they called in the aid of the civil power. After the publication of his first book, he had to leave Ireland to escape arrest by the Irish parliament, and in England he was for a time in danger of prosecution. He busied himself in political as well as in theological controversy, defended the protestant succession, took part, though unofficially, in important missions, and became known to the Electress Sophia and her daughter the Queen of Prussia, to whom his *Letters to Serena* (1704) were addressed. He made some influential friends also, and Leibniz was among his correspondents.

Christianity not Mysterious shows the influence of Locke —of his *Essay*, however, rather than of his *Reasonableness of Christianity*, which, published only a year before Toland's book, does not seem to have affected its argument. Locke's name is not mentioned by Toland; but Locke's view of knowledge, as consisting in the agreement of ideas, forms the starting-point of his argument, and in the preliminary matter he often adopts Locke's words. But he is more aggressive in applying his principles. Locke's aim was to show that Christianity was reasonable; Toland's, to demonstrate that nothing contrary to reason, and nothing above reason, can be part of Christian doctrine. There are no mysteries in it. Revelation has unveiled what was

formerly mysterious. Whoever reveals anything must do so in words that are intelligible, and the matter must be possible. The things revealed, therefore, are no longer mysteries. This holds whether the revelation come from God or from man. The only difference between the two cases is that a man may lie and God can not. Without ideas neither faith nor knowledge is possible; and, "if by knowledge be meant understanding what is believed, then I stand by it that faith is knowledge." The ideas may not be adequate; but, in nature as well as in divinity, we have to be content without adequate ideas; even a "spire of grass" is not known in its real essence; we understand only its properties or attributes; and God and the soul are known in the same way.

Toland was a scholar and boasted acquaintance with more than ten languages. He was also a theologian and could meet his opponents on their own ground. This interest dominated his literary career; even his political work was in the service of the protestant religion, and his scholarship was chiefly shown in the field of Christian origins. His own theological views went through various modifications. He was brought up a Roman Catholic; at the age of sixteen he became "zealous against popery"; afterwards he was connected with protestant dissenters; when *Christianity not Mysterious* was published he reckoned himself a member of the Church of England, his sympathies being with the broad (or, as it was then called, low) church party. When his book was burned at the door of the Irish house of parliament, he may have felt his churchmanship insecure. His later works exhibit its gradual disappearance.

In *Amyntor* (1699), a defence of his *Life of Milton* (1698), he gave, in answer to an opponent, a long list of early apocryphal Christian literature. His interest in researches of this kind was shown afterwards in *Nazarenus; or Jewish, Gentile, and Mahometan Christianity* (1718). His text, in this work, was an Italian manuscript

with Arabic annotations, which he had discovered. He took it for a translation from the Arabic and identified it with the lost Gospel of Barnabas. In both conjectures later scholarship has shown that he was in error. But his discovery led to some remarkable reflections on the differences between the Jewish and Gentile Christians in the early church. He maintained that the former, who kept the Jewish law themselves but without enforcing it on the Gentiles, represented "the true original plan of Christianity"; and he declared that he himself took "less exception to the name of Nazaren than to any other." More than a century afterwards the same distinction as that upon which he laid stress was made fundamental in the explanation of early church history offered by F. C. Baur and his followers.

Among other topics in the *Letters to Serena* was a discussion of Spinoza, which perhaps shows the trend of Toland's speculation. Leibniz, at any rate, in a letter to him of 30 April 1709, remarks that Toland, in several of his books, refers to the opinion that there is no other eternal being than the universe but offers no refutation of this "pernicious" error. In his reply Toland promises an answer to this point in his next; but he does not seem to have kept his word. Pantheism, at any rate, was the doctrine with which he ended, if we may trust the evidence of *Pantheisticon* (1720). This curious piece was issued anonymously, with 'Cosmopolis' on the title-page as the place of publication. But the author took no pains to conceal his identity, for the preface is signed "Janus Julius Eoganesius." Now, Inis Eogain or Inishowen was the place of Toland's birth; and Janus Julius were the extraordinary names by which he was christened and known, till a sensible schoolmaster changed them to John. The little book, which is written in Latin, describes the ritual of certain (supposed or real) pantheistic societies. It imitates the fashion of a prayer-book, gives the responses of the congregation, and is printed with red rubrics. As

a whole, it is a clever skit, though in the very worst taste. But Toland had not received any favours from fortune; he had been harshly attacked by his opponents, even when he regarded himself as a defender of the Christian faith; and perhaps it gave him satisfaction to retaliate bitterly.

Toland thus began as a liberal or rational theologian, and ended with some form of pantheistic creed. His writings do not enable us to trace accurately the steps in this change of view; but there is no evidence that he ever accepted the cardinal point of what is commonly called deism—the idea of God as an external creator who made the world, set it under certain laws, and then left it alone[1]. He was a free-thinker rather than a deist. And this also describes the position occupied by Anthony Collins, the friend and disciple of Locke, in his best-known work, *A Discourse of Free-thinking, occasioned by the rise and growth of a sect call'd Free-thinkers* (1713). Bentley's brilliant criticism of this book, in his *Remarks upon a late Discourse of Free-thinking*, gained for it an unenviable reputation. The *Remarks* admitted of no answer; but they were more successful in demolishing a free-thinker than in refuting free-thinking; and perhaps this was Bentley's sole object in exposing the author's slipshod scholarship. But he was not blind to an ambiguity of which Collins had taken advantage. 'Free-thinking' may mean nothing more than the exercise of reason. If this had been all that Collins argued for, there would have been little point in his contention, for both parties claimed that they followed reason.

[1] Samuel Clarke (*Being and Attributes of God*, 9th ed., pp. 159 ff.) distinguishes four classes of Deists: (1) those who "pretend to believe the existence of an eternal, infinite, independent, intelligent Being; and... teach also that this Supreme Being made the world: though at the same time...they fancy God does not at all concern himself in the government of the world, nor has any regard to, or care of, what is done therein"; (2) those who, also, admit divine providence in nature; (3) those who, further, have some notion of the moral perfections of God; (4) those who, in addition, acknowledge man's duties to God, and see the need for a future state of rewards and punishments—but all this only "so far as 'tis discoverable by the light of nature."

So far, Tillotson would certainly have been with him, and indeed Collins claims his support. But he used the term also to cover the attitude or doctrines of a "sect of free-thinkers," without any clear account of their position, or any suggestion that the word had more than one meaning. The ambiguity is connected with the duality of the motives which seem to have determined the writings of Collins. One of these was faith in reason—a faith which he had inherited from Locke; the other was a suspicion and dislike of priestcraft. These two motives are indicated by the titles of his earliest works—*Essay concerning the use of Reason* (1707), and *Priestcraft in Perfection* (1709). They are combined in *A Discourse of Free-thinking* in a way which generates more heat than light. Collins held firmly to a belief in God as established by reason; but (though sometimes in guarded language) he was a hostile critic of the Christian creed. His works produced a crowd of controversial literature: his chief later work—*Discourse of the Grounds and Reasons of the Christian Religion* (1724)—having called forth no less than thirty-five replies in two years. He was also the author of a small book called *A Philosophical Inquiry concerning Human Liberty and Necessity* (1715)—an acute and clearly-written argument in favour of the necessitarian solution of the problem.

In some respects—and these perhaps the most important—the most significant work of the whole deistical movement was Tindal's *Christianity as Old as the Creation: or, the Gospel, a Republication of the Religion of Nature* (1730). It is no mere defence of the use of reason or attack on Christian mysteries. It is a masterly presentation of the prevalent philosophical ideas of the time and a comparison of them with the rational theology which found favour with leaders of the church. "The will of God," said Samuel Clarke, then the most prominent figure in British philosophy and theology, "always determines itself to act according to the eternal reason of things," and "all rational creatures are obliged to govern them-

selves in all their actions by the same eternal rule of reason." "The religion of the Gospel," said Sherlock, preaching a missionary sermon, "is the true original religion of reason and nature," and its precepts are "declarative of that original religion which was as old as the creation." These extracts Tindal prints on his title-page; and his own aim is to show that "natural religion and external revelation, like two tallies, exactly answer one another, without any other difference between them but as to the manner of their being delivered." Tindal grasps firmly the principles of natural religion, as they were taught by Clarke and Wollaston and other theologians of the day. Reason convinces us of the being and attributes of God, and of the truths of morality; the goodness of God makes it impossible that he should have concealed from any of his creatures what was necessary to their well-being. Christianity, therefore, cannot displace deism, as Clarke held that it could: it can only confirm it. And, as reason suffices to establish the truths of deism, it would seem that Christianity is superfluous. Tindal, however, did not expressly draw this conclusion: he was seventy years of age when he wrote this book, and he retained his fellowship at All Souls, through many changes of government and of personal creed, till his death.

The remaining deistical writers require only the briefest notice. Thomas Woolston was an enthusiast in patristic study, and his enthusiasm seems to have verged on insanity in his later years. He had two passions—"love of the fathers and hatred of the protestant clergy[1]." The latter was intensified by his being deprived of his fellowship at Cambridge; the former led to his allegorical interpretation of Scripture. This method he applied to the New Testament miracles, in his series of *Discourses* (1727—30), ridiculing the ordinary view of them as actual events. The historical occurrence of the miracles was, about the same time, defended by Sherlock in *The Trial of the Witnesses*

[1] J. Hunt, *Religious Thought in England*, II, p. 40.

(1729); and to this work Peter Annet replied in *The Resurrection of Jesus examined by a Moral Philosopher* (1744), in which the expressions are of an open, not to say scandalous, kind rare in the earlier literature of deism. Thomas Chubb, an obscure tradesman of Salisbury, with no pretentions to scholarship or education, published a number of tracts in which points of the Scriptures were criticised and views similar to those of Tindal asserted. The same doctrine was stated once more by Thomas Morgan, a physician, in *The Moral Philosopher* (1737—41). In the main he follows Clarke and Tindal; but he also recalls the investigations of Toland by the prominence which he gives to the opposition between the Judaising and the universal factors in early Christianity. *Christianity not founded on argument*, a pamphlet published in 1742 by Henry Dodwell (son of a theologian and scholar of the same name), is one of the latest publications of this school of thought.

Bolingbroke and Shaftesbury stand in a different relation to the deistical movement from that of the writers already named. Bolingbroke was not a philosopher, though various occasional writings of his were collected and published by Mallet as *Philosophical Works* (1752). But he illustrates the way in which the fundamental doctrines of deism had permeated the thinking of the men of mark in their day who were interested in ideas; and he did much to confirm this attitude and to extend its influence. Voltaire regarded his views as significant, and the superficial optimism of Pope's clear-cut verse, in the *Essay on Man*, was directly due to Bolingbroke. Shaftesbury may have been coupled with Bolingbroke as a deist, in the popular mind, and may also have lent inspiration to Pope. But he had a far profounder view of the problems of thought, which will receive consideration in connection with the group of writers distinguished as moralists.

The line between deists and churchmen was not always

drawn very clearly. There was a good deal of common ground in the assumptions of both parties; and there was, besides, a general ferment of theological thought which disregarded customary boundaries. The latter characteristic is exhibited in the works of William Whiston, mathematician and theologian. They were related to the controversy, but hardly belong to it. Whiston was a man of active and original mind, which led him outside the established church, but in a direction of his own, different from that of Toland or Tindal. He was opposed to rationalism, and a believer in prophecy and miracle; but he came to the conclusion that the Arian heresy represented the true and primitive Christian creed. His views are fully developed in *Primitive Christianity Revived* (1711—12); but they had previously become notorious, and had led in 1710 to his being deprived of the Cambridge professorship in which he had succeeded Newton. He founded a society to promote the true faith, as he held it, and composed a revised liturgy for its use; and he wrote on a variety of topics, not all of them theological. His translation of Josephus (1737), however, has proved of more lasting value than his original works. Conyers Middleton, on the other hand, showed how near a clergyman might come to the deistical position. He was immersed in the controversy, and he did something to infuse into it a new historical spirit. The whole tendency of his contributions, however, was critical and destructive. He separated himself from most apologists of the day by denying verbal inspiration; and he examined and rejected the evidence for the ecclesiastical miracles in a manner which admitted of wider application. This argument is contained in his most important theological work, entitled *A Free Inquiry into the Miraculous Powers which are supposed to have existed in the Christian Church through several successive Ages* (1748). Of the content of religion Middleton takes little account, except as a bulwark of the social order. His work shows that interest was drifting away

from the question of content, from which it had started, towards the question of external evidences which suited so well the genius of the later eighteenth century.

Among the opponents of the deists, the two greatest were Samuel Clarke and Joseph Butler. Their contributions to the thought of the period are reserved for discussion in the last section of this chapter. Of the others some have been already referred to; most do not call for more than bibliographical mention; but one name figures so largely in the controversy as to require further notice. By his learning, but still more by his mental vigour and resource, William Warburton made an impression upon his time which is not yet forgotten. He was born in 1698 and died in 1779. Bred in a solicitor's office, he took orders without having passed through a university, and, after other preferments, became bishop of Gloucester in 1759. He was ready for almost any kind of literary work —controversy preferred. He wrote *The Alliance between Church and State* (1736); defended the orthodoxy of Pope's *Essay on Man*; edited Shakespeare (1747); published a hostile *View of Lord Bolingbroke's Philosophy* (1754), and had the courage to write *Remarks* on Hume's *Natural History of Religion* (1757). His most famous work was *The Divine Legation of Moses demonstrated on the Principles of a Religious Deist* (1737—41). This vast work, which was never completed, was designed to meet a deistical objection to the Old Testament Scriptures—that the books of Moses contain no reference to the doctrine of a future life. An objection of this sort does not seem to have been prominent in the writings of the greater deists; but it suited Warburton's purpose and enabled him to propound an ingenious paradox. He agrees that morality needs the support of a belief in a future life of rewards and punishments; he agrees that Moses did not appeal to any such belief or teach any such doctrine, although it was common among ancient authors of other countries. But just this, he argues, proves the divine

legation of the lawgiver. The laws of nature are an insufficient support for morality; without the belief in a future life government cannot be maintained—except by miracle. The absence of the belief among the Jews is, therefore, taken as a proof that they were under the immediate providence of God, working by means outside natural law. The defence of this paradoxical theory gave Warburton ample scope for displaying his learning and his controversial talent on a great variety of topics, the relevance of which is not always apparent. Of his learning, Bentley said that he had a "monstrous appetite and bad digestion." His ability to get up a case and score a point has been traced to his legal training; a critic of his own day attributed to the same source some of the coarser and more violent features of his controversial method. Of insight into history, philosophy, or religion, he does not seem to have had any conspicuous share.

III. Moralists

Samuel Clarke was not a man of original genius; but, by sheer intellectual power, he came to occupy a leading position in English philosophy and theology. He touched the higher thought of the day at almost every point. The new physics, deism, the trinitarian controversy, biblical and classical study—all occupied him. Only as to Locke, and the new turn which Locke gave to many problems, he never defined his position. He was born in 1675 and died in 1729. In 1697 he published an annotated Latin translation of the Cartesian Rohault's *Traité de physique*, and thereby prepared the way, as he intended to do, for the reception of Newton's works as text-books at Cambridge; he also translated Newton's *Optics*. In 1699 his controversies with the deists began, with Toland's *Amyntor* for a text. In 1704 and 1705 he delivered two courses of Boyle Lectures, entitled, respectively, *A Demonstration of the Being and Attributes of God*, and *A Discourse concerning the Unchangeable Obligations of Natural*

Religion, and the Truth and Certainty of the Christian Revelation. He published editions of Caesar's *Commentaries* (1712) and Homer's *Iliad* (1729), as well as many books of biblical exegesis. His treatise entitled *The Scripture Doctrine of the Trinity* (1712) brought upon him the accusation of Arianism, and led to trouble with Convocation. In 1715—16 he was engaged in a controversy with Leibniz, which arose from a comment of the latter on a remark of Newton's in which space was spoken of as the *sensorium* of God, branched out into fundamental questions of metaphysics, and came to an end only with the death of the German philosopher.

Clarke's Boyle Lectures may be safely reckoned his greatest work. They contain little that is strikingly new; but the arrangement of the separate points and the logical consecutiveness of the whole are masterly; and they show, nearly always, an elevation of tone and clearness of phrase which were often lacking in the controversies of the age. Clarke arranges his argument in a series of propositions which he first states and then proceeds to demonstrate; but otherwise he did not imitate mathematical method, as Descartes and Spinoza had done. Nor did he, like Descartes, rely on the purely ontological argument. He argued from existence not from idea: maintaining that there must be a self-existent being to account for existing things, and then going on to show the attributes which must belong to this self-existent being. When he has to prove that intelligence and wisdom are among these attributes, he relies expressly on *a posteriori* reasoning. The whole argument—therein resembling Locke's—belongs to the cosmological variety. Clarke's system has been represented as only a less logical Spinozism; but the comparison is superficial. One salient point of resemblance—the view of space as an attribute of God—means something different in the two systems; for Clarke does not identify space with matter. And the method of his argument leaves room for the recognition of freedom and for a

distinction of morality from nature, which were impossible for Spinoza.

Clarke's theory of morality has exerted a more permanent influence, and shows more traces of originality, than any of his other doctrines. He had an idea of a moral universe constituted by moral relations, analogous to the physical relations of the physical universe. There are certain "fitnesses of things" over and above their merely physical relations: "there is," he says, "a fitness or suitableness of certain circumstances to certain persons, and an unsuitableness of others, founded in the nature of things and in the qualities of persons, antecedent to will and to all arbitrary or positive appointment whatsoever." Many illustrations are given of these "relations of things"; but their nature is not further explained. 'Fitness,' 'agreement,' 'suitableness' are the terms by which they are described. They differ, therefore, from the causal relations with which physical science is concerned. They indicate a different aspect—the moral aspect—of reality. But they are known in the same way—by reason. As they are in themselves, so they appear to be to the understanding of all intelligent beings. And, so far as they are intelligent, all reasonable beings guide their conduct by them. God is a free being; but, being rational, it is impossible that he can act against them: he is, therefore, necessarily good. The same relations ought to determine human conduct; but the will of man is deflected by his passions and particular interests, and his understanding is imperfect, so that moral error is possible and common. For this reason also the obligation of virtue needs the support of religion.

Clarke thus gave a new reading of an old doctrine. The view that morality is not arbitrary, but belongs to the order of the universe, had found frequent expression in theories of 'the law of nature'; Cudworth, influenced by Platonic idealism, had insisted that the nature or essence of things is immutable, and that good and evil are qualities

which belong to that essence; Clarke goes one step further in holding that goodness is a certain congruity of one thing with another, or rather of a person with a thing—a relation as eternal as is the nature of the things[1]. But he gave no further definition of this congruity, beyond the description of it by a variety of terms. That it needed very careful statement became obvious from some of the consequences drawn by his followers. His views were defended, against the first of a new school of psychological moralists, by John Balguy, in *The Foundation of Moral Goodness* (1727—8). Still earlier, William Wollaston, in his *Religion of Nature delineated* (1722), had given point to the intellectualism of the moral theory propounded by Clarke. What Clarke had called 'fitness' was interpreted by him as an actual existing relation or quality. A wrong act he held to be simply the assertion in conduct of a false proposition. Thus, "if a man steals a horse and rides away upon him," he does not "consider him as being what he is," namely, another man's horse; and "to deny things to be as they are is the transgression of the great law of our nature, the law of reason." Bentham's criticism

[1] Clarke does not refer to Locke; but both seem to have been influenced by Cudworth, and their views may be compared. Both held (1) that moral relations are apprehended intuitively, (2) that they are to be conceived as laws of God, (3) that they need reinforcement by religious sanctions. They differ, however, in the way in which they would have interpreted the second point. Locke speaks, indeed, of the ideas of God and ourselves as the "foundations of our duty"; but his examples of moral rules do not in any way involve the idea of God (*Essay*, IV, iii, 18). Clarke, on the other hand, attempts to show "how the nature and will of God himself must be necessarily good and just," and he holds that the difference between good and evil is "antecedent to all laws" (*Being and Attributes*, p. 125)—whereas Locke's notion of moral good and evil depends upon a reference to law (II, xxviii, 5). He would have agreed with Locke's statement that moral knowledge is concerned with "the congruity and incongruity of the things themselves" (III, xi, 16), but Locke's reason for this statement—that these "moral things," being "mixed modes," are of "man's making" (III, xi, 15)—would not have satisfied him.

of this is hardly a caricature: "if you were to murder your own father, this would only be a particular way of saying he was not your father."

A more fruitful line of ethical thought was entered upon by Clarke's contemporary, the third Earl of Shaftesbury, grandson of the first earl, Locke's patron, and himself educated under Locke's supervision. He was debarred by weak health from following an active political career, and his life was thus mainly devoted to intellectual interests. After two or three unhappy years of school life at Winchester, he travelled abroad, chiefly in Italy, with a tutor; in early manhood he resided in Holland; in later life his health drove him to Italy once more. He was an ardent student of the classics, especially of Plato, Epictetus, and Marcus Aurelius, a devotee of liberty in thought and in political affairs, and an amateur of art—at once a philosopher and a *virtuoso*. His writings were published in three volumes, entitled *Characteristicks of Men, Manners, Opinions, Times*, in 1711; a second edition, carefully revised and enlarged, was ready at the time of his death in 1713. Several of the treatises comprised in these volumes had been previously published. The most important of them, *An Inquiry concerning Virtue, or Merit*, was surreptitiously printed from an early draft, in 1699, by Toland—whom he had befriended and financed; *The Moralists, a Philosophical Rhapsody* appeared in 1709; *A Letter concerning Enthusiasm* in 1708; *Sensus Communis: an Essay on the Freedom of Wit and Humour* in 1709; *Soliloquy: or Advice to an Author* in 1710. Two of the treatises in later editions were posthumous: *A Notion of the Historical Draught or Tablature of the Judgment of Hercules*, 1713, and *Miscellaneous Reflections*, 1714. Long afterwards, a work entitled *Philosophical Regimen* was published in 1900, and a volume of *Second Characters or the Language of Forms* in 1913. Shaftesbury's style is nearly always clear, and it has the great merit of avoiding traditional technicalities; but it is over-polished and often artificial—

too 'genteel,' as Lamb said. Its decorations pleased contemporary taste; but the rhapsodies of *The Moralists* fall coldly on the modern ear, and the *virtuoso* has obscured the philosopher.

Shaftesbury was reckoned among the deists, and perhaps not without reason, though his first publication was an introduction to the sermons of Whichcote, the Cambridge Platonist, and he remained a churchman to the end. His sympathies were with that spiritual view of the world which is common to Christianity and to Plato and Marcus Aurelius. He had no taste for the refinements of theological controversy or for modern religious fanaticisms. He hated still more the method of suppressing the latter by persecution; and this led to his suggestion that they would be better met if their absurdities were left to ridicule. He never said that ridicule was the test of truth; but he did regard it as a specific against superstition; and some of his comments, in illustration of this thesis, not unnaturally gave offence. He himself, however, was not without enthusiasms, as is shown by his concern for the good of his friends and his country and by his devotion to his view of truth.

For him the enemy was the selfish theory of conduct, which he found not in Hobbes only but also, in a more insinuating form, in Locke. His own ethical writings were intended to show that the system of man's nature did not point to selfishness. There are affections in man which have regard to his own interest or happiness; but there are also social (or, as he calls them, natural) affections which are directed to the good of the species to which he belongs; and he labours to prove that there is no conflict between the two systems. And the mind of man has a still higher reach. "The natural affection of a rational creature" will take in the universe, so that he will love all things that have being in the world: for, in the universal design of things, "nothing is supernumerary or unnecessary"; "the whole is harmony, the numbers entire, the music perfect."

Further, the mind of man is itself in harmony with the cosmic order. Connate in it is a "sense of right and wrong," to which Shaftesbury gives the name "the moral sense." And it is for his doctrine of the moral sense that he is now most often remembered. In his own century his writings attained remarkable popularity: Berkeley (in *Alciphron*) was one of his severest critics; Leibniz and Diderot were among his warmest admirers.

The doctrine of the moral sense led to immediate development, especially at the hands of Francis Hutcheson. Hutcheson, a native of Ulster, was educated at the University of Glasgow, and in 1729 returned there as professor of moral philosophy. Among the more notable British philosophers he was the first to occupy a professor's chair; and his lectures are said by Dugald Stewart "to have contributed very powerfully to diffuse, in Scotland, that taste for analytical discussion, and that spirit of liberal enquiry, to which the world is indebted for some of the most valuable productions of the eighteenth century." Before his appointment as professor Hutcheson had published two volumes—*An Inquiry into the Original of our Ideas of Beauty and Virtue* (1725), and *An Essay on the Nature and Conduct of the Passions and Affections, with Illustrations on the Moral Sense* (1726)—each containing two treatises. Text-books on logic, metaphysics, and ethics followed; his *System of Moral Philosophy* (1755) was published after his death. The ideas of Shaftesbury reappear in these works in a somewhat more systematic form, but without his metaphysical basis and with an increased tendency towards a psychological interpretation of them. Hutcheson maintained the disinterestedness of benevolence; he assimilated moral and aesthetic judgments; he elaborated the doctrine of the moral sense, sometimes speaking of it as merely a new source of pleasure or pain; and he identified virtue with universal benevolence: in the tendency towards general happiness he found the standard of goodness. In this respect he was historically

the forerunner of the utilitarians. In his first work he even used the formula—"the greatest happiness for the greatest numbers"—afterwards, with only a slight verbal change, made famous by Bentham[1]. He anticipated Bentham, also, in the attempt to form a calculus of pleasures and pains.

Hutcheson's first work was described on the title-page as a defence of Shaftesbury against the author of *The Fable of the Bees*. In 1705 Bernard Mandeville, a Dutch physician resident in London, had published a pamphlet of some four hundred lines of doggerel verse entitled *The Grumbling Hive, or Knaves Turn'd Honest*. This was republished as a volume in 1714, together with "an inquiry into the original of moral virtue" and "remarks" on the original verses, and again in 1723 with further additions —the whole bearing the title *The Fable of the Bees; or, Private Vices, Public Benefits*. Mandeville marks a reaction against the too facile optimism which was common with the deists and to which Shaftesbury gave philosophical expression, and against the conventions associated with popular morality. But he did not draw nice distinctions: convention and morality are equally the objects of his satire. He was clever enough to detect the luxury and vice that gather round the industrial system, and perverse enough to mistake them for its foundation. He reverted to Hobbes's selfish theory of human nature, but was without Hobbes's grasp of the principle of order. He looked upon man as a compound of various passions, governed by each as it comes uppermost, and he held that "the moral virtues are the political offspring which

[1] Hutcheson, *Inquiry*, p. 164. Although Bentham thought and said (*Works*, x, 46, 142) that he got the formula from Priestley, it is not to be found in Priestley's works, and was, almost certainly, taken from Beccaria. Beccaria's words (*Dei Delitti e delle Pene*, 1764) were *la massima felicità divisa nel maggior numero*, and these were rendered in the English translation (1767) by "the greatest happiness of the greatest number"—the exact words which Bentham first used in 1776. The dependence of Beccaria on Hutcheson is not established.

flattery begot upon pride." The combination of ability and coarseness with which this view was developed led to many other answers than Hutcheson's. Berkeley replied in *Alciphron*; and William Law, as his manner was, went to the heart of the matter in a brilliant pamphlet, *Remarks upon a late book, entituled The Fable of the Bees* (1723). Law also made his mark in the deist controversy by *The Case of Reason* (1731), a reply to Tindal, in which he anticipated the line of argument soon afterwards worked out by Butler.

Joseph Butler, bishop of Durham during the last two years (1750—52) of his life, did not make any contributions to pure metaphysics; but his is the greatest name both in the theological and in the ethical thought of the period. He published two books only—a volume of *Fifteen Sermons* (1726), which (in particular, the first three sermons, entitled 'on human nature') express his ethical system, and *The Analogy of Religion, Natural and Revealed, to the Constitution and Course of Nature* (1736). These works are without any pretentions to literary elegance; and it is only in rare passages that the usually sombre style glows with the fire of restrained eloquence. But they are compact of profound thought. The names of other writers are rarely mentioned; but all their arguments have been considered; no difficulties are slurred over, and no opinion is accepted without being probed to the bottom. There is an air of completeness and finality about the reasoning, which needs no grace of diction.

Butler's condensed and weighty argument hardly admits of summary. Yet his view of things as a whole may be expressed in the one word 'teleological.' Human nature is a system or constitution; the same is true of the world at large; and both point to an end or purpose. This is his guiding idea, suggested by Shaftesbury, to whom due credit is given; and it enables him to rise from a refutation of the selfish theory of Hobbes to the truth that man's nature or constitution is adapted to virtue. The old

argument about selfish or disinterested affections is lifted to a higher plane. He shows that the characteristic of impulse, or the 'particular passions,' is to seek an object, not to seek pleasure, while pleasure results from the attainment of the object desired. Human nature, however, is not impulsive merely; there are also reflective principles by which the tendency of impulses is judged and their value appraised. On this level selfishness is possible; but self-love is not the only reflective principle of conduct; beside it stands the moral sense or, as Butler preferred to call it, conscience. The claim to rule, or "superintendency" (a point overlooked by Shaftesbury), is of the very nature of conscience; and, although Butler labours to prove the harmony of the dictates of the two principles, it is to conscience that he assigns ultimate authority. It is true that, in an oft-quoted sentence, he admits "that when we sit down in a cool hour, we can neither justify to ourselves this [*i.e.*, moral rectitude] or any other pursuit, till we are convinced that it will be for our happiness, or at least not contrary to it." But, even if we disregard the "let it be allowed" that introduces the admission, the single sentence is hardly sufficient to justify the assertion that Butler held the authority of self-love to be equal to, or higher than, that of conscience. The passage is, rather, a momentary concession to the selfish spirit of the age; and it has to be interpreted in the light of his frequent assertions of the natural superiority of conscience. "To preside and govern, from the very economy and constitution of man, belongs to it," he says. "Had it strength as it has right, had it power as it has manifest authority, it would absolutely govern the world."

Since the essence of human nature is expressed in this spiritual principle, Butler is able to justify the assertion that man is adapted to virtue. But here his ethics may be said almost to stop short. He does not explain further the nature of conscience in relation to reason and will, or derive from it, in any systematic way, the content of

morality. In his first work the conduct approved by conscience seemed to be identified with benevolent actions or such as aimed at the common good. But in the "Dissertation on Virtue" appended to *The Analogy*, he took a different view. "Without enquiring how far, and in what sense, virtue is resolvable into benevolence," he maintained that "we are so constituted as to condemn falsehood, unprovoked violence, injustice, and to approve of benevolence to some preferably to others, abstracted from all consideration which conduct is likeliest to produce an overbalance of happiness or misery." Butler did not work out a system; he was distrustful of any attempt at a complete philosophy, and resigned to accept probability as the guide of life.

The same fundamental conception and the same limitation reappear in Butler's still more famous work, *The Analogy*. The world is a system—"a scheme in which means are made use of to accomplish ends, and which is carried on by general laws." It is neglect of this truth which makes men think that particular instances of suffering virtue or successful vice are inconsistent with "the wisdom, justice, and goodness of the constitution of nature." In the constitution and government of the world, nature and morality are so closely connected as to form a single scheme, in which "it is highly probable that the first is formed and carried on merely in subserviency to the latter." The imperfections of our knowledge make it impossible to demonstrate this in detail. But grant, as the deists granted, that God is the author of nature, and it can then be shown that there is no difficulty in the doctrines of religion, whether natural or revealed, which has not a parallel difficulty in the principle common to both sides in the argument. This is the analogy to the establishment of which in detail Butler's reasonings are directed. They are so exhaustive, so thorough, and so candid, that critics of all schools are agreed in regarding his as the final word in a great controversy.

CHAPTER VIII

DAVID HUME

Of David Hume and Adam Smith it has been truthfully said that "there was no third person writing the English language during the same period, who has had so much influence upon the opinions of mankind as either of these two men[1]." There were many other writers on the same or cognate subjects, who made important contributions to the literature of thought; but Hume and Adam Smith tower above them all both in intellectual greatness and in the permanent influence of their work.

In the sketch of his *Own Life*, which he wrote a few months before his death, Hume says that he was "seized very early with a passion for literature, which has been the ruling passion of my life, and the great source of my enjoyments." Another document of much earlier date (1734), which Hume himself revealed to no one, but which has been discovered and printed by his biographer[2], gives us a clear insight into the nature of this literary ambition and of the obstacles to its satisfaction. This is his own account of his motive and aims: "As our college education in Scotland, extending little further than the languages, ends commonly when we are about fourteen or fifteen years of age, I was after that left to my own choice in my reading, and found it incline me almost equally to books of reasoning and philosophy, and to poetry and the polite authors. Every one who is acquainted either with the philosophers or critics, knows that there is nothing yet established in either of these two sciences, and that they contain little more than endless disputes, even in the

[1] J. H. Burton, *Life and Correspondence of David Hume*, I, p. 117.
[2] *Ibid.* I, pp. 30–39.

most fundamental articles. Upon examination of these, I found a certain boldness of temper growing in me, which was not inclined to submit to any authority in these subjects, but led me to seek out some new medium by which truth might be established. After much study and reflection on this, at last, when I was about eighteen years of age, there seemed to be opened up to me a new scene of thought, which transported me beyond measure, and made me, with an ardour natural to young men, throw up every other pleasure or business to apply entirely to it. ...Having now time and leisure to cool my inflamed imagination, I began to consider seriously how I should proceed in my philosophical inquiries. I found that... every one consulted his fancy in erecting schemes of virtue and of happiness, without regarding human nature, upon which every moral conclusion must depend. This, therefore, I resolved to make my principal study, and the source from which I would derive every truth in criticism as well as morality." These passages show, not only that Hume's ambition was entirely literary, but also that his literary ambition was centred in philosophy and that he was convinced he held in his grasp a key to its problems. Literary ambition never ceased to be Hume's ruling passion, and it brought him fame and even affluence. But his early enthusiasm for the discovery of truth seems to have been damped by the reception of his first and greatest work, or by the intellectual contradiction to which his arguments led, or by both causes combined. In philosophy he never made any real advance upon his first work, *A Treatise of Human Nature*; his later efforts were devoted to presenting its arguments in a more perfect and more popular literary form, or to toning down their destructive results, and to the application of his ideas to questions of economics, politics, and religion, as well as to winning a new reputation for himself in historical composition.

His career contained few incidents that need to be recorded beyond the publication of his books. He was

born at Edinburgh on 26 April 1711, the younger son of a country gentleman of good family but small property. His "passion for literature" led to his early desertion of the study of law; when he was twenty-three, he tried commerce as a cure for the state of morbid depression in which severe study had landed him, and also, no doubt, as a means of livelihood. But, after a few months in a merchant's office at Bristol, he resolved to make frugality supply his deficiency of fortune, and settled in France, chiefly at La Flèche, where, more than a century before, Descartes had been educated at the Jesuit college. But he never mentions this connection with Descartes; he was occupied with other thoughts; and, after three years, in 1737, he came home to arrange for the publication of *A Treatise of Human Nature*, the first two volumes of which appeared in January 1739. If the book did not literally, as Hume put it, fall "dead-born from the press," it excited little attention; the only literary notice it received entirely failed to appreciate its significance. He was bitterly disappointed, but continued the preparation for the press of his third volume, "Of Morals." This appeared in 1740; and in 1741 he published a volume of *Essays Moral and Political*, which reached a second edition and was supplemented by a second volume in 1742. The success of these essays gratified Hume's literary ambition, and perhaps had a good deal to do with the direction of his activity towards the application and popularisation of his reflections rather than to further criticism of their basis.

About this time Hume resided, for the most part, at the paternal estate (now belonging to his brother) of Ninewells in Berwickshire; but he was making efforts to secure an independent income: he failed twice to obtain a university professorship; he spent a troublesome year as tutor to a lunatic nobleman; he accompanied General St Clair as his secretary on his expedition to France in 1746, and on a mission to Vienna and Turin in 1748. In the latter year was published a third volume of *Essays*

Moral and Political, and also *Philosophical Essays concerning Human Understanding*, afterwards (1758) entitled *An Enquiry concerning Human Understanding*, in which the reasonings of book I of *A Treatise of Human Nature* were presented in a revised but incomplete form. A second edition of this work appeared in 1751, and, in the same year, *An Enquiry concerning the Principles of Morals* (founded upon book III of the *Treatise*) which, in the opinion of the author, was of all his "writings, historical, philosophical, or literary, incomparably the best." A few months later (February 1752), he published a volume of *Political Discourses* which, he said, was "the only work of mine that was successful on the first publication." According to Burton[1], it "introduced Hume to the literature of the continent." It was translated into French in 1753 and again in 1754. In 1752 he was appointed keeper of the advocates' library—a post which made a small addition to his modest income and enabled him to carry out his historical work. In 1753—4 appeared *Essays and Treatises on several subjects*; these included his various writings other than the *Treatise* and the *History*, and, after many changes, attained their final form in the edition of 1777. The new material added to them in later editions consisted chiefly of *Four Dissertations* published in 1757. The subjects of these dissertations were the natural history of religion, the passions (founded on book II of the *Treatise*), tragedy, and taste. Essays on suicide and on immortality had been originally designed for this volume, but were hurriedly withdrawn on the eve of publication.

For more than two years, 1763 to 1765, Hume acted as secretary to the English embassy at Paris, where he was received with extraordinary enthusiasm by the court and by literary society. "Here," he wrote, "I feed on ambrosia, drink nothing but nectar, breathe incense only, and walk on flowers." He returned to London in January 1766, accompanied by Rousseau, whom he had befriended

[1] *Life and Correspondence of Hume*, I, p. 365.

and who, a few months later, repaid his kindness by provoking one of the most famous of quarrels between men of letters. Before the close of the year he was again in Scotland, but, in the following year, was recalled to London as under-secretary of state, and it was not till 1769 that he finally settled in Edinburgh. There he rejoined a society less brilliant and original than that he had left in Paris, but possessed of a distinction of its own. Prominent among his friends were Robertson, Hugh Blair, and others of the clergy—men of high character and literary reputation, and representative of a religious attitude, known in Scotland as 'moderatism[1],' which did not disturb the serenity of Hume. He died on 25 August 1776.

After his death his *Own Life* was published by Adam Smith (1777), and his *Dialogues concerning Natural Religion* by his nephew David (1779). We hear of these *Dialogues* more than twenty years earlier; but he was dissuaded from publishing them at the time, though he was concerned that they should not be lost and subjected the manuscript to repeated and careful revision. His philosophical activity may be said to have come to an end in 1757 with the publication of *Four Dissertations*, when he was forty-six years old. In spite of many criticisms he refused to be drawn into controversy; but, in an "advertisement" to the final edition of *Essays and Treatises*, he protested with some irritation against criticisms of *A Treatise of Human Nature*—"the juvenile work which the Author never acknowledged."

This disclaimer of his earliest and greatest work is interesting as a revelation of Hume's character, but cannot affect philosophical values. If he had written nothing else, and this book alone had been read, the influence of his ideas on general literature would have been less marked; but his claim to rank as the greatest of English philoso-

[1] For a definition of 'moderatism' by an observer of its decline, see Lord Cockburn's *Journal*, II, pp. 289–291.

phers would not be seriously affected: it would be recognised that he had carried out a line of thought to its final issue, and the effect upon subsequent speculation would have been, in essentials, what it has been.

Hume is quite clear as to the method of his enquiry. He recognised that Locke and others had anticipated him in the "attempt to introduce the experimental method of reasoning into moral subjects." Locke had also opened the way for deriving a system of philosophy from the science of the human mind; but Hume far excelled him in the thoroughness and consistency with which he followed this way. Locke's express purpose was to examine the understanding that he might discover "the utmost extent of its tether." He does not doubt that knowledge can signify a reality outside the mind; but he wishes to determine the range of this cognitive power. From the outset Hume conceives the problem in a wider manner. All knowledge is a fact or process of human nature; if we are able, therefore, "to explain the principles of human nature," we shall "in effect propose a complete system of the sciences." Without doubt this utterance points back to his early discovery of a "new medium by which truth might be established"—a discovery which, at the age of eighteen, had transported him beyond measure. In saying that "a complete system of the sciences" would result from "the principles of human nature," Hume did not mean that the law of gravitation or the circulation of the blood could be discovered from an examination of the understanding and the emotions. His meaning was that, when the sciences are brought into system, certain general features are found to characterise them; and the explanation of these general features is to be sought in human nature—in other words, in our ways of knowing and feeling. His statement, accordingly, comes simply to this, that mental science, or what we now call psychology, takes the place of philosophy—is itself philosophy.

Hume is commonly, and correctly, regarded as having

worked out to the end the line of thought started by Locke. But, in the width of his purpose, the thoroughness of its elaboration, and his clear consciousness of his task, he may be compared with Hobbes—a writer who had little direct effect upon his thought. For Hume is Hobbes inverted. The latter interprets the inner world—the world of life and thought—by means of the external or material world, whose impact gives rise to the motions which we call perception and volition. Hume, on the other hand, will assume nothing about external reality, but interprets it by means of the impressions or ideas of which we are all immediately conscious. And, as Hobbes saw all things under the rule of mechanical law, so Hume also has a universal principle of connection. "Here," he says, that is to say, among ideas, "is a kind of *Attraction*, which in the mental world will be found to have as extraordinary effects as in the natural, and to shew itself in as many and as various forms." The law of gravitation finds its parallel in the law of the association of ideas; as the movements of masses are explained by the former, so the latter is used to account for the grouping of mental phenomena.

In enumerating these mental facts he modifies the doctrine of Locke. According to Locke the material of knowledge comes from two different sources—sensation and reflection. The view hardly admitted of statement without postulating both a mental and a material world existing over against one another. Hume tries to avoid any such postulate. His primary data are all of one kind; he calls them "impressions," and says that they arise "from unknown causes." Ideas are distinguished from impressions by their lesser degree of "force and liveliness." Hume makes the generalisation that "every simple idea has a simple impression which resembles it"; an idea is thus the "faint image" of an impression; and there are degrees of this faintness: the "more lively and strong" are ideas of memory, the weaker are ideas of imagination. Further, certain ideas, in some unexplained way, reappear

with the force and liveliness of impressions, or, as Hume puts it, "produce the new impressions" which he calls "impressions of reflection" and which he enumerates as passions, desires, and emotions. Reflection is thus derived from sensation, although its impressions in their turn give rise to new ideas. All mental facts (in Hume's language, all "perceptions") are derived from sense-impressions, and these arise from unknown causes. Simple ideas are distinguished from simple impressions merely by their comparative lack of force and liveliness; but these fainter data tend to group themselves in an order different from that of their corresponding impressions. By this "association of ideas" are formed the complex ideas of relations, modes, and substances.

Such are the elements of Hume's account of human nature; out of these elements he has to explain knowledge and morality; and this explanation is, at the same time, to be "a complete system of the sciences." He is fully alive to the problem. In knowledge ideas are connected together by other relations than the "association" which rules imagination; and he proceeds at once to an enquiry into "all those qualities which make objects admit of comparison." These he calls "philosophical relations," and he arranges them under seven general heads: resemblance, identity, space and time, quantity, degree of quality, contrariety, cause and effect.

All scientific propositions are regarded as expressing one or other of these relations. Hume regards the classification as exhaustive; and, at least, it is sufficient to form a comprehensive test of his theory. Since we have nothing to go upon but ideas and the impressions from which ideas originate, how are we to explain knowledge of these relations? Hume's enquiry did not answer this question even to his own satisfaction; but it set a problem which has had to be faced by every subsequent thinker, and it has led many to adopt the sceptical conclusion in which the author himself finally landed.

The "philosophical relations," under his analysis, fall into two groups. On the one hand, some of them depend entirely on the ideas compared: these are resemblance, contrariety, degrees in quality, and proportions in quantity or number. On the other hand, the relations of identity, space and time, and causation may be changed without any change in the ideas related; our knowledge of them thus presents an obvious difficulty, for it cannot be derived from the ideas themselves. Hume does not take much trouble with the former class of relations, in which this difficulty does not arise. He is content to follow on Locke's lines and to think that general propositions of demonstrative certainty are obviously possible here, seeing that we are merely stating a relationship clearly apparent in the ideas themselves. He does not ask whether the relation is or is not a new idea, and, if it is, how it can be explained—from what impression it took its rise. And he gives no explanation of the fixed and permanent character attributed to an idea when it is made the subject of a universal proposition.

It is important to note, however, that he does not follow Locke in holding that mathematics is a science which is at once demonstrative and 'instructive.' The propositions of geometry concern spatial relations, and our idea of space is received "from the disposition of visible and tangible objects"; we have "no idea of space or extension but when we regard it as an object either of our sight or feeling" (*i.e.*, touch); and in these perceptions we can never attain exactness: "our appeal is still to the weak and fallible judgment which we make from the appearance of the objects, and correct by a compass or common measure." Geometry, therefore, is an empirical science; it is founded on observations of approximate accuracy only, though the variations from the normal in our observations may be neutralised in the general propositions which we form. Hume did not apply the same doctrine to arithmetic, on the ground (which his principles do not

justify) that the unit is something unique. He was thus able to count quantity and number in his first class of relations and to except algebra and arithmetic from the effect of his subtle analysis of the foundations of geometry. In his *Enquiry concerning Human Understanding*, however, he deserts, without a word of justification, the earlier view which he had worked out with much care and ingenuity, and treats mathematics generally as the great example of demonstrative reasoning. In this later work, in which completeness is sacrificed to the presentation of salient features, he speaks, not of two kinds of relations, but of "relations of ideas" and "matters of fact"; and, in each, he seeks to save something from the general ruin of the sciences to which his premisses lead. The last paragraph of the book sets forth his conclusion: "When we run over our libraries, persuaded of these principles, what havoc must we make? If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, *Does it contain any abstract reasoning concerning quantity or number?* No. *Does it contain any experimental reasoning concerning matter of fact and existence?* No. Commit it then to the flames; for it can contain nothing but sophistry and illusion."

This passage, startling and ruthless as it sounds, is chiefly remarkable for its reservations. It was easy to condemn "divinity or school metaphysics" as illusory; they had for long been common game. But to challenge the validity of mathematics or of natural science was quite another matter. Hume did not temper the wind to the shorn lamb; but he took care that it should not visit too roughly the sturdy wethers of the flock. Yet we have seen that, according to his principles, mathematics rests upon observations which fall short of accuracy, while natural science, with its "experimental reasoning concerning matter of fact," depends upon the relation of cause and effect.

The examination of this relation occupies a central posi-

tion in both his works; and its influence upon subsequent thought has been so great as sometimes to obscure the importance of other factors in his philosophy. He faced a problem into which Locke had hardly penetrated, and of which even Berkeley had had only a partial view. What do we mean when we say that one thing is cause and another thing its effect, and what right have we to that meaning? In sense-perception we have impressions of flame and of heat, for instance; but why do we say that the flame causes the heat, what ground is there for asserting any "necessary connection" between them? The connection cannot be derived from any comparison of the ideas of flame and of heat; it must come from impression, therefore; but there is no separate impression of 'cause' or 'causation' which could serve as the link between two objects. What then is the origin of the connection? To use the terminology of the *Enquiry*, since cause is not a "relation of ideas," it must be a "matter of fact"—an impression. But it is not itself a separate or simple impression; it must therefore be due to the mode or manner in which impressions occur. In our experience we are accustomed to find flame and heat combined; we pass constantly from one to the other; and the custom becomes so strong that, whenever the impression of flame occurs, the idea of heat follows. Then we mistake this mental or subjective connection for an objective connection. Necessary connection is not in the objects, but only in the mind; yet custom is too strong for us, and we attribute it to the objects.

This is a simple statement of the central argument of Hume's most famous discussion. The "powers" which Locke attributed to bodies must be denied—as Berkeley denied them. The consciousness of spiritual activity on which Berkeley relied is equally illusory on Hume's principles. "If we reason *a priori*," says Hume, "anything may appear able to produce anything. The falling of a pebble may, for aught we know, extinguish the sun,

or the wish of a man control the planets in their orbits." This striking utterance is, strictly, little better than a truism. No philosopher ever supposed that such knowledge about definite objects could be got in any other way than by experience. But Hume's negative criticism goes much deeper than this. We have no right to say that the extinction of the sun needs any cause at all, or that causation is a principle that holds of objects; all events are loose and separate. The only connection which we have a right to assert is that of an idea with an impression or with other ideas—the subjective routine which is called 'association of ideas.' Hume's constructive theory of causation is an explanation of how we come to suppose that there is causal connection in the world, although there is really nothing more than customary association in our minds.

If we admit Hume's fundamental assumption about impressions and ideas, it is impossible to deny the general validity of this reasoning. Any assertion of a causal connection—the whole structure of natural science therefore—is simply a misinterpretation of certain mental processes. At the outset Hume himself had spoken of impressions as arising from "unknown causes"; and some expressions of the sort were necessary to give his theory a start and to carry the reader along with him; but they are really empty words. Experience is confined to impressions and ideas; causation is an attitude towards them produced by custom—by the mode of sequence of our perceptions; its applicability is only within the range of impressions or ideas; to talk of an impression as caused by something that is neither impression nor idea may have a very real meaning for any philosopher except Hume; but for Hume it cannot have any meaning at all.

The discussion of causation brings out another and still more general doctrine held by Hume—his theory of belief. When I say that flame causes heat, I do not refer to a connection of ideas in my own mind; I am expressing

belief in an objective connection independent of my mental processes. But Hume's theory of causation reduces the connection to a subjective routine. Now, some other impression than 'flame' might precede the idea of heat—the impression 'cold,' for instance. How is it, then, that I do not assert 'cold causes heat'? The sequence 'cold—heat' may be equally real in my mind with the sequence 'flame—heat.' How is it that the former does not give rise to belief in the way that the latter does? Hume would say that the only difference is that the association in the former case is less direct and constant than in the latter (in which the association had been set a-going by the repeated sequence of impression upon impression), and thus leads to an idea of less force and liveliness. Belief, accordingly, is simply a lively idea associated with a present impression. It belongs to the sensitive, not to the rational, part of our nature. And yet it marks the fundamental distinction between judgment and imagination.

In the *Treatise*, at any rate, there is no faltering of purpose or weakening of power when the author proceeds to apply his principles to the fabric of knowledge. It is impossible, in this place, to follow his subtle and comprehensive argument; but its issue is plain. With objections not unlike Berkeley's he dismisses the independent existence of bodies, and then he turns a similar train of reasoning against the reality of the self: "When I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I can never catch *myself* at any time without a perception, and never can observe anything but the perception. When my perceptions are removed for any time, as by sound sleep, so long am I insensible of *myself*, and may truly be said not to exist[1]." According to Hume's own illustration, the mind is but the stage on which perceptions pass

[1] *A Treatise of Human Nature*, I, iv, 6.

and mingle and glide away. Or rather, there is no stage at all, but only a phantasmagory of impressions and ideas.

Hume's purpose was constructive; but the issue, as he faces it, is sceptical. And he is a genuine sceptic; for even as to his scepticism he is not dogmatic. Why should he assent to his own reasoning? he asks; and he answers, "I can give no reason why I should assent to it, and feel nothing but a *strong* propensity to consider objects *strongly* in that view." The propensity, however, is strong only when the "bent of mind" is in a certain direction; a dinner, a game of backgammon, makes such speculations appear ridiculous; and "nature" suffices to "obliterate all these chimeras." A year later Hume referred again to this sceptical *impasse*, in an appendix to the third volume of his *Treatise*[1]; and there, with remarkable insight, he diagnosed the causes of his own failure. The passage deserves quotation, seeing that it has been often overlooked and is, nevertheless, one of the most significant utterances in the history of philosophy. "In short there are two principles, which I cannot render consistent; nor is it in my power to renounce either of them, viz. *that all our distinct perceptions are distinct existences*, and *that the mind never perceives any real connexion among distinct existences*. Did our perceptions either inhere in something simple and individual, or did the mind perceive some real connexion among them, there would be no difficulty in the case. For my part, I must plead the privilege of a sceptic, and confess that this difficulty is too hard for my understanding. I pretend not, however, to pronounce it absolutely insuperable. Others, perhaps, or myself, upon more mature reflexions, may discover some hypothesis that will reconcile those contradictions." Hume himself seems to have made no further attempt to solve the problem. His followers have been content to build their systems on his foundation, with minor improvements of their own, but

[1] Ed. Green and Grose, I, p. 559; ed. Selby-Bigge, p. 636.

without overcoming or facing the fundamental difficulty which he saw and expressed.

The logical result of his analysis is far from leading to that "complete system of the sciences" which he had anticipated from his "new medium"; it leads, not to reconstruction, but to a sceptical disintegration of knowledge; and he was clearsighted enough to see this result. Thenceforward scepticism became the characteristic attitude of his mind and of his writings. But his later works exhibit a less thorough scepticism than that to which his thinking led. Even his *Enquiry concerning Human Understanding* shows a weakening of the sceptical attitude, in the direction of a "mitigated scepticism" which resembles modern positivism and admits knowledge of phenomena and of mathematical relations.

When he came to deal with concrete problems his principles were often applied in an emasculated form. But the "new medium" was not altogether discarded: appeal was constantly made to the mental factor—impression and idea. This is characteristic of Hume's doctrine of morality. "Here is a matter of fact; but 'tis the object of feeling not of reason. It lies in yourself not in the object[1]." And from this results his famous definition of virtue. "Every quality of the mind," he says in the *Treatise*[2], "is denominated virtuous which gives pleasure by the mere survey; as every quality which produces pain is called vicious"; or, as he puts it in the *Enquiry concerning the Principles of Morals*[3], virtue is "whatever mental action or quality gives to the spectator the pleasing sentiment of approbation; and vice the contrary." The "sentiments of approbation or blame," which thus arise, depend in all cases on sympathy. Sympathy with the pleasures and pains of others is postulated by Hume as an ultimate

[1] *Treatise*, III, i, 1; ed. Green and Grose, II, p. 245; ed. Selby-Bigge, p. 469.

[2] III, iii, 1; ed. Green and Grose, II, p. 348; ed. Selby-Bigge, p. 591.

[3] App. i; ed. Selby-Bigge, p. 289; *Essays*, ed. Green and Grose, II, p. 261.

fact; the reasonings of Butler and Hutcheson prevented him from seeking to account for it as a refined form of selfishness, as Hobbes had done; and yet, upon his own premisses, it remains inexplicable. In his *Enquiry concerning the Principles of Morals* his differences from Hobbes, and even from Locke, are still more clearly shown than in the *Treatise*; he defends the reality of disinterested benevolence; and the sentiment of moral approbation is described as "humanity," or "a feeling for the happiness of mankind," which, it is said, "nature has made universal in the species[1]." This sentiment, again, is always directed towards qualities which tend to the pleasure, immediate or remote, of the person observed or of others. Thus Hume occupies a place in the utilitarian succession; but he did not formulate a quantitative utilitarianism, as Hutcheson had already done. He drew an important distinction, however, between natural virtues, such as benevolence, which are immediately approved and which have a direct tendency to produce pleasure, and artificial virtues, of which justice is the type, where both the approval and the tendency to pleasure are mediated by the social system which the virtue in question supports.

Hume exerted a profound influence upon theology, not only by the general trend of his speculation, but also through certain specific writings. The most important of these writings are the essay 'Of Miracles' contained in *An Enquiry concerning Human Understanding*, the dissertation entitled 'The Natural History of Religion,' and *Dialogues concerning Natural Religion*. The first-named is the most famous; it produced a crowd of answers, and it had a good deal to do with public attention being attracted to the author's works. It consists of an expansion of a simple and ingenious argument, which had occurred to him when writing his *Treatise of Human Nature*, but which, strangely enough, is inconsistent with the principles of

[1] *Enquiry concerning the Principles of Morals*, sect. I and app. i; ed. Selby-Bigge, pp. 173, 286; ed. Green and Grose, II, pp. 172, 259.

that work. It regards 'laws of nature' as established by a uniform experience, 'miracles' as violations of these laws, and the evidence for miracles as necessarily inferior to the 'testimony of the senses' which establishes the laws of nature. Whatever validity these positions may have on another philosophical theory, the meaning both of laws of nature, and of miracles as conflicting with these laws, evaporates under the analysis by which, as in Hume's *Treatise*, all events are seen as 'loose and separate.' 'The Natural History of Religion' contains reflections of greater significance. Here Hume distinguishes between the theoretical argument which leads to theism and the actual mental processes from which religion has arisen. Its "foundation in reason" is not the same thing as its "origin in human nature"; and he made an important step in advance by isolating this latter question and treating it apart. He held that religion arose "from a concern with regard to the events of life, and from the incessant hopes and fears which actuate the human mind," and, in particular, from the 'melancholy' rather than from the 'agreeable' passions; and he maintained the thesis that polytheism preceded theism in the historical development of belief.

"The whole is a riddle, an enigma, an inexplicable mystery." Such is the concluding reflection of this work. But a further and serious attempt to solve the riddle is made in his *Dialogues concerning Natural Religion*. This small book contains the author's mature views on ultimate questions. It is written in his most perfect style and shows his mastery of the dialogue form. There is none of the usual scenery of the dramatic dialogue; but the persons are distinct, the reasoning is lucid, and the interest is sustained to the end. The traditional arguments are examined with an insight and directness which were only equalled afterwards by Kant; but, unlike Kant, and with insight more direct if not more profound, Hume finds the most serious difficulties of the question in the realm of

morals. The form of the work makes it not altogether easy to interpret; and some commentators have held that Hume's own views should not be identified with those of the more extreme critic of theism. Hume himself says as much at the close of the work; but his habitual irony in referring to religious topics is part of the difficulty of interpretation. All the speakers in the *Dialogues* are represented as accepting some kind of theistic belief; and it is not necessary to attribute expressions of this kind simply to irony. The trend of the argument is towards a shadowy form of theism—"that the cause or causes of order in the universe probably bear some remote analogy to human intelligence"; and, in a remarkable footnote, the author seems to be justifying his own right to take up such a position: "No philosophical Dogmatist denies, that there are difficulties both with regard to the senses and to all science; and that these difficulties are in a regular, logical method, absolutely insolvable. No Sceptic denies, that we lie under an absolute necessity, notwithstanding these difficulties, of thinking, and believing, and reasoning with regard to all kind of subjects, and even of frequently assenting with confidence and security." In other words, his logic leads to complete scepticism; but, just because the "difficulties" are insoluble, he claims a right to disregard them, and to act and think like other men, when action and thought are called for.

For this reason his theory of knowledge has little effect upon his political and economical essays, although these are closely connected with his ethical and psychological views. The separate essays were published, in various volumes, between 1741 and 1777; and, in the interval, political philosophy was profoundly influenced by the works of Montesquieu[1] and Rousseau[2]. The essays do not make a system, and economics is in them not definitely

[1] *De l'esprit des lois*, 1748.

[2] *Discours sur les sciences et les arts*, 1750; *Discours sur l'origine et les fondemens de l'inégalité parmi les hommes*, 1755; *Du contrat social*, 1762.

distinguished from politics; but both system and the distinction are suggested in the remarks on the value of general principles and general reasonings which he prefixed to the essays on commerce, money, and other economical subjects. "When we reason upon *general* subjects," he says, "our speculations can scarcely ever be too fine, provided they be just."

In both groups of essays Hume was not merely a keen critic of prevailing theories and conceptions; his knowledge of human nature and of history guided his analysis of a situation. A growing clearness of doctrine also may be detected by comparing his earlier with his later utterances. In later editions he modified his acceptance of the traditional doctrines of the natural equality of men and of consent as the origin of society. The essay 'Of the Origin of Government,' first published in 1777, makes no mention either of divine right or of original contract. Society is traced to its origin in the family; and political society is said to have been established "in order to administer justice"—though its actual beginnings are sought in the concert and order forced upon men by war. Again, whereas, in an earlier essay, he had said that "a constitution is only so far good as it provides a remedy against maladministration," he came later to look upon its tendency to liberty as marking the perfection of civil society—although there must always be a struggle between liberty and the authority without which government could not be conducted. His political thinking, accordingly, tends to limit the range of legitimate governmental activity; similarly, in economics, he criticises the doctrine of the mercantilists, and on various points anticipates the views of the analytical economists of a later generation. Perhaps, however, nothing in these essays shows better his insight into the principles of economics than the letter which, shortly before his death, he wrote to Adam Smith upon receipt of a copy of *The Wealth of Nations*. In this letter, after a warm expression of praise for, and satis-

faction with, his friend's achievement, he makes a single criticism—'I cannot think that the rent of farms makes any part of the price of the produce, but that the price is determined altogether by the quantity and the demand'—which suggests that he himself had arrived at a theory of rent similar to that commonly associated with the name of Ricardo.

CHAPTER IX

ADAM SMITH AND OTHERS

I. Adam Smith

Adam Smith was born at Kirkcaldy on 5 June 1723. He was educated at the University of Glasgow, where he had Hutcheson as one of his teachers, and in 1740 he proceeded to Oxford, where he resided continuously through term and vacation for more than six years. Like Hobbes in the previous century, and Gibbon and Bentham shortly after his own day, he has nothing that is good to say of the studies of the university. His own college of Balliol gave small promise of its future fame: it was then chiefly distinguished as a centre of Jacobitism, and its authorities confiscated Smith's copy of Hume's *Treatise of Human Nature*; but its excellent library enabled him to devote himself to assiduous study, mainly in Greek and Latin literature. After some years spent at home, he returned to Glasgow as professor of logic (1751), being transferred in the following year to the chair of moral philosophy. In 1759 he published his *Theory of Moral Sentiments*, which brought him immediate fame. Early in 1764 he resigned his professorship in order to accompany the young Duke of Buccleuch on a visit to France, which lasted over two years.

This change in his career marks the beginning of the second and more famous period of his literary work. He found Toulouse (where they first settled) much less gay than Glasgow, and therefore started writing a book "in order to pass away the time[1]." This is probably the first reference to the great work of his riper years. But it does not mark the beginning of his interest in economics. By

[1] Cp. J. Rae, *Life of Adam Smith*, p. 179.

tradition and by his own preference, a comprehensive treatment of social philosophy was included in the work of the moral philosophy chair at Glasgow; and there is evidence to show that some of his most characteristic views had been written down even before he settled there[1]. When, in 1765—6, Smith resided for many months in Paris with his pupil, he was received into the remarkable society of 'economists' (commonly known as the 'physiocrats[2]'). Quesnay, the leader of the school, had published his *Maximes générales de gouvernement économique* and his *Tableau économique* in 1758; and Turgot, who was soon to make an effort to introduce their common principles into the national finance, was at this time writing his *Réflexions sur la formation et la distribution des richesses*, although it was not published till some years later. Smith held the work of the physiocrats, and of Quesnay in particular, in high esteem; only death robbed Quesnay of the honour of having *The Wealth of Nations* dedicated to him. The exact extent of Smith's indebtedness to the school is matter of controversy. But two things seem clear, though they have been sometimes overlooked. He shared their objection to mercantilism and their approval of commercial freedom on grounds at which he had arrived before their works were published; and he did not accept their special theory that agriculture is the sole source of wealth, or the practical consequence which they drew from the principle that the revenue of the state should be derived from 'a single tax' on land. After his return from France Smith settled down quietly with his mother and cousin at Kirkcaldy, and devoted himself to the composition of *The Wealth of Nations*, which was published in 1776. In 1778 he removed to Edinburgh as commissioner of customs; he died on 17 July 1790.

[1] Cp. Dugald Stewart, *Life and Writings of Adam Smith* in *Works*, I, pp. 67, 68; *Lectures of Adam Smith*, ed. Cannan, pp. 157 ff.

[2] This term was invented by Dupont de Nemours (1739–1817), a younger member of the school.

Apart from some minor writings Adam Smith was the author of two works of unequal importance. These two works belong to different periods of his life—the professorial, in which he may be looked upon as leading the ordinary secluded life of a scholar, and the later period, in which he had gathered wider knowledge of men and affairs. And the two works differ in the general impression which they are apt to produce. According to the earlier, sympathy, or social feeling, is the foundation of morality; the ideal of the later work is that of a social system in which each person is left free to pursue his own interest in his own way, and the author throws gentle ridicule upon the "affectation" of "trading for the public benefit." Undue stress has, however, been laid upon the difference; it is superficial rather than fundamental, and results from the diversity of subject and method in the two works rather than from an opposition between their underlying ideas. Indeed, it might be argued that the social factor in the individual, which is brought out in the ethical treatise, is a necessary condition of that view of a harmony between public and private interests which underlies the doctrine of "natural liberty" taught in *The Wealth of Nations*.

The Theory of Moral Sentiments covers much ground already traversed by preceding British moralists. It is an elaborate analysis of the various forms and objects of the moral consciousness. It is written in a flowing and eloquent, if rather diffuse, style; it is full of apt illustration; and the whole treatise is dominated by a leading idea. Smith's central problem, like that of his predecessors, is to explain the fact of moral approval and disapproval. He discards the doctrine of a special 'moral sense,' impervious to analysis, which had been put forward by Shaftesbury and Hutcheson. Like Hume he regards sympathy as the fundamental fact of the moral consciousness; and he seeks to show, more exactly than Hume had done, how sympathy can become a test of morality. He sees that it is not, of itself, a sufficient test. A spectator may

enter imaginatively into the emotional attitude of another man, and this is sympathy; but it is not a justification of the man's attitude. The spectator may have misunderstood the circumstances, or his own interests may have been involved. Accordingly, the only sympathy that has ethical value is that of an "impartial and well-informed spectator." But this impartial and well-informed spectator, whose sympathy with our passions and affections would be their adequate justification, is not an actual but an ideal person; and indeed Smith recognises as much when he says that we have to appeal from "the opinions of mankind" to "the tribunal of [our] own conscience" —to "the man within the breast." The great merit of the theory, as worked out by Smith, is its recognition of the importance of the social factor in morality, and of sympathy as the means by which this social factor operates. The individual man, in his view, is a being of social structure and tendencies. But the social side of his nature is not exaggerated: if man "can subsist only in society," it is equally true that "every man is by nature first and principally recommended to his own care." These points modify the contrast between the teaching of his first work and the 'individualism' of his economic theory.

Adam Smith is frequently spoken of as the founder of political economy. By this is meant that he was the first to isolate economic facts, to treat them as a whole, and to treat them scientifically. But, nine years before the publication of *The Wealth of Nations*, another work appeared which may be regarded as having anticipated it in these respects—Sir James Steuart's *Inquiry into the Principles of Political Economy* (1767). Steuart was a Jacobite laird, who, in 1763, returned from a long exile abroad. He had travelled extensively, and his work contains the results of observation of different states of society as well as of systematic reflection; but it is without merit in respect of literary form. It is presented to the public as "an attempt towards reducing to principles, and forming into a regular

science, the complicated interests of domestic policy." It deals with "population, agriculture, trade, industry, money, coin, interest, circulation, banks, exchange, public credit, and taxes"; and the author has a definite view of scientific method. He speaks, indeed, of "the art of political economy," using the term "political economy" in much the same sense as that in which Smith used it in dealing with "systems of political economy" in the fourth book of his great work. But this art is the statesman's business; and behind the statesman stands "the speculative person, who, removed from the practice, extracts the principles of this science from *observation* and *reflection*." Steuart does not pretend to a system, but only to "a clear deduction of principles." These principles, however, are themselves gathered from experience. His first chapter opens with the assertion, "Man we find acting uniformly in all ages, in all countries, and in all climates, from the principles of self-interest, expediency, duty and passion." And, of these, "the ruling principle" which he follows is "the principle of self-interest." From this point the author's method may be described as deductive, and as resembling that of Smith's successors more than it does Smith's own. Further, he recognises that the conclusions, like the principles from which they proceed, are abstract and may not fit all kinds of social conditions, so that "the political economy in each [country] must necessarily be different." How far Smith took account of Steuart's reasonings we cannot say; he does not mention his name: though he is reported to have said that he understood Steuart's system better from his talk than from his book.

Adam Smith does not begin with a discourse on method; he was an artist in exposition; and he feared, perhaps unduly, any appearance of pedantry. He plunges at once into his subject: "The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually con-

sumes." These first words suggest the prevailing theme. Wealth consists not in the precious metals, but in the goods which men use or consume; and its source or cause is labour. On this foundation he builds the structure of his science; and—although he says nothing about it—we can trace the method which he regarded as appropriate to his enquiry. It may be described shortly as reflection and reasoning checked and reinforced by historical investigation. The main theorems of the analytical economics of a later period are to be found expressed or suggested in his work; but almost every deduction is supported by concrete instances. Rival schools have thus regarded him as their founder, and are witnesses to his grasp of principles and insight into facts. He could isolate a cause and follow out its effects; and, if he was apt sometimes to exaggerate its prominence in the complex of human motives and social conditions, it was because the facts at his disposal did not suggest the necessary qualifications of his doctrine, although further experience may have shown that the qualifications are needed.

Adam Smith isolates the fact of wealth and makes it the subject of a science. But he sees this fact in its connections with life as a whole. His reasonings are grounded in a view of human nature and its environment, both of which meet in labour, the source of wealth and also, as he thinks, the ultimate standard of the value of commodities. In the division of labour he sees the first step taken by man in industrial progress. His treatment of this subject has become classical, and is too well known for quotation; it is more to the purpose to point out that it was an unerring instinct for essentials which led him, in his first chapter, to fix attention on a point so obvious that it might easily have been overlooked and yet of far-reaching importance in social development generally. The division of labour, according to Smith, is the result of "the propensity to truck, barter, and exchange one thing for another." But his analysis of motives goes deeper

than this; and, so far as they are concerned with wealth, human motives seem to be reduced by him to two: "the passion for present enjoyment" which "prompts to expense," and "the desire of bettering our condition" which "prompts to save." Both are selfish; and it is on these two motives of self-interest, or on a view of one's own advantage, that Smith constantly relies. He constructs an economic commonwealth which consists of a multitude of persons, each seeking his own interest and, in so doing, unwittingly furthering the public good—thus promoting "an end which was no part of his intention." "The natural effort of every individual to better his own condition," he says, "when suffered to exert itself with freedom and security, is so powerful a principle, that it is alone, and without any assistance, not only capable of carrying on the society to wealth and prosperity, but of surmounting a hundred impertinent obstructions with which the folly of human laws too often encumbers its operations."

Smith, like many other philosophers of the time, assumed that there was a natural identity of public and private interests. It is a comfortable belief that society would be served best if everybody looked after his own interests; and, in an economist, this belief was perhaps an inevitable reaction from a condition in which state regulation of industry had largely consisted in distributing monopolies and other privileges. In Smith's mind the belief was also bound up with the view that this identity of interests resulted from the guidance of "the invisible hand" that directs the fate of mankind. But the belief itself was incapable of verification, and subsequent industrial history refutes it. Indeed, in various places in his work, Smith himself declines to be bound by it. He thinks that the interests of the landowners and of the working class are in close agreement with the interests of society, but that those of "merchants and master manufacturers" have not the same connection with the public

interest. "The interest of the dealers," he says, "is always in some respects different from, and even opposite to, that of the public." The harmony of interests, therefore, is incomplete. Nor would it be fair to say that Smith had relinquished, in *The Wealth of Nations*, his earlier view of the social factor in human motive. What he did hold was rather that, in the pursuit of wealth, that is to say, in industry and commerce, the motive of self-interest predominates; in famous passages, he speaks as if no other motive need be taken into account; but he recognises its varying strength; and it is only in the class of "merchants and master manufacturers" that he regards it as having free course: they are acute in the perception of their own interest and unresting in its pursuit; in the country gentleman, on the other hand, selfish interest is tempered by generosity and weakened by indolence[1].

From the nature of man and the environment in which he is placed, Smith derives his doctrine of "the natural progress of opulence." Subsistence is "prior to conveniency and luxury"; agriculture provides the former, commerce the latter; the cultivation of the country, therefore, precedes the increase of the town; the town, indeed, has to subsist on the surplus produce of the country; foreign commerce comes later still. This is the natural order, and it is promoted by man's natural inclinations. But human institutions have thwarted these natural inclinations, and, "in many respects, entirely inverted" the natural order. Up to Adam Smith's time, the regulation of industry had been almost universally admitted to be part of the government's functions; criticism of the principles and methods of this regulation had not been wanting; the theory of "the balance of trade," for instance, important in the doctrine of the mercantilists, had been examined and rejected by Hume and by others before him. But Smith made a comprehensive survey of the means by which, in agriculture, in the home trade, and

[1] *The Wealth of Nations*, bk. I, ch. xi, conclusion.

in foreign commerce, the state had attempted to regulate industry; these attempts, he thought, were all diversions of the course of trade from its "natural channels"; and he maintained that they were uniformly pernicious. Whether it acts by preference or by restraint, every such system "retards, instead of accelerating, the progress of the society towards real wealth and greatness; and diminishes, instead of increasing, the real value of the annual produce of its land and labour." When all such systems are swept away, "the obvious and simple system of natural liberty establishes itself of its own accord[1]."

The ideas and arguments of Adam Smith were influential, at a later date, in establishing the system of free trade in Great Britain; and, perhaps, it would be not far wrong to say that a generation of economists held his views on this question to be his most solid title to fame. He regarded liberty as natural in contrast with the artificiality of government control; and the term 'natural' plays an ambiguous part in his general reasonings, changing its shade of meaning, but always implying a note of approval. In this, he only used the language of his time —though Hume had pointed out that the word was treacherous. But it has to be borne in mind that, while he extolled this 'natural liberty' as the best thing for trade, he did not say that it was in all cases the best thing for a country. He saw that there were other things than wealth which were worth having, and that of some of these the state was the guardian. Security must take precedence of opulence, and on this ground he would restrict natural liberty, not only to defend the national safety[2], but also for the protection of the citizens generally[3].

II. Other Writers

As we look back upon the development of philosophical problems, it might seem that, for a philosophical

[1] *The Wealth of Nations*, bk. IV, ch. ix.
[2] *Ibid.* bk. IV, ch. ii. [3] *Ibid.* bk. II, ch. ii.

thinker after Hume, there was but one thing worth doing —to answer him, if possible; and, if that were not possible, to keep silent. But the issue was not quite so clear to his contemporaries. Indeed, his own example did not press it home. It showed, on the contrary, that work of importance might be done in certain departments even when the contradiction was ignored to which Hume had reduced the theory of knowledge. Soon after the publication of *A Treatise of Human Nature*, valuable writings appeared on psychology, and on moral and political theory; there were also critics of Hume in considerable number; and one of that number had both the insight to trace Hume's scepticism to its logical origin and the intellectual capacity to set forth a theory of knowledge in which the same difficulty should not arise.

Among the psychologists the most important place belongs to David Hartley, a physician, and sometime fellow of Jesus college, Cambridge, whose *Observations on Man: his frame, his duty, and his expectations* appeared in 1749. The rapid march of philosophical thought in the previous forty years was ignored by, and probably unknown to, the author. The whole second part of his book, in which he works out a theological theory, may be regarded as antiquated. He does not mention Berkeley; he seems never to have heard of David Hume. But the first or psychological part of the book has two striking features: it is a systematic attempt at a physiological psychology, and it developed the theory of the association of ideas in a way which influenced, far more than Hume did, the views of the later associational school of James Mill and his successors. The physiological doctrine was suggested by certain passages in Newton's *Optics*. Hartley supposes that the contact of an external object with the sensory nerves excites "vibrations in the æther residing in the pores of these nerves"; these vibrations enter the brain, are "propagated freely every way over the whole

medullary substance," and sensations are the result; further, they leave vestiges or traces behind them, and this is the origin of ideas, which depend on minute vibrations or "vibratiuncles." Motor activity is explained in a similar way. This physiological view is the basis of his whole doctrine of mind and, more particularly, of the doctrine of association. In respect of the latter doctrine, Hartley wrote under the influence of Locke; but he has left it on record that the suggestion to make use of association as a general principle of psychological explanation came from John Gay, fellow of Sidney Sussex College, Cambridge, who had written *A Dissertation* prefixed to Law's English translation of Archbishop King's *Origin of Evil* (1731), in which the doctrine was used to explain the connection of morality with private happiness. Hartley offered a physiological explanation of association itself, gave a generalised statement of its laws, and applied it to the details of mental life. He did not see, as Hume had seen, the special difficulty of applying it so as to explain judgment, assent, or belief.

Abraham Tucker was a psychologist of a different temper from Hartley. He was a constant critic of Hartley's physiological doctrines, and he excelled in that introspective analysis which has been practised by many English writers. Tucker was a country gentleman whose chief employment was a study of the things of the mind. The first fruit of his reflection was a fragment *Freewill, Foreknowledge and Fate* (1763), published under the pseudonym of Edward Search; certain criticisms of this piece produced, also in 1763, *Man in quest of Himself: or a Defence of the Individuality of the Human Mind*, "by Cuthbert Comment." Thereafter, he did not turn aside from his great work, *The Light of Nature pursued*, of which the first four volumes were published by himself (again under the name of Search) in 1768, and the last three appeared after his death (1778). The author was a man of leisure himself, and he wrote for men of leisure; he was

not without method; but his plan grew as he proceeded; when new fields of enquiry opened, he did not refuse to wander in them; and he liked to set forth his views *de omnibus rebus et quibusdam aliis*. Indeed, it is a work of inordinate length, and the whole is of unequal merit. Many of the long chapters have lost their interest through lapse of time and the changes which time has brought. Others perhaps may appeal to us only when we can catch the author's mood. Such are the speculations—put forward as purely hypothetical—concerning the soul's vehicle, the mundane soul, and the vision of the disembodied soul. Mysticism is apt to appear fantastic when expressed in language so matter of fact; but the writer has a rare power of realising his fancies. The chapters, however, which deal more specifically with human nature are a genuine and important contribution to the literature of mind and morals. The writer was as innocent of Hume as was Hartley; he criticised Berkeley, though seldom with insight and never with sympathy; and he took Locke as his master. But he was not a slavish follower; it would be difficult to instance finer or more exhaustive criticism than his examination of the Lockean view that all action has for its motive the most pressing uneasiness. His moral doctrine is perhaps still more remarkable for the candour and elaboration with which he discussed the problem which faced all followers of Locke—the consistency of an analysis of action in terms of personal pleasure and pain with a theory of morality in which benevolence is supreme. Herein he provided most of the material afterwards made use of by Paley. Into the details of his teaching it is impossible to enter. But perhaps it is not too much to say that only his diffuseness has prevented him from becoming a classic. The mere mass of the book is deterrent. Yet he would be an unlucky reader who could spend half-an-hour over its pages without finding something to arrest his attention and even to enthral his interest. The author sees mankind and the human lot with

shrewd but kindly eyes; his stores of illustration are inexhaustible and illuminate subjects which in other hands would be dull; even the subtlest points are made clear by a style which is free and simple and varied; there is never any trace of sentimentality; but there are passages of humour and of pathos worthy of Goldsmith.

Richard Price, a native of Glamorgan, who became a unitarian minister in London, left his mark on more than one department of thought. His *Observations on Reversionary Payments* (1771) made a distinct advance in the theory of life assurance. His *Appeal to the Public on the Subject of the National Debt* (1771) is said to have contributed to the reestablishment of the sinking fund. He was drawn into the current of revolutionary politics and became a leading exponent of their ideas. His *Observations on the Nature of Civil Liberty, the Principles of Government, and the Justice and Policy of the War with America* made him famous in two continents. The preface to the first edition was dated 8 February, that to the fifth edition 12 March, 1776. *Additional Observations* on the same subject appeared in 1777, and a *General Introduction and Supplement* to the two tracts in 1778. The revolution in France was the occasion for *A Discourse on the Love of our Country, delivered on Nov.* 4, 1789; and this he closed with a *Nunc dimittis*: "After sharing in the benefits of one Revolution, I have been spared to be a witness to two other Revolutions, both glorious." This *Discourse* had the further distinction of provoking Burke's *Reflections on the Revolution in France*. But, famous as his political partisanship made him at the time, Price has a better title to be remembered for his first work, *A Review of the Principal Questions in Morals* (1757; 3rd edn, revised and enlarged, 1787).

Price has the mathematician's interest in intellectual concepts and his power of dealing with abstractions. In philosophy he is a successor of Cudworth and Clarke,

and the theories of knowledge of both Locke and Hume are attacked at the roots. The understanding or reason (he argues) has its own ideas, for which it does not depend upon sense-impression. Necessity, possibility, identity, cause are instances of such abstract ideas. They are " intelligible objects " discovered by " the eye of the mind." Reason is thus " the source of new ideas "; and among them are the ideas of right and wrong; these are simple ideas and perceived by an immediate " intuition " of the understanding: " morality is a branch of necessary truth." The system which Price bases on his view has become, more than any other, the type of modern intuitional ethics.

Joseph Priestley had many points of sympathy with Price. They belonged to the same profession—the unitarian ministry—and they were prominent on the same side in the revolutionary politics of the day. But, in spite of this similarity and of their personal friendship, they represent different attitudes of mind. Price was a mathematician, familiar with abstract ideas, and an intellectualist in philosophy. Priestley was a chemist, busied in experiments, a convinced disciple of the empirical philosophy, and a supporter of materialism. He was the author of *The History and present State of Electricity* (1767), and afterwards of numerous papers and treatises on chemical subjects, which recorded the results of his original investigations and have established his fame as a man of science. He came early under the influence of Hartley and published a simplification of his book—omitting the doctrine of vibrations and laying stress solely on the principle of the association of ideas; but he rejected Hartley's view of mind as an immaterial principle and held that the powers termed mental are the result " of such an organical structure as that of the brain." His philosophical views were expressed and defended in *Disquisitions relating to Matter and Spirit* (1777), in *The Doctrine of Philosophical Necessity* (1777), and in *A Free Discussion*

(1778) on these topics with Price; and he also published (1774) *An Examination* of the doctrines of Reid and others of the new school of Scottish philosophers. Of greater interest than these, however, is the short *Essay on the First Principles of Government* (1768). This forms a contrast to the *a priori* arguments in which Price delighted—although its practical tendency is the same. It propounds "one general idea," namely, "that all people live in society for their mutual advantage," and draws the conclusion that their happiness is "the great standard by which every thing relating to that state must finally be determined." Priestley thus set the example, which Bentham followed, of taking utilitarian considerations for the basis of a philosophical radicalism, instead of the dogmas about natural rights common with other revolutionary thinkers of the period. He did not anticipate Bentham in using the famous utilitarian formula (as he is often said to have done[1]), but he did precede him in taking the happiness of the majority as the test in every political question, and he made it easier for Bentham to use the same standard in judging private conduct.

In a somewhat similar way the exhaustive analyses of Tucker led to the theological utilitarianism of William Paley, archdeacon of Carlisle, sometime fellow of Christ's College, Cambridge, and senior wrangler in 1763. Paley was not a writer of marked originality. If, in his *Principles of Moral and Political Philosophy* (1785), he owed much to Tucker, in his *View of the Evidences of Christianity* (1794), he depended on the *Criterion* (1752) of John Douglas, bishop of Salisbury—a reply to Hume's argument against miracles—and on Nathaniel Lardner's *Credibility of the Gospel History* (1723—55), and, in his *Natural Theology* (1804), he drew much material from John Ray's *The Wisdom of God manifested in the Works of the Creation* (1691), from William Derham's *Physico-*

[1] See above, p. 162 n.

Theology (1713), and from the work of the Dutchman Nieuwentyt, which had been translated into English in 1730 as *The Religious Philosopher*. His *Horae Paulinae* (1790) is said to be the most original, and to have been the least successful, of his publications. These four books form a consistent system. Probably no English writer has ever excelled Paley in the power of marshalling arguments or in clearness of reasoning; and these merits gave some of his works a longer life as academic text-books than their other merits can justify. Paley was essentially a man of his time and his views were its views, though expressed with a skill which was all his own.

In his *Moral Philosophy* there is no trace of the vacillation at critical points which marks most of his empirical predecessors. The only criticism to which it lies open is that morality vanishes when reduced to a calculation of selfish interests. A man's own happiness is always his motive; he can seek the general happiness only when that way of acting is made for his own happiness also; and this can be done only by the rewards and punishments of a lawgiver. Locke distinguished three different sorts of law, and Paley followed him rather closely. But the law of honour is insufficient, as having little regard to the general happiness; and the law of the land is inadequate, for it omits many duties as not fit objects for compulsion and it permits many crimes because incapable of definition; there remains, therefore, only the law of Scripture (that is, of God) which alone is obviously sufficient. Hence the famous definition, " Virtue is the doing good to mankind, in obedience to the will of God, and for the sake of everlasting happiness."

This conclusion leads up to the argument of his later works. His *Horae Paulinae* and *Evidences* have to demonstrate the credibility of the New Testament writings and the truth of the Christian revelation; and this position assumes the existence of God which, in his *Natural Theology*, he proves from the marks of design in the universe

and, in particular, in the human body. In these works we see how complete is the shifting of interest to which reference has been previously made[1]. Attention is concentrated on the question of external evidences, and the content of religion is almost entirely overlooked. God is the superhuman watchmaker who has put the world-machine together with surprising skill, and intervenes miraculously, on rare occasions, when the works are getting out of order. Paley developed a familiar analogy with unequalled impressiveness; he should not be blamed for failing to anticipate the effect upon his argument which has been produced by the biological theory of natural selection; but he did not pause to examine the underlying assumptions of the analogy which he worked out; he had no taste for metaphysics; and his mind moved easily only within the range of the scientific ideas of his own day.

[1] See above, pp. 153 f.

CHAPTER X

THOMAS REID AND OTHERS

THE most powerful reply to Hume—indeed, the only competent attempt to refute his philosophy as a whole—came from one of a group of scholars in Aberdeen who had formed themselves into a philosophical society. Of this group Thomas Reid, a professor in King's College, was the most notable member, and he was the founder of the school of Scottish philosophy known as the Common Sense school. With him were associated George Campbell and James Beattie, professors (the former afterwards principal) in Marischal College, as well as other men of mark in their day. The earliest contribution to the controversy —Campbell's *Dissertation on Miracles* (1763)—dealt with a side issue; but it is of interest for its examination of the place of testimony in knowledge; whereas experience (it is argued) leads to general truths and is the foundation of philosophy, testimony is the foundation of history, and it is capable of giving absolute certainty. Campbell's later work, *The Philosophy of Rhetoric* (1776), contains much excellent psychology. Beattie's *Essay on the Nature and Immutability of Truth* (1770) is not a work of originality or of distinction; but it is a vigorous polemic; it brought him great temporary fame, and he has been immortalised by the art of Reynolds as serenely clasping his book whilst Hume and other apostles of error are being hurled into limbo. About the same time James Oswald, a Perthshire clergyman, published *An Appeal to Common Sense in behalf of Religion* (1766—72). Reid, Beattie, and Oswald were placed together by Priestley for the purpose of his *Examination*; and the same collocation of names was repeated by Kant; but it is entirely unjust to Reid.

Reid's *Inquiry into the Human Mind on the Principles of Common Sense* was published in 1764; in the same year he removed to Glasgow to fill the chair vacated by Adam Smith. His later and more elaborate works—*Essays on the Intellectual Powers of Man* and *Essays on the Active Powers of Man*—appeared in 1785 and 1788 respectively. In his philosophical work Reid has the great merit of going to the root of the matter, and he is perfectly fair-minded in his criticism. He admits the validity of Hume's reasonings; he does not appeal to the vulgar against his conclusions; but he follows the argument back to its premisses and tests the truth of these premisses. This is his chief claim to originality. He finds that the sceptical results of Hume are legitimate inferences from 'the ideal theory' which Locke took over from Descartes, and he puts to himself the question, "what evidence have I for this doctrine, that all the objects of my knowledge are ideas in my own mind?" He points out (what is undoubtedly true) that neither Locke nor Berkeley nor Hume produced any evidence for the assumption. They started with the view that the immediate object of knowledge is something in the mind called ideas or (as by Hume) impressions; and they were consequently unable to prove or defend the existence of anything outside the mind and even of mind itself, or to explain the relations required for any knowledge of things. "Ideas," says Reid, "seem to have something in their nature unfriendly to other existences."

'The ideal theory' had made two assumptions which were acknowledged and formulated by Hume[1]: (1) "that all our distinct perceptions [*i.e.*, impressions and ideas] are distinct existences"; and (2) "that the mind never perceives any real connexion among distinct existences." Hume found himself unable "to renounce either of them"; but Reid rejects them both. He maintains that 'the ideal system' went wrong at the outset by assuming

[1] See above, p. 179.

that bare ideas are primary data and that we must first get these and then proceed to make judgments about them. "Nature does not exhibit these elements separate, to be compounded by us." Not the simple idea, but judgment is the unit. "The simple apprehension [of the idea] is performed by resolving and analysing a natural and original judgment." This judgment, belief, or knowledge accompanies sensation, and it cannot be defined any more than sensation can[1]; but "every operation of the senses, in its very nature, implies judgment or belief as well as simple apprehensions[2]."

This criticism brings out the point that Locke and Hume have mistaken the results of their psychological analysis for primary data of experience, and have thus fallen into the unwarranted assumption that these results —the 'simple ideas' of Locke, the 'impressions' of Hume—are distinct existences. And there is another ambiguity in the use of the term 'idea' on which Reid lays stress. It may mean either the operation of the mind or the object of that operation[3]; and the two meanings are confused by Hume, as indeed his system does not allow of his distinguishing them. Now, it is the idea as object whose existence Reid calls in question. "The ideas," he says, "of whose existence I require the proof, are not the operations of any mind, but supposed objects of those operations[4]." And he denies the existence of any such "images of external things" in the mind.

Having got rid of the only existences which Hume allowed, Reid is able to re-assert the real existence of mind and external objects, which Hume denied. And it is not mere assertion. He reaches his position by means of a new analysis of relations. These are not got by comparing distinct ideas. "It is not by having first the notions of mind and sensation, and then comparing them together, that we perceive the one to have the relation of a subject

[1] Reid's *Works*, ed. Hamilton, p. 107 *a*.
[2] *Ibid.* p. 209 *a*. [3] *Ibid.* p. 224 *a*. [4] *Ibid.* p. 208 *b*.

or substratum, and the other that of an act or operation: on the contrary, one of the related things—to wit, sensation—suggests to us both the correlate and the relation[1]." In like manner, sensations suggest qualities existing in external things (without at all resembling these qualities)[2]. Sensation is different from the " perception of external objects," which it accompanies: regarded by itself, it is an act of mind which has no object distinct from the act[3]. The perception, on the other hand, is an act of knowledge whose object is the real external thing.

Hume had said that his difficulties would vanish if our perceptions [impressions or ideas] inhered in something simple and individual, or if the mind perceived some real connection among them. And the claim may be made for Reid that he proposed a positive theory of knowledge which gives the required assurance on these points. Reid pointed to certain principles in the constitution of experience, more fundamental than distinct ideas or impressions; but he did not give any thorough account of their nature or of the way in which they determine the structure of knowledge. His terminology is not happy, and his thought is not always clear. The word ' suggests,' for instance, is badly chosen, and to it is largely due the lack of clearness in his doctrine of immediate perception. He is aware of the ambiguity without effectively guarding against it. The word ' gold ' suggests a certain substance; " in like manner, a sensation of touch suggests hardness." But there is an important difference between the two ' suggestions ': " in the first, the suggestion is the effect of habit and custom; in the second it is not the effect of habit, but of the original constitution of our minds[4]." He uses the word ' suggestion ' for the latter process, he says, " because I know not one more proper to express a power of the mind, which seems entirely to have escaped the notice of philosophers, and to which we owe many of

[1] *Works*, p. 111 *a*.
[2] *Ibid.* p. 121 *b*.
[3] *Ibid.* p. 229.
[4] *Ibid.* p. 121 *b*.

our simple notions which are neither impressions nor ideas, as well as many original principles of belief[1]."

These principles are to be taken for granted, not because of their acceptance by the vulgar, but because " the constitution of our nature leads us to believe them "; and he calls them " the principles of common sense[2]." The term ' Common Sense ' (from which his philosophy has derived one of its names) has given rise also to serious misunderstandings, for which he is not entirely blameless. Perhaps he laid too great weight on the contention that " all men that have common understanding agree in such principles "—a contention which may favour the misleading appeal to general consent. Yet he reached these principles, not by appealing to general consent, but by an analysis of experience; and he puts them forward as " the foundation of all reasoning and of all science[3]." He did not give them systematic development; but, if we read him sympathetically, we may see that he had hold of a truth of fundamental importance. The isolated impressions or ideas with which Locke and Hume began are fictions; they do not correspond to anything real in experience. The simplest portion of our experience is not separate from its context in this way; it implies a reference to mind and to an objective order, and thus involves the relations which Reid ascribed to ' natural suggestion ' or ' common sense.'

The tradition of this type of philosophy—which has come to be known as the ' Scottish Philosophy '—was carried on in the next generation, and through the period of Bentham's supremacy, by Dugald Stewart. Stewart was born in 1753 and died in 1828; for twenty-five years (1785—1810) he was professor of moral philosophy at Edinburgh. His lectures were the most powerful formative influence upon the principles and tastes of a famous generation of literary Scotsmen, and they attracted besides many hearers from England, the continent, and

[1] *Works*, p. 111 *b*. [2] *Ibid.* p. 108 *b*. [3] *Ibid.* p. 230 *b*.

America. " Perhaps few men ever lived," said Sir James Mackintosh, one of his pupils, " who poured into the breasts of youth a more fervid and yet reasonable love of liberty, of truth, and of virtue... Without derogation from his writings, it may be said that his disciples were among his best works." His writings also were numerous. The first volume of his *Elements of the Philosophy of the Human Mind* appeared in 1792, the second in 1814, the third in 1827. His *Outlines of Moral Philosophy* was published in 1794, *Philosophical Essays* in 1810, a dissertation entitled *The Progress of Metaphysical, Ethical, and Political Philosophy since the Revival of Letters* (contributed to *The Encyclopaedia Britannica*) in 1815 and 1821, *The Philosophy of the Active and Moral Powers* in 1828; and accounts of the lives and writings of Adam Smith, Robertson, and Reid were contributed to the *Transactions* of the Royal Society of Edinburgh.

Himself, in his youth, a pupil of Reid, Stewart remained his follower in philosophy. But he avoided the use of the term ' common sense,' which, as employed by Reid, had produced the impression that questions of philosophy could be decided by an appeal to popular judgment. He speaks, instead, of " the fundamental laws of human belief, or the primary elements of human reason"; and these he regards not as the data upon which conclusions depend, but rather " as the vincula which give coherence to all the particular links of the chain, or (to vary the metaphor) as component elements without which the faculty of reasoning is inconceivable and impossible." He differed from Reid also on many special points, often approximating to the positions of writers of the empirical school; but, according to Mackintosh, he " employed more skill in contriving, and more care in concealing, his very important reforms of Reid's doctrines, than others exert to maintain their claims to originality." His works often betray their origin in the lecture-room, and are full of quotations from, and criticisms of, other authors. They

are written in a style which is clear and often eloquent, without ever being affected; but the exposition and criticism are devoted to those aspects of philosophical controversy which were prominent in his own day, and they have thus lost interest for a later generation. Nor did he show any such profundity of thought, or even distinction of style, as might have saved his work from comparative neglect. Among his numerous writings there is no single work of short compass which conveys his essential contribution to the progress of thought.

A position intermediate between the associationism of Mill and the traditional doctrines of the Scottish school was taken by Thomas Brown, professor of moral philosophy at Edinburgh from 1810 till his death in 1820. By the time he was twenty years of age Brown had published *Observations on the Zoonomia of Erasmus Darwin* (1798), which was recognised as a mature criticism of that work. Seven years afterwards, in 1805, an ecclesiastico-academical controversy drew from him a small volume entitled *Observations on the Nature and Tendency of the Doctrine of Mr Hume concerning the Relation of Cause and Effect*, of which a second enlarged edition was published in 1806, and a third edition, further enlarged and modified in arrangement and title, in 1817. In this book he maintained the view that causation means simply uniform antecedence, " to whatever objects, material or spiritual, the words may be applied "; but he held also that there was an intuitive or instinctive belief that, " when the previous circumstances in any case are exactly the same, the resulting circumstances also will be the same."

Brown's work on causation certainly showed him to be possessed of an intellect of penetrating philosophical quality; and it may be noted that, in his preface to the second edition of it, he already laid down two principles which distinguished his subsequent writing. One was that the ' philosophy of mind ' is to be considered as a

science of analysis; the other was the implicit rejection of the doctrine of mental faculties as it had figured in previous academic philosophies. Functions such as memory or comparison, he says, are merely names for the resemblances among classes of mental facts. In his *Lectures on the Philosophy of the Human Mind* (1820), published after his death, these principles were applied to the details of perception and cognition. He made the important distinction between the muscular sense and touch proper, resolved knowledge of extension into a succession of muscular sensations, and knowledge of the external world into a number of constituent sensations, but held, nevertheless, to the real existence of the physical object, on the ground that it was implied in the intuitive belief in causality. In these doctrines, and in his analysis of 'relative suggestion,' he made contributions to psychology which were largely original, although he was considerably indebted to De Tracy[1] and other predecessors. The eloquence of his style, as well as the subtlety of his analyses, made his lectures famous during his lifetime and, in their printed form, for many years after his death. They were written hastily, each lecture to meet the demand of the following day, and they are too ornate in style for scientific purposes. The shortness of the author's life, and his own unfortunate preference for his poetical works over his philosophical, prevented a thorough revision of what he had written or a consistent and adequate development of his views.

[1] *Eléments d'idéologie*, 1801–15.

CHAPTER XI

BENTHAM AND THE UTILITARIANS

JEREMY BENTHAM is famous as the leader of a school of thought and practice which is known sometimes as utilitarianism, sometimes as philosophical radicalism. Before his day the philosophical school was not a characteristic feature of English speculation. The greater writers influenced the course of ideas without transmitting a definite body of doctrines to a definite group of followers. Bacon proclaimed a philosophical revolution; but he sought in vain for assistants and collaborators, and the details of his theory were commonly ignored. Hobbes formulated a compact system, but he had no disciples. Locke struck out a new way which many followed to conclusions often very different from his own Berkeley never lost courage, but he could not open other eyes to his own vision, and the verdict of the day upon his speculations seems to be not unfairly represented by Hume's statement that his arguments " admit of no answer and produce no conviction[1]." For his own sceptical results Hume himself seemed to desire applause rather than converts. The works of these writers never led to a combination for the defence and elucidation of a creed—to any philosophical school which can be compared with Peripateticism, Stoicism, or Epicureanism in ancient Greece or with the Cartesian, Kantian, or Hegelian schools in modern thought. The nearest approach to such a phenomenon was of the nature of a revival—the new Platonic movement of the seventeenth century, associated with the names of Cudworth, Henry More, and other Cambridge scholars. In this way

[1] *Enquiry concerning Human Understanding*, sect. xii, pt. i, ed. Selby-Bigge, p. 155; *Essays*, ed. Green and Grose, II, p. 127.

the utilitarian group presents an appearance unknown before in English philosophy—a simple set of doctrines held in common, with various fields assigned for their application, and a band of zealous workers, labouring for the same end and united in reverence for their master.

Jeremy Bentham was born in 1748 and died in 1832, when his fame was at its height and his party was on the eve of a great triumph[1]. He was a prodigy from his childhood; he read history and French, Latin, and Greek, when other boys of his years were feeding their imaginations with fairy tales; at the tender age of thirteen his religious sensibilities were hurt and theological doubts raised in his mind when he was required to sign the thirty-nine articles on matriculating at Queen's College, Oxford; he submitted, however, completed his course there, and afterwards duly entered upon the study of law in London. His father had marked his abilities and expected them to raise him to the woolsack; he had several causes 'at nurse' for him before he was called to the bar; and, when Jeremy neglected the practical for the theoretical side of his profession, the father said in his grief that the boy would never be anything more than "the obscure son of an obscure attorney." But he made life easy for his son financially, and had some compensation for the disappointment of his ambition in the reputation made by Jeremy's first book, *A Fragment on Government*, which was published anonymously in 1776, and which the public voice ascribed to one or another of several great men, including Burke and Mansfield.

Bentham spent almost his whole life in London or its neighbourhood or at his house in the country; but, for over two years, 1785—88, he made an extended tour in the east of Europe and paid a long visit to his younger brother Samuel, who held an important industrial appointment at Kritchev in Russia. There he wrote his *Defence*

[1] He died on 6 June, the day before the royal assent was given to the Reform Bill.

of Usury (published 1787). There also, from his brother's method of inspecting his work-people, he derived the plan of his 'panopticon'—a scheme for prison management, which was to dispense with Botany Bay. On this scheme he laboured for five and twenty years; the government played with it and finally rejected it, giving him a large sum by way of compensation for the still larger sums which he had expended on its advocacy; but the failure of this attempt to influence administration left its mark on his attitude to the English system of government.

After his return from Russia, Bentham published, in 1789, the work which, more than any other, gives him a place among philosophers—*An Introduction to the Principles of Morals and Legislation*. It had been printed nine years earlier, and only the urgency of his friends (who disliked his being anticipated by Paley) induced him to make it public. As an author Bentham was singularly careless about publication and as to the form in which his writings appeared. He worked assiduously, in accordance with a plan which he formed early in life; he passed from point to point methodically; each day he produced a number of pages of manuscript, indicated their place in his scheme, and then put them aside and never looked at them again. A doubtful proposition would lead him to turn to a new line of enquiry, which might mean a new book. According to one of the friends of his early years, he was "always running from a good scheme to a better. In the meantime life passes away and nothing is completed." This method of working had its effect upon his style. His early writings were clear and terse and pointed, though without any attempt at elegance. Afterwards he seemed to care only to avoid ambiguity, and came to imitate the formalism of a legal document. He was overfond also of introducing new words into the language; and few of his inventions have had the success of the term "international," which was used for the first time in the preface to his *Introduction to the Principles of Morals and Legislation*.

It was fortunate for Bentham's reputation that he soon came to be surrounded by a group of devoted friends, who were convinced of the value of his ideas and eager to help in making them known. And he was content to leave in their hands the selection, revision, and publication of his more important manuscripts. His first work had brought him to the notice of Lord Shelburne (afterwards first Marquis of Lansdowne), at whose house he met a number of the statesmen and political thinkers of the day. There also he met Étienne Dumont, who afterwards gave literary form to the principles of legislation and administration which Bentham elaborated. Dumont was a citizen of Geneva, and had been minister of one of its churches; driven from his native town by political troubles, he settled for some time in St Petersburg, and in 1785 came to London as tutor to Lansdowne's son; in 1788, and again in 1789, he visited Paris and was in close relations, literary and political, with Mirabeau. On the earlier of these visits he was accompanied by Sir Samuel Romilly, with whom he had become intimate and who was already known to Bentham; Romilly showed him some of Bentham's manuscripts, written in French, and Dumont became an enthusiastic disciple and one of the chief agents in spreading the master's ideas. With Bentham's manuscripts and published work before him, and with opportunities for conversation with the author, he produced a series of works which made the new jurisprudence and political theory known in the world of letters. He translated, condensed, and even supplied omissions, giving his style to the whole; but he did not seek to do more than put Bentham's writings into literary form, and, in Bentham's collected *Works*, published after his death, many of the most important treatises are retranslations into English from Dumont's versions. The first of Dumont's treatises appeared in 1802, the last in 1825. It is stated that, by 1830, forty thousand copies of these treatises had been sold in Paris for the South American trade alone.

Other helpers surrounded Bentham during his long life; but his acquaintance with James Mill, which began in 1808, led, for the first time, to the association of a master-mind with his own in pursuit of common objects. Mill was less of a jurist than Bentham, but more of a philosopher, and better equipped for the defence of their fundamental principles on psychological and general grounds. He was also a man of affairs, familiar with practical business and accustomed to deal with other men, and his influence counted for much in making philosophical radicalism an effective political force. Bentham was a recluse occupied with ideas and projects, infinitely patient in elaborating them on paper, and convinced that they would be carried into effect so soon as he had demonstrated their value. The men who sought him out regarded him as a sage, hung upon his lips, and approved his doctrines; and he expected other men, especially political leaders, to be equally rational. During the first half of his career he was not a democrat in politics; but the failure of his scheme for a panopticon, which he regarded as an administrative reform of the first importance, and in the advocacy of which he had incurred lavish expenditure, gave him a new—if also somewhat perverted—insight into the motives of party politicians, and led to a distrust of the governing classes. His mind was thus fitted to receive a powerful stimulus from James Mill, a stern and unbending democrat—too stern sometimes for Bentham, who once let drop the caustic phrase that Mill's creed resulted "less from love to the many than from hatred of the few[1]."

Up to this time the utilitarian philosophy had not met with great success as an instrument of political propagandism; it had failed adequately to influence the old political parties; an organisation of its own was needed with a programme, an organ in the press, and representatives in parliament. The new party came to be known

[1] See Bentham's *Works*, ed. Bowring, x, p. 450.

as philosophical radicals. Their organ was *The Westminster Review*, founded by Bentham in 1824; their programme laid stress on the necessity for constitutional reform before legislative and administrative improvements could be expected; and a number of eminent politicians became the spokesmen of the party in parliament. It is not possible to assign to the philosophical radicals their exact share in bringing about the changes which gradually ensued; many other influences were working in the same direction. Their power was not due to their numbers, but to the great ability of many members of the group and to the clear and definite policy which they advocated. Bentham was the head of this party; but perhaps it is not too much to say that James Mill was its leading spirit. Mill also joined with others in giving literary assistance to Bentham; he edited, with modifications of his own, *A Table of the Springs of Action* (1817); he prepared, from the author's manuscripts, an *Introductory view of the Rationale of Evidence* (printed, in part, in 1812, and published in the *Works*); and his brilliant son, John Stuart Mill, then just out of his 'teens, edited *The Rationale of Evidence* in five volumes[1] (1827). Another prominent assistant was John Bowring, who was the first editor of *The Westminster Review*, wrote from the author's dictation the *Deontology* (a work whose accuracy, as an expression of Bentham's mind, was impugned by the Mills), and became Bentham's biographer and editor of his collected *Works*.

Bentham's *Fragment on Government* is the first attempt to apply the principle of utility in a systematic and methodical manner to the theory of government; it takes the form of "a comment on the *Commentaries*"—a detailed criticism of the doctrine on the same subject which had been set forth in Blackstone's famous work. Sir William Blackstone was born in 1723; he practised at the bar, lectured on the laws of England at Oxford, and in 1758

[1] Reprinted in Bentham's *Works*, vols. VI and VII.

was appointed to the newly-founded Vinerian professorship of law; in 1770 he was made a judge, first of the court of king's bench, afterwards of the court of common pleas; he died in 1780. He edited the Great Charter and was the author of a number of *Law Tracts* (collected and republished under this title in 1762); but his fame rests upon his *Commentaries on the Laws of England*, the first volume of which appeared in 1765 and the fourth and last in 1769. It is a work of many conspicuous merits. In it the vast mass of details which makes up the common and statute law is brought together and presented as an organic structure; the meaning of each provision is emphasised, and the relation of the parts illustrated: so that the whole body of law appears as a living thing, animated by purpose and a triumph of reason. The style of the book is clear, dignified, and eloquent. Bentham, who had heard Blackstone's lectures at Oxford, says that he, " first of all institutional writers, has taught jurisprudence to speak the language of the scholar and the gentleman." These merits, however, were accompanied by defects, less obvious to the general reader. The author was more prone to see similarities than differences. His analytical power has been praised; but it was inadequate to the conceptions with which he had to deal. His treatment of natural law, in the second section of the introduction, is a case in point; another instance is the discussion of society and the original contract which Bentham criticises. His emphasis on meaning and purpose adds interest to his exposition, and shows insight into the truth that law is not a haphazard collection of injunctions and prohibitions; but this conception also leads him astray; he does not distinguish clearly enough historical causes from logical grounds; his exposition takes on the character of an encomium; and he is too apt to discover, at every point of the English constitution, " a direction which constitutes the true line of the liberty and happiness of the community[1]."

[1] Blackstone, *Commentaries* (ed. 1836), I, p. 135.

In the preface to his *Fragment* Bentham offers a criticism of the *Commentaries* in general; but the body of his work is restricted to an examination of a few pages, of the nature of a digression, which set forth a theory of government. In these pages Blackstone gave a superficial summary of the nature and grounds of authority, in which the leading conceptions of political theory were used with more than customary vagueness. Bentham finds the doctrine worse than false; he finds it unmeaning. He wishes " to do something to instruct, but more to undeceive, the timid and admiring student, . . to help him to emancipate his judgment from the shackles of authority." He insists upon a precise meaning for each statement and each term; and, while he reduces Blackstone's doctrine to ruins, he succeeds, at the same time, in conveying at least the outline of a definite and intelligible theory of government. There are two striking characteristics in the book which are significant for all Bentham's work. One of these is the constant appeal to fact and the war against fictions; the other is the standard which he employs—the principle of utility. And these two are connected in his mind: " the footing on which this principle rests every dispute, is that of matter of fact." Utility is matter of fact, at least, of " future fact—the probability of certain future contingencies." Were debate about laws and government reduced to terms of utility, men would either come to an agreement or they would " see clearly and explicitly the point on which the disagreement turned." " All else," says Bentham, " is but womanish scolding and childish altercation, which is sure to irritate and which never can persuade."

In an interesting footnote Bentham gives an account of the way in which he arrived at this principle. Many causes, he tells us, had combined to enlist his " infant affections on the side of despotism." When he proceeded to study law, he found an " original contract " appealed to " for reconciling the accidental necessity of resistance

with the general duty of submission." But his intellect revolted at the fiction. " ' To prove fiction, indeed,' said I, ' there is need of fiction; but it is the characteristic of truth to need no proof but truth.'. . Thus continued I unsatisfying, and unsatisfied, till I learnt to see that *utility* was the test and measure of all virtue; of loyalty as much as any; and that the obligation to minister to general happiness, was an obligation paramount to and inclusive of every other. Having thus got the instruction I stood in need of, I sat down to make my profit of it. I bid adieu to the original contract: and I left it to those to amuse themselves with this rattle, who could think they needed it." It was from the third volume of Hume's *Treatise of Human Nature* that the instruction came. " I well remember," he says, " no sooner had I read that part of the work which touches on this subject than I felt as if scales had fallen from my eyes. I then, for the first time, learnt to call the cause of the people the cause of Virtue. . . That the foundations of all *virtue* are laid in *utility*, is there demonstrated, after a few exceptions made, with the strongest evidence: but I see not, any more than Helvétius saw, what need there was for the exceptions."

Hume's metaphysics had little meaning for Bentham, but it is interesting to note that his moral doctrine had this direct influence upon the new theory of jurisprudence and politics. Hume was content with showing that utility, or tendency to pleasure, was a mark of all the virtues; he did not go on to assert that things were good or evil according to the amounts of pleasure or pain that they entailed. This quantitative utilitarianism is adopted by Bentham from the start. In the preface to the *Fragment*, the " fundamental axiom," whose consequences are to be developed with method and precision, is stated in the words, " it is the greatest happiness of the greatest number that is the measure of right and wrong." Half a century earlier, Hutcheson had formulated this ' axiom ' almost

in the same words; but Bentham does not seem to have been influenced directly by him. Helvétius, whom he had studied closely, comes very near the same doctrine[1], and Priestley had preceded Bentham in using a similar standard in political reasoning. Priestley is not mentioned in this place, though the preface begins with a reference to his scientific discoveries, and Bentham has elsewhere recorded his youthful enthusiasm for his writings. He even says that he had found the phrase "greatest happiness of the greatest number" in one of Priestley's pamphlets; but in this his memory must have deceived him, for the phrase does not seem to have been used by Priestley. So far as Bentham was concerned, its origin (as he in one place suggests) must be traced to Beccaria[2], the Italian jurist whose work on the penal law proceeded on the same principles as Bentham's and had a notable effect upon the latter. Beccaria's book on *Crimes and Punishments* was translated into English in 1767, and, in this translation, the principle of utility is expressed in the exact words in which, through Bentham's influence, it soon became both an ethical formula and a party watchword. Bentham himself used the word "utilitarian" as early as 1781, and he asserted that it was the only name for his creed[3]; but, in later life, he came to prefer the alternative phrase "greatest happiness principle." "The word *utility*," he said, in a note written in July 1822[4], "does not so clearly point to the ideas of *pleasure* and *pain* as the words *happiness* and *felicity* do: nor does it lead us to the consideration of the *number* of the interests affected." A few months after the latter date, the term "utilitarian" was revived by John Stuart Mill[5], who seems to have been unaware that it had been previously

[1] "La justice consiste...dans la pratique des actions utiles au plus grand nombre."—*De l'Esprit* (1758), discours II, chap. 24.

[2] See above, p. 162 n.

[3] *Works*, vol. X, pp. 92, 392.

[4] *Principles of Morals and Legislation*, ed. 1879, p. 1 n.

[5] *Autobiography*, pp. 79, 80; *Utilitarianism*, p. 9 n.

employed and afterwards discarded by Bentham; he found the word in Galt's *Annals of the Parish*, where it is used in describing some of the revolutionary parties of the early nineties of the preceding century; and, "with a boy's fondness for a name and a banner," he adopted it as a "sectarian appellation." After this time, "utilitarian" and "utilitarianism" came into common use to designate a party and a creed.

The evidence goes to show that the "greatest happiness principle," or principle of utility, was arrived at by Bentham, in the first instance, as a criterion for legislation and administration and not for individual conduct—as a political, rather than an ethical, principle. His concern was with politics; the sections of Hume's *Treatise* which chiefly influenced him were those on justice; Beccaria wrote on the penal law; and it was expressly as a political principle that Priestley made use of "the happiness of the members, that is the majority of the members, of any state," as his standard. The point is important, seeing that, from the time of Locke, the action of every individual had been commonly interpreted as determined by his own pleasure and pain. It is difficult to reconcile this interpretation (which Bentham accepted) with an ethical theory which makes the greatest happiness of all the end for each. But the same difficulty does not arise when the point of view is shifted from the individual to the state. Indeed, an analogical argument will now be open: since each person is concerned with his own greatest happiness, the end for the community may be taken to be the greatest happiness of the greatest number. And, when the "greatest happiness of the greatest number" has been accepted in this way, it is easy—though it is not logical—to adopt it as not merely a political, but also in the strict sense an ethical, principle.

It is to his *Introduction to the Principles of Morals and Legislation* that we must look for Bentham's fullest and clearest account of the underlying principles, psycholo-

gical and ethical, of his enterprise. The interests of the individual do not always agree with the interests of the community; and this divergence sets the problem for penal law. Again, the rule of right is one question, and the causes of action is another question; and it is important not to confuse the ethical with the psychological problem. This distinction is made, and ignored, in the arresting paragraph that opens the work: "Nature has placed mankind under the governance of two sovereign masters, *pain* and *pleasure*. It is for them alone to point out what we ought to do, as well as to determine what we shall do. On the one hand the standard of right and wrong, on the other the chain of causes and effects, are fastened to their throne. They govern us in all we do, in all we say, in all we think: every effort we can make to throw off our subjection will serve but to demonstrate and confirm it. In words a man may pretend to abjure their empire: but in reality he will remain subject to it all the while. The *principle of utility* recognises this subjection, and assumes it for the foundation of that system, the object of which is to rear the fabric of felicity by the hands of reason and of law. Systems which attempt to question it, deal in sounds instead of sense, in caprice instead of reason, in darkness instead of light."

These sentences give the gist of Bentham's simple philosophy. Everything rests upon pleasure and pain. They are, in the first place, the causes of all human actions. Man is a pleasure-seeking, pain-avoiding animal. It is true, he has many different impulses, springs of action, or motives; and of these the author essays some account in this book; and, in *A Table of the Springs of Action*, he comprehends them all in a diagram with their sources and their corresponding interests. But the strength of each impulse or motive lies entirely in the pleasure or pain connected with it; and there are only quantitative differences among pleasures themselves, or among pains themselves; and pains can be compared with pleasures,

and marked on the same scale by their distance below the indifference or zero point where there is neither pleasure nor pain. To this theory a later writer[1] has given the name 'psychological hedonism.' It still counts many psychologists among its adherents, but Bentham held it in a special form which hardly admits of defence. It is not the actual pleasure or pain experienced at the moment of action which, according to him, determines action, but the estimate formed by the agent of the probable balance of pleasure that is likely to result to him from the action. The cause, as well as the standard, of human action is thus matter of 'future fact' only. Had this phrase been used by Blackstone, Bentham might have pointed out that, so long as anything is future, it is not a fact but only an expectation of a fact; it is an estimate of probabilities. Not pleasure, therefore, but an idea of pleasure, is the actual motive. Although he thinks that pleasure is man's only object, Bentham always treats him as pursuing this object in a deliberate and intelligent way under the guidance of ideas or opinions; he commits the philosopher's fallacy of substituting a reason for a cause; he overlooks the fact that man was an active being before he was a rational being, that he is a creature of impulses, inherited and acquired, that it is only gradually that these impulses come to be organised and directed by reason, and that this rationalising process is never completed.

Bentham's views on this point lend emphasis to the importance of his hedonic calculus. If men are always guided by estimates of pleasures and pains, these estimates should be rendered as exact as possible. For this purpose Bentham analyses the circumstances that have to be taken into account in estimating the 'force' or 'value' (notions which, for him, are identical) of pleasures and pains. A pleasure or pain, he says, taken by itself, will vary in the four circumstances of intensity, duration, certainty, and

[1] Sidgwick, *Methods of Ethics*, book I, chap. iv.

propinquity[1]. If we consider its effects, we must take into account two other circumstances: its fecundity, or the chance of its being followed by other feelings of the same kind; and its purity, or the chance of its not being followed by feelings of an opposite kind. If more than one person is concerned, then account must also be taken of the number of persons, that is, the extent of the pleasure or pain. It we would estimate the benefit to a community of any particular action, then each person affected by it must be considered separately; each distinguishable pleasure caused by the action must have its value for him calculated in accordance with the six circumstances first mentioned; and each distinguishable pain must have its value calculated in the same way. When this has been done for every person affected, and the sum of all the pains subtracted from the sum of all the pleasures, then the surplus of pleasure will measure the good tendency of the act; or, if the pains exceed the pleasures in total amount, then the balance of pain will measure the evil tendency of the act.

This may seem an elaborate calculation, but it gives only a faint idea of the minute detail into which Bentham pursued an estimate of good or evil. The significant feature of his method is that it is quantitative. The same method had been suggested by Hutcheson and others before him; his contemporary Paley used it to some extent; but Bentham was the first to follow it out into all its ramifications by an exhaustive enumeration and classification of every conceivable consequence. His aim was to make morals and legislation as precise and certain as the physical sciences. For this purpose, he saw that quantitative propositions were necessary. He did not stop to enquire

[1] Sidgwick points out that, on a rational estimate, propinquity in time (apart from the greater certainty which it implies) is not an independent ground of value. Bentham follows Beccaria in introducing it; but Beccaria had a different question in view in his enquiry, namely, the actual deterrent effect of an immediate, as compared with a remote, punishment.

whether quantity was applicable at all to pleasure and pain; he assumed that it was; and perhaps the assumption was correct. Neither did he seek too curiously for a standard of measurement of these quantities, such as every physical science possesses for its purposes. Even in the exact observations which instruments of precision render possible in the physical sciences, allowance has to be made for the personal equation of the observer. But Bentham almost disregarded the personal equation, even in matters of feeling. He did not adequately allow for the difference of individual susceptibilities, or for the degree in which they change in a single lifetime and in the history of the race; nor did he avoid the fallacy of arguing as if one man's pleasure were always a safe guide for another. Just as he assumed that men were constantly controlled by intellectual considerations, so here he also assumes that men are much more alike than they really are: and the two assumptions account for many of the weaknesses, and even absurdities, of his projects.

Later utilitarians have avoided some of these difficulties by laying stress on the importance, in personal and social life, of the permanent objects which are sources of pleasure, rather than upon particular pleasant experiences. Bentham himself, in another work[1], follows similar lines in enumerating four subordinate ends on which the happiness of society depends. These are subsistence, abundance, equality, and security. Subsistence and security are the most important of the four: "without security equality could not last a day; without subsistence abundance could not exist at all." With subsistence and abundance, law has little or no direct concern: "You may order production; you may command cultivation; and you will have done nothing. But assure to the cultivator the fruits of his industry, and perhaps in that alone you will have done enough." Bentham's treatment of equality is remarkable for certain "pathological propositions" (as he calls them)

[1] *Theory of Legislation*, trans. Hildreth, 1876, pp. 96 ff.

which he lays down regarding the effect of wealth upon happiness. But the chief care of law is security; and the principle of security extends to the maintenance of all those expectations which law itself has created. Security, one may say, is a necessity for social life and for any moderate degree of human happiness; equality is rather of the nature of a luxury, which legislation should promote when it does not interfere with security. As for liberty, it is not one of the principal objects of law, but a branch of security, and a branch which law cannot help pruning. Rights of any kind, especially rights of property, can be created or maintained only by restricting liberty; "in particular all laws creative of liberty are, as far as they go, abrogative of liberty."

These suggestions point to a better way of estimating value than the enumeration of separate pleasures and pains. But the latter is Bentham's prevailing method; and he brings into clear light a point which, on any theory such as his, should not be obscured—the difference between the greatest happiness of an individual and the greatest happiness of the greatest number. Even Bentham hesitates, both in his earlier and in his later writings, to assert that it is each man's duty to promote the happiness of all. How indeed can it be so, in Bentham's view, unless there is sufficient motive to require such conduct? He says that a man is never without motives to act in this direction: he has the social motive of sympathy and the semi-social motive of love of reputation. But a man may have, and commonly has, motives which tend in a different direction and may render those insufficient or powerless. The divergence may be read between the lines of the halting sentences in which Bentham speaks of the coincidences between private ethics and legislation. There is no mental fusion between the two classes of motives (the selfish and the social); there is no natural identity between the courses of conduct to which they tend; the identification of self-interest with public interest can only be brought

about artificially[1] by means of superadded pleasures and pains, especially the latter. These are the sanctions of the principle of utility, which Bentham reduces to four: the physical, the political, the moral (or popular), and the religious. The physical sanction results from natural law, and is exemplified by the headache that follows intemperance: it sanctions prudence, but not benevolence. The popular sanction results from the illwill of society in any of its non-political expressions; it is often a powerful deterrent, but it is apt to be variable and inconsistent, and it has no exact correspondence with public interest. On the religious sanction Bentham does not rely. There remains the political sanction, the rewards and punishments employed by society organised as a state. But rewards count for little. The whole weight of the doctrine that general happiness is the rule of right and wrong for individual conduct thus rests upon the penal law; it is the "duty-and-interest-junction-prescribing principle." And this principle also is found to be imperfect. Even when punishment is neither groundless nor needless, there are cases in which it would be inefficacious, and others in which it would be unprofitable—by causing more unhappiness than it would avert. In general, it can compel probity but it cannot compel beneficence. Thus the doctrine of sanctions fails to establish the thesis of utilitarianism that general happiness is the ethical standard. And the failure is not covered by the retort: "if the thunders of the law prove impotent, the whispers of simple morality can have but little influence."

In the preface to his *Principles of Morals and Legislation* Bentham gave a list of the works which he had in preparation or contemplation and in which his great design would be completed. According to this list works were

[1] These terms—fusion of interests, natural identity of interests, artificial identification of interests—describe different solutions of the same problem and have been introduced by Halévy, *Formation du radicalisme philosophique*, I, pp. 15 ff.

to be written on the principles of legislation in the following nine matters: civil law; penal law; procedure; reward; constitutional law; political tactics (that is, rules for the direction of political assemblies so that they may attain the end of their institution); international law; finance; political economy; and these were to be followed by a tenth treatise, giving a complete plan of law in all its branches, in respect of its form, including all that properly belongs to the topic of universal jurisprudence. In the course of his life he dealt with all these subjects, as well as with many others, in separate works. In the more important and complete of his works he depended on the literary assistance of Dumont and others. But the ideas and the method were always his own. For the exposure of the anomalies of English law, and for the elaboration of a rational and businesslike system to serve as a model for its reform, he deserves almost the sole credit.

Bentham's power was derived from the combination in his mind of two qualities—the firm grasp of a single principle, and a truly astonishing mastery of details. Every concrete situation was analysed into its elements and these followed out into all their ramifications. The method of division and subdivision was artificial; but it tended to clearness and exhaustiveness, and it could be applied to any subject. Whatever did not yield to this analysis was dismissed as "vague generality." Applying this method with infinite patience, he covered the whole field of ethics, jurisprudence, and politics. Everything in human nature and in society was reduced to its elements, and then reconstructed out of these elements. And in each element only one feature counted, whether in respect of force or of value—its quantum of pleasure or pain. The whole system would have been upset if an independent qualitative distinction between pleasures had been allowed, such as Plato contended for, or John Stuart Mill afterwards attempted to introduce into utilitarianism. "Quantity of pleasure being equal," says Bentham, "pushpin is as good

as poetry." As regards the principle itself there was no opportunity for originality: Hume had suggested its importance to his mind; Priestley had shown its use in political reasoning; he picked up the formula from Beccaria; and in his exposition of its nature there is perhaps nothing that had not been stated already by Helvétius. But the relentless consistency and thoroughness with which he applied it had never been anticipated; and this made him the founder of a new and powerful school.

His method was not that most characteristic of the revolutionary thought of the period. The ideas of the revolution centred in certain abstract conceptions. Equality and freedom were held to be natural rights of which men had been robbed by governments, and the purpose of the revolutionists was to regain and realise those rights. This mode of thought was represented in England by Richard Price; through Rousseau it came to dominate the popular consciousness; in the American Declaration of Independence of 1776 it was made the foundation of a democratic reconstruction of government. The year 1776 is of note in literary history also. It marks the death of Hume, and the publication of *The Wealth of Nations*, of the first volume of Gibbon's *Decline and Fall*, and of Bentham's *Fragment on Government*. The last-named work preaches a radical reform, but without appealing to natural or abstract rights. Although he was an admirer of the American constitution, Bentham was never deceived by the crude 'metapolitics' (to use Coleridge's word) of the Declaration of Independence, or by the same doctrine as it was expounded at greater length in the "Declaration of the Rights of Man and the Citizen," decreed in the French Constituent Assembly of 1791. His *Anarchical Fallacies*, written about this time, is a masterly exposure of the crudities and confusions of the latter document. All rights, in his view, are the creation of law; "*natural rights*

is simple nonsense: natural and imprescriptible rights, rhetorical nonsense—nonsense upon stilts." Yet the difference between Bentham's theory and that of continental and American revolutionists was not immediately obvious. He was in correspondence with some of the leaders of the revolution, recommended his panopticon scheme for adoption in France, and offered himself as chief gaoler; in 1792 he was made a citizen of France. Nevertheless his *Anarchical Fallacies* made his position clear: and it is owing to him that philosophical radicalism in England, unlike the corresponding revolutionary doctrines in other countries, was based upon an empirical utilitarianism and not upon *a priori* ideas about natural rights. A comparison of his argument in *Anarchical Fallacies* with his criticism of our "matchless constitution" in *The Book of Fallacies* (1824) shows that he was a foe to all kinds of loose thinking, whether in praise of revolutionary ideals or in the interests of the established order.

The *Constitutional Code*, which Bentham published towards the end of his life, exhibits an endeavour to give to the people concerned the fullest possible control over the acts of government. The author had become increasingly impressed by the extent to which "sinister interests," especially the personal and class interests of the rulers, interfered with public interest; and he seeks to check their operation at every turn. His work is intended "for the use of all nations and all governments professing liberal opinions." Some years earlier he had published *Codification Proposals*, offering his services in the matter to any nation that wanted them. Portugal had already applied to him for assistance. He had negotiations of a similar, if less official, kind with Spain, Mexico, Venezuela, the United States, Russia, Greece, and Tripoli. The world seemed to be at his feet, anxious to learn from him the arts of law and government; and he was willing to instruct all comers. He sometimes overlooked, but he did not entirely disregard, differences of national character and

historical conditions. In his essay on *The Influence of Time and Place in Matters of Legislation* he attributes immutability to the grounds of law rather than to the laws themselves, and rebukes as "hot-headed innovators" those legislators who "only pay attention to abstract advantage."

Bentham's genius was comprehensive and tenacious rather than profound. He covered an extensive field, always following the same clue. He passed from social science to religion, and analysed its influence "upon the temporal happiness of mankind," part of his work being edited by a disciple, George Grote, and published under a pseudonym (1822). He wrote also a number of papers on education under the title *Chrestomathia* (1816); and he and his friends projected a chrestomathic school in which the youth of the middle and upper classes were to be trained in correct utilitarian principles. Thus he dealt in a way with the deeper things of life, and yet only with the surface-aspect of these things. With forces and values that cannot be measured in terms of pleasure or pain he had no concern; into history, art, and religion he had little insight; but he was unconscious of his limitations, and he attempted to deal with these things by his own scale of values.

On the ground of his general principles Thomas Robert Malthus may be counted among the utilitarians; but he was a follower of Tucker and Paley rather than of Bentham. He did not share Bentham's estimate of the intellectual factor in conduct, and the exaggeration of this estimate in other thinkers of the time was the indirect cause of his famous work. Hume had spoken of reason as the slave of the passions; but William Godwin wrote as if men were compact of pure intellect. He too was a utilitarian, in the sense that he took happiness as the end of conduct; but he was under the sway of the revolutionary idea; he put down all human ills to government,

regarding it as an unnecessary evil, and thought that, with its abolition, man's reason would have free play and the race would advance rapidly towards perfection. It was this doctrine of the perfectibility of man that gave Malthus pause. His criticism of the doctrine was first thrown out in conversation with his father. The elder Malthus, a friend and executor of Rousseau, expressed approval of the idea of human perfectibility set forth in 1793 in Godwin's *Political Justice* and in Condorcet's *Esquisse d'un tableau historique des progrès de l'esprit humain*. Robert Malthus took a more sombre view of things than his father; he had had a scientific education; and, as a clergyman, he knew something of the life of the people; above all, he was of the new generation, and the dreams of an earlier day did not blind him to existing facts. He saw an obstacle in the way of all Utopias. Even if equality and happiness were once attained, they could not last; population would soon expand beyond the means of subsistence; and the result would be inequality and misery. The argument thus struck out in the course of debate was expanded, soon after, in *An Essay on the Principle of Population* (1798). A storm of controversy followed its publication; but its teaching made notable converts, such as Pitt among statesmen and Paley among philosophers; and it soon came to be adopted as part of the orthodox utilitarian tradition. To his critics Malthus replied with the thoroughness of an honest enquirer; he travelled on the continent, studied social conditions, and investigated the actual circumstances which had kept the numbers of the people and their food in equilibrium. The answer came in the second edition of his *Essay* (1803) which, in contents, is practically a new book. Even the title is modified. The first edition discusses the principle of population "as it affects the future improvement of society"; the second is "a view of its past and present effects on human happiness." The former shattered the picture of a future golden age, to be reached by the abolition of government

or by some communistic device; the effect which the book produces on the reader is one of unrelieved depression; mankind is in the power of an instinct hostile to welfare; only vice and misery prevent the world from being overpeopled. The second edition turns from the future to the past and the present; it is informed by a fuller study of facts; it finds that the pressure of the people on the food has diminished with the advance of civilisation; not vice and misery only, but morality also, is reckoned among the checks to the increase of population. Thus, as he says in the preface, he "tried to soften some of the harshest conclusions of the first essay."

The main doctrine of Malthus was not entirely new. The question of the populousness of ancient and modern nations had been discussed by a number of writers, including Hume; there were anticipations of Malthus in Joseph Townsend's *Dissertation on the Poor Laws* (1786); and still earlier, in 1761, Robert Wallace, in his *Various Prospects of Mankind*, had at first suggested community of goods as a solution of the social problem, and then pointed out that the increase of population, which would result from communism, was a fatal flaw in his own solution. But Malthus made the subject his own, and showed by patient investigation how population, as a matter of fact, had pressed upon the means of subsistence, and by what measures it had been kept in check. He produced a revolution in scientific opinion and powerfully affected popular sentiment, so that pure literature took up the theme:

> Slowly comes a hungry people as a lion creeping nigher,
> Glares at one that nods and winks behind a slowly dying fire.

It is hardly too much to say that the prospect weighed on the social mind of the nineteenth century like a nightmare. The mind of the twentieth century has shaken it off like a dream, but it has not answered the main thesis for which Malthus contended. It is true that his exposition is not

above criticism. The terms in which he stated his thesis—that population tends to increase in a geometrical ratio and food in an arithmetical ratio—are, at best, inexact. Perhaps also he did not allow sufficiently for the effects of new methods and inventions in increasing the supply of food and for the possible reaction of quality upon numbers among men. The darker side of his picture of the human lot may be read in his criticism of the poor law. But he was not blind to considerations of a more favourable kind. He saw that the "struggle for existence" (the phrase is his) was the great stimulus to labour and a cause of human improvement. Thus, at a later date, Darwin and A. R. Wallace, working independently, found in his book a statement of the principle, of which they were in search, for an explanation of biological development.

The publication of *An Essay on the Principle of Population* determined the career of Malthus, which thenceforth was devoted to teaching and writing on economics. His *Inquiry into the Nature and Progress of Rent*, his *Principles of Political Economy*, and his correspondence with Ricardo are of importance in the history of economic theory, though they were not fitted to exert any notable influence upon thought and literature in general. In all that he wrote Malthus kept in close touch with the actual facts of social and industrial life; in this respect his writings form a contrast in method to the works of Ricardo, in whose abstract reasonings the economics of the Benthamite school attained their most characteristic expression.

Thus the economic doctrines characteristic of the utilitarian school were elaborated by a writer who cannot be regarded as a member of it and who indeed was not interested in philosophy or even in the larger questions of social theory. David Ricardo—the son of a Dutch Jew who had settled in London and himself a successful stockbroker—had already made his mark as a writer on the

currency when he became acquainted with James Mill, by whose encouragement, as well as by that of other friends, he was induced in 1817 to publish his chief work, *Principles of Political Economy and Taxation*. Ricardo received his impetus towards economic study from Adam Smith. He did not share the latter's breadth of social outlook or his psychological insight; but he had a masterly power of abstract reasoning which enabled him to present economic doctrines in the form of a deductive science. He was concerned not so much with the "nature and causes" as with the distribution of wealth. This distribution has to be made between the classes concerned in the production of wealth, namely, the landowner, the capitalist, and the labourer; and Ricardo seeks to show the conditions which determine the share of each. Here his theory of rent is fundamental. According to this theory rent is the price which a landowner is able to charge for the special advantages of his land; it is the difference between its return to a given amount of capital and labour and the similar return of the least advantageous land which has to be cultivated. Consequently it rises as the margin of cultivation spreads to less fertile soils. Obviously this doctrine leads to a strong argument in favour of the free importation of foreign goods, especially corn. It also breaks with the economic optimism of Adam Smith, who thought that the interest of the country gentleman harmonised with that of the mass of the people; for it shows that the rent of the landowner rises as the increasing need of the people compels them to have resort to inferior land for the production of their food.

The value of an article is determined, according to Ricardo, by the amount of labour required to produce it under the least favourable conditions; in the distribution of this value the share of wages depends on the price of necessaries (that is, chiefly, of food); and the law of population (which he takes over from Malthus) prevents any further rise of wages. On the other hand, the profits of

the employer depend on low or high wages. Thus, in the progress of society, the " natural tendency " of profits is to fall, until " almost the whole produce of the country, after paying the labourers, will be the property of the owners of land and the receivers of tithes and taxes." There is, therefore, an opposition of interests within the body economic; and this opposition is held to be the result of natural and inevitable law—" happily checked," however, at repeated intervals, by improvements and discoveries. For their effect Ricardo made allowance. But he took no account of other than economic motives in human conduct; he may be said to have invented the fiction of the ' economic man,' though he did not use the phrase. And he regarded the economic structure of society as rigid, though his doctrines often read like satires upon it, and they became, in the hands both of contemporary[1] and of later socialist writers, a powerful argument for fundamental social changes.

Ricardo's method was to proceed from a few very general propositions about society and human nature, and to draw out their consequences deductively. That his premisses were one-sided generalisations, and that his conclusions at best had only hypothetical validity, he did not recognise. This method was also characteristic of the Benthamite reasoning in political theory generally. Thus it was that, in economics, James Mill professed himself Ricardo's disciple. Mill's *Political Economy* (1821) reduces Ricardo's doctrines to text-book form, and states them with the concise and confident lucidity which distinguished the author. For Mill however, unlike Ricardo, economics was only one amongst a large number of topics, social and philosophical, which were open to the same general method of treatment, and which appealed to his interest. Mill was closely associated with Bentham—at

[1] See the bibliography by H. S. Foxwell, in appendix II (pp. 191–267) of the English translation of A. Menger's *Right to the Whole Produce of Labour* (1899).

any rate, from 1808 onwards—and it is difficult to find any originality in the fundamental doctrines of his creed. At the same time he had certain points of superiority. Much inferior to Bentham in jurisprudence and all that concerned the details of law, he had perhaps a clearer view of political theory and certainly a wider knowledge of historical conditions. He was, of course, a whole-hearted adherent of the greatest happiness principle, and added nothing to its statement; but he was better equipped for its defence on philosophical grounds and he could supplement Bentham's deficiencies as a psychologist. But the necessity of making an income by literary work, and afterwards the demands of official employment, as well as always the engrossing interest of public affairs, left him little leisure for philosophy.

Mill's systematic work in political theory is contained in certain articles, especially an article on government, contributed to the supplement of *The Encyclopaedia Britannica*, edited by Macvey Napier (1820). In these articles the author proceeds methodically to determine the best form of political order by deductive reasoning; and his method was the object of severe criticism by Macaulay in an article contributed to *The Edinburgh Review* in 1829, but not republished in his collected *Essays*. This article contained also an attack on the utilitarians generally; and Mill's rejoinder, so far as he made any, is to be found in *A Fragment on Mackintosh* (1835). This consists of "strictures on some passages" of *A Dissertation on the Progress of Ethical Philosophy* which Sir James Mackintosh had contributed to the seventh edition of *The Encyclopaedia Britannica*. Like Mill, Mackintosh was keenly interested in philosophy, although his career gave him little time for its pursuit. In this, his only contribution to the subject, he reviewed the work of the English moralists with appreciation and insight. It contained criticisms of the utilitarians and of their intellectual predecessors which aroused Mill's hostility, and its occa-

sional lack of precision of thought laid it open to attack. Mill's 'strictures' are limited to a few points only, and expose the weaknesses of his antagonist's positions in a manner which would have been more effective if it had been less violent—although his friends had induced him to moderate its tone before making it public.

Mill's chief philosophical work was, however, his *Analysis of the Phenomena of the Human Mind* (1829). In this he laid the foundation in psychology for the utilitarian superstructure. It is a compact statement of a theory of mind elaborated by the same method as that by which any department of nature might be studied. Mental phenomena are reduced to their simplest elements, and the association of these into groups and successions is investigated, all association being reduced by him to one law—that of contiguity. In general Mill follows Hume and Hartley—but Hartley much more than Hume. He disregards, however, the physiological side of Hartley's theory, so that his own doctrines are purely psychological. To the psychological school of a later date, whose leading representatives were John Stuart Mill and Alexander Bain, his chief positive contribution was the doctrine of inseparable association; in addition, he marked out afresh the lines to be followed by a theory which attempts to explain the facts of consciousness from the 'association' of ultimate elements called 'sensations,' which were assumed not to be themselves in need of explanation.

CHAPTER XII

THE VICTORIAN ERA

I. Introduction

English philosophy may be said to have touched low-water mark in or about the fourth decade of the nineteenth century. The general public had ceased to be occupied with matters of speculative thought, and the universities did little or nothing to keep an interest in them alive. Writing in 1835, John Stuart Mill complained that philosophy was falling more and more into disrepute and that great events had ceased to inspire great ideas. "In the intellectual pursuits which form great minds," he said, "this country was formerly pre-eminent. England once stood at the head of European philosophy. Where stands she now?...Out of the narrow bounds of mathematical and physical science, not a vestige of a reading and thinking public engaged in the investigation of truth *as* truth, in the prosecution of thought for the sake of thought. Among few except sectarian religionists—and what they are we all know—is there any interest in the great problem of man's nature and life: among still fewer is there any curiosity respecting the nature and principles of human society, the history or the philosophy of civilization; nor any belief that, from such inquiries, a single important practical consequence can follow[1]." About the same time, or a few years earlier, similar views concerning the low estate of English philosophy had been expressed by Sir William Hamilton and by Thomas Carlyle[2]; and a foreign observer—Hegel—had spoken with scorn of

[1] *Dissertations and Discussions*, vol. I, pp. 96, 97.
[2] Cp. Masson, *Recent British Philosophy*, 3rd edn, pp. 2–5.

the usage of the word 'philosophy' in the English language[1].

The writers who made this complaint were foremost in bringing about a change. Without any approach to philosophical method, Carlyle forced upon public attention ideas concerning the ultimate meaning and value of life, and, in his own way, had an influence upon the thought of his time which may be compared with that of Coleridge in the generation immediately preceding. Hamilton and Mill were the leaders of a marked revival of interest in speculative topics, which reinstated philosophy in its due place in the national culture; and this revival took two different directions connected with their diverse views and training.

Philosophy, however, had not merely to overcome the public indifference referred to by John Stuart Mill; it had also to contend against itself, or at least against its dominant form. The Benthamite creed, which was in the ascendant, was not favourable to speculative enquiry. "The great problem of man's nature and life" was regarded as solved in a sense which made metaphysics and theology alike impossible; ethical principles were held to be finally settled by Bentham, so that nothing remained but their application to different situations; even political and social theory, the field of the chief triumphs of the utilitarians, was divorced from history and from every ethical idea save that of utility; psychology alone stood in need of more adequate treatment than Bentham could give it, and James Mill had supplied the school with a theory of mind which was in harmony with their other views.

II. Sir William Hamilton and others

Hamilton's reputation has not withstood the test of time; but, in his own day and for a number of years afterwards, his was one of the two names which stood for

[1] *Encyklopädie der philosophischen Wissenschaften*, § 7.

the revival of philosophical thought in Great Britain. His pre-eminence was not altogether undisputed, however. Even from his younger contemporaries who did most for Scottish metaphysics, different opinions regarding his merit may be gathered. Ferrier looked upon him, morally and intellectually, as "amongst the greatest of the great[1]": whereas Hutchison Stirling found in him "a certain vein of disingenuousness that, cruelly unjust to individuals, has probably caused the retardation of general British philosophy by, perhaps, a generation[2]." The truth lies somewhere between these extreme views, and it is important to arrive at a correct estimate of Hamilton's work in order to understand the course of British philosophy.

Sir William Hamilton was born in 1788, in the old college of Glasgow, where his father was a professor. He was educated there and at Oxford, was called to the Scottish bar and, in 1836, appointed to the chair of logic and metaphysics at Edinburgh. In 1844 he had a stroke of paralysis, and, although he was able to continue the work of his professorship until his death in 1856, he never recovered his physical strength. His published work began with a number of articles in *The Edinburgh Review*, republished in 1852 as *Discussions on Philosophy and Literature, Education and University Reform*. The most important of these were three articles on 'the Philosophy of the Unconditioned,' 'the Philosophy of Perception' and 'Logic,' which appeared between 1829 and 1833. He afterwards devoted himself to the preparation of an edition of Reid's *Works*, which he illustrated with elaborate appended 'Notes,' chiefly historical in character. This work was published in 1846; but the 'Notes' were never completed and are of the nature of material rather than of literature. After his death his *Lectures on Metaphysics and Logic* were published in four volumes (1858—60).

[1] J. F. Ferrier, *Scottish Philosophy: the old and the new* (1856), pp. 15, 16.

[2] J. H. Stirling, *Sir W. Hamilton: being the Philosophy of Perception* (1865), p. vii.

Hamilton's positive contributions to philosophy are connected with the topics of the three articles already named. Indeed, except as regards logic, these articles contain almost all that is essential and original in his work. But other points have to be taken into account in estimating his influence upon philosophical thought.

Since the time of Descartes continental thought had had little effect upon English philosophy. Leibniz and even Spinoza were hardly more than names. Helvétius had influenced Bentham, and De Tracy Thomas Brown; but Helvétius and De Tracy themselves worked on lines laid down in England—the lines of Locke. The doctrines of Locke, Berkeley, and Hume, together with the ideas of the deistical movement, had entered into the European tradition; but the reaction which they produced, and which began with Kant, was for long ignored in England. One or two enthusiasts tried to make Kant known, but their efforts were without result; an article on Kant by Thomas Brown in the second number of *The Edinburgh Review* (1803) only showed the poverty of the land. Coleridge, indeed, was a much more important medium; he brought into English literature ideas which had been derived from Kant and his successors, and he was recognised by John Stuart Mill as representing a type of thought, antagonistic to the dominant Benthamism, which had to be reckoned with. But the teaching of Coleridge was prophetic rather than scientific, and the philosophical student had to be approached in his own language and by a master who had the command of traditional learning as well as fresh doctrines to teach.

It was here that Hamilton's cosmopolitan learning broke in upon British philosophy and lifted it out of the narrow grooves into which both the Scottish academic teachers and the English Benthamites had fallen. Hamilton's learning struck most of his contemporaries as almost superhuman; it was certainly vast, and, as certainly, without precedent at the time. It made possible

a new orientation in philosophy. The special problems to which discussion had become restricted were seen as part of a larger field of enquiry which extended over the whole of western thought from ancient Greece to modern Germany. Hamilton, however, had the defects of his qualities. He never obtained easy mastery of his own learning; he would summon a "cloud of witnesses" when a single good argument would have been more to the purpose; and his selection of "authorities" was often ill-judged: they were numbered instead of weighed; and he would spend time over third-rate schoolmen or equally third-rate modern Germans which would have been better spent if devoted to a sympathetic understanding of Kant and Hegel. Nevertheless, Hamilton's work in this respect is important. He overcame the provincialism of English thought and he brought it into connection with the greatest of the new German philosophers. It may have been an imperfect Kant that he revealed; Fichte, Schelling, and Hegel were introduced for the purpose of criticism only. But the traditional circle of English thought was broken, and new ideas were brought within it.

Hamilton came forward as a reconciler of Scottish and German thought—of Reid with Kant. It was only an imperfect synthesis that he worked out, but the enterprise was notable. His logical work, indeed, stands to some extent apart. He followed Kant in his strictly formal treatment, and he devoted a large amount of time, and no little ingenuity, to the elaboration of a modification of the formal doctrine of the traditional logic. This modified doctrine made a great stir for many years, and was even hailed as the greatest logical discovery since the time of Aristotle[1]. It is known as 'the Quantification of the Predicate.' Hamilton's own expositions of it are incomplete and are contained in appendixes to his *Discussions* and to his *Lectures*. The clearest accounts of his views have to be sought in *An Essay on the New Analytic of*

[1] T. S. Baynes, *Essay on the New Analytic* (1850), p. 80.

Logical Forms (1850) by his pupil, Thomas Spencer Baynes, and in *An Outline of the Laws of Thought* (the first edition of which was published in 1842) by William Thomson, afterwards archbishop of York. But the gist of the matter can be put very shortly. According to the traditional view, in a judgment or proposition, an assertion is made about something; that is to say, the subject is said to possess or not to possess the quality signified by the predicate. When made not about an individual thing, but about a group or class, then the assertion may be meant to apply to every member of the class or only to some of them; it is, therefore, necessary to indicate this, or to express the quantity of the subject. The predicate is not similarly quantified. But a quality is always potentially a class—the class of things which possess that quality. The most elementary of logical operations implies that it can be treated as such and assigned a quantity as the subject of a new proposition. Hamilton's 'new analytic' depends upon the contention that the quantity thus implied should be always explicitly stated, and consists in following out the changes in formal procedure which seem to him to result from this being done. But Hamilton was not thorough enough in the elaboration of his theory. He did not see that his view of the judgment as an assertion of the quantitative relation between two classes would lead to a very different classification of propositions from his and, in general, to a much more radical revision of logical forms. Two contemporary mathematicians—Augustus de Morgan and George Boole—went further than he did; and the latter's treatise entitled *The Laws of Thought* (1854) laid the foundations of the modern logical calculus.

Hamilton's article on 'the Philosophy of Perception' is both a defence of Reid and, at the same time, a relentless attack upon Thomas Brown. It is also an attempt to formulate and justify the doctrine of 'natural realism' or 'natural dualism' in a form less ambiguous than that

in which it had been stated by Reid. "In the simplest act of perception," says Hamilton, "I am conscious of myself as the perceiving subject and of an external reality as the object perceived." As regards the latter factor what we have is said to be "an immediate knowledge of the external reality." This clear view almost disappears, however, in the process of discussion and elaboration which it underwent in Hamilton's later thought. In the course of his psychological analysis he distinguished sharply and properly between the subjective and the objective factors in the act of cognising external reality; the former he called sensation proper and the latter perception proper; and he even formulated a 'law' of their inverse ratio. He elaborated also the old distinction of primary and secondary qualities of matter, to which, *more suo*, he added an intermediate class of secundo-primary qualities. As a result of these distinctions the doctrine of "immediate knowledge of the external reality" is transformed. The object of perception proper, it is now said, is either a primary quality or a certain phase of a secundo-primary. But we do not perceive the primary qualities of things external to our organism. These are not immediately known but only inferred; the primary qualities which we do perceive "are perceived as *in our organism*." That is to say, when we perceive a table, we do not perceive the shape or size of the table; knowledge of these is got by inference; the shape and size which we perceive are in our own bodies. The existence of an extra-organic world is apprehended through consciousness of resistance to our muscular energy, which Hamilton calls a "quasi-primary phasis of the secundo-primary" qualities[1]. From this view it follows that no immediate knowledge of external reality is given by sight; and yet it would be hard to show that the "testimony of consciousness," to which Hamilton constantly and confidently appeals, makes any such distinction between things seen and things touched.

[1] Reid's *Works*, ed. Hamilton, Note D*, pp. 881, 882.

The value of Hamilton's 'philosophy of the conditioned,' as he called it, is not easy to estimate, chiefly owing to the difficulty of stating the exact sense in which he held his favourite doctrine of the relativity of human knowledge. His most striking publication is the first article he wrote—that on 'the Philosophy of the Unconditioned.' It is a review not directly of Schelling or Hegel, but of the eclectic system of his French contemporary, Victor Cousin. The unconditioned, in his use of the term, is a genus of which the infinite (or unconditionally unlimited) and the absolute (or unconditionally limited) are the species; and his contention is that it is not an object of thought at all, but "merely a common name for what transcends the laws of thought." His argument follows lines similar to those used by Kant in exhibiting the antinomies of rational cosmology, though it is applied to the conclusions of post-Kantian speculation. According to him there cannot be any knowledge of that which is without conditions, whether it is called infinite or absolute; knowledge lies between two contradictory inconceivables, one of which must be true though neither can be conceived; all true philosophy is a philosophy of the conditioned. "To think," he says, "is to condition."

This statement, however, involves two positions which he does not take care to keep distinct. It implies that we cannot know the infinite or whole, which in its nature must be without any conditions; and it may also be taken as implying that our knowledge of the finite parts is not a knowledge of them as they truly exist, but only as they are modified by our way of knowing. This latter position, though very definitely stated by Hamilton, is not clearly carried out. He follows Kant by laying chief stress on space and time as the forms under which we know objects; but he departs from Kant in holding that these forms are also modes of things as actually existing. It would therefore appear that the fact of their being (as Hamilton calls

them) *à priori* " forms of thought " does not interfere with the objective truth of our spatio-temporal knowledge; it is a knowledge, under the forms of space and time, of things which really exist in space and time. Hamilton's doctrine of immediate perception necessitates some such view. He saw, moreover, that some kind of reconciliation was required; but a parenthetical paragraph in his article on ' the Philosophy of Perception ' exhausts what he has to say on this important problem. " To obviate misapprehension," he asserts that all that we know is " those phases of being which stand in analogy to our faculties of knowledge." This vague phrase may mean little more than that we cannot know what we are incapable of knowing. Because the nature of a thing is " in analogy to our faculties " may be the reason why we are able to know it; it cannot show that we do not know it as it is or in its actual nature. But Hamilton's mind seemed to work in two distinct compartments belonging respectively to the philosophy of perception and to the philosophy of the conditioned. The two lines of thought seldom met, and when they did meet the result was sometimes curious. *Rerumque ignarus, imagine gaudet* is the taunt he flings at Brown and the representationists; but, when he poses as the philosopher of the conditioned, he takes the same tag as his own motto—*rerumque ignarus, imagine gaudet.*

As regards our supposed knowledge of the absolute or of the infinite, that, he holds, is merely a negative conception. On this topic he can hardly be said to have set forth anything substantially new, though his arguments were novel and striking to the English reader of the day. Nor, even here, on this fundamental point, can his view be said to be free from ambiguity. His doctrine seems to lead logically to a form of positivism; he will not even allow that the moral consciousness or ' practical reason ' has the significance assigned to it by Kant; but yet he asserts emphatically that what cannot be known can be

and ought to be believed. What then is belief? By classifying it as a form or 'faculty' of cognition, Hamilton strikes at the root of his doctrine that thought excludes the notion of the absolute or infinite. When on the war-path against the unconditioned, the 'imbecility' of human knowledge is asserted to the fullest extent; when religious belief is in question, the 'unknown God' is represented as somehow the object of consciousness. Sometimes it would even appear as if his view were simply that knowledge of the highest object which consciousness can apprehend cannot, like our knowledge of particular things, imply a reference to some higher concept.

The theological results of the philosophy of the conditioned were worked out thoroughly and with effective logic by Henry Longueville Mansel, an Oxford professor who was dean of St Paul's for the three years preceding his death in 1871. Mansel was a scholar of less miscellaneous learning than Hamilton, and his thinking was less original; but his thought was not obscured by his learning. In the notes and appendixes to his edition of Aldrich's *Artis Logicae Rudimenta* (1849), and in his *Prolegomena Logica* (1851), he defined and defended a formal view of the science similar to Hamilton's. His *Metaphysics* (1860), originally contributed to *The Encyclopaedia Britannica*, is the best connected exposition of the philosophy that may be called Hamiltonian; and, in his *Philosophy of the Conditioned* (1866), the doctrine was defended against the criticisms of Mill. He was also the author of a brilliant brochure, in the form of an Aristophanic comedy, entitled *Phrontisterion* (republished in *Letters, Lectures and Reviews*, 1873), in which academic reformers and German philosophers are satirised. But his wider fame came from his Bampton lectures, *The Limits of Religious Thought* (1858). This work is a Christian apologetic founded on the doctrine of agnosticism (to use the modern term) which he shared with Hamilton. Since knowledge of God,

in his absolute existence, is self-contradictory, since 'absolute morality' is equally beyond human knowledge and since our moral conceptions can only be 'relative and phenomenal,' he seeks to disallow any criticisms of theological doctrine which are based upon human conceptions of good and evil. The indignation with which this doctrine was repudiated by John Stuart Mill formed one of the most striking, but not one of the most important, features of his criticism of the philosophy of Hamilton.

III. John Stuart Mill and others

John Stuart Mill is, on the whole, the most interesting and characteristic figure in English philosophy in the nineteenth century. He was successively the hope and the leader, sometimes also the despair, of the school of thought which was regarded as representative of English traditions. He was born in London on 20 May 1806, and was the eldest son of James Mill. He was educated entirely by his father and was deliberately shielded from association with other boys of his age. From his earliest years he was subjected to a rigid system of intellectual discipline. As a result of this system, knowledge of what are considered the higher branches of education was acquired by him in childhood, and he started on his career, according to his own account, with an advantage of a quarter of a century over his contemporaries. This is probably an overstatement of a very remarkable intellectual precocity; and John Mill recognised, in later life, that his father's system had the fault of appealing to the intellect only and that the culture of his practical and emotional life had been neglected, while his physical health was probably undermined by the strenuous labour exacted from him. James Mill's method seems to have been designed to make his son's mind a first-rate thinking machine, so that the boy might become a prophet of the utilitarian gospel. In this he succeeded. But the interest —one may almost say, the tragedy—of the son's life arose

from the fact that he possessed a much finer and subtler nature than his father's—a mind which could not be entirely satisfied by the hereditary creed. He remained more or less orthodox, according to the standards of his school; but he welcomed light from other quarters, and there were times when Grote and others feared that he might become a castaway. "A new mystic" was Carlyle's judgment upon some of his early articles. Mill never became a mystic; but he kept an open mind, and he saw elements of truth in ideas in which the stricter utilitarians could see nothing at all.

He had no doubts at the outset of his career. On reading Bentham (this was when he was fifteen or sixteen) the feeling rushed upon him "that all previous moralists were superseded." The principle of utility, he says, understood and applied as it was by Bentham, "gave unity to my conception of things. I now had opinions; a creed, a doctrine, a philosophy; in one among the best senses of the word, a religion; the inculcation and diffusion of which could be made the principal outward purpose of a life." Soon afterwards he formed a small 'Utilitarian Society,' and, for some few years, he was one of "a little knot of young men" who adopted his father's philosophical and political views "with youthful fanaticism." A position under his father in the India Office had secured him against the misfortune of having to depend on literary work for his livelihood; and he found that office-work left him ample leisure for the pursuit of his wider interests.

He was already coming to be looked upon as a leader of thought when, in his twenty-first year, the mental crisis occurred which is described in his *Autobiography*. This crisis was a result of the severe strain, physical and mental, to which he had been subjected from his earliest years. He was "in a dull state of nerves"; the objects in life for which he had been trained and for which he had worked lost their charm; he had "no delight in virtue, or the general good, but also just as little in anything

else"; a constant habit of analysis had dried up the fountains of feeling within him. After many months of despair he found, accidentally, that the capacity for emotion was not dead, and "the cloud gradually drew off." But the experience he had undergone modified his theory of life and his character. Happiness was still to be the end of life, but it should not be taken as its direct aim. "Ask yourself whether you are happy, and you cease to be so. The only chance is to treat, not happiness, but some end external to it, as the purpose of life." Further, he ceased to attach almost exclusive importance to the ordering of outward circumstances, and, "for the first time, gave its proper place, among the prime necessities of human well-being, to the internal culture of the individual." In this state of mind he found in the poems of Wordsworth—"the poet of unpoetical natures," as he calls him—that very culture of the feelings which he was seeking. From him he learned "what would be the perennial sources of happiness, when all the greater evils of life shall have been removed."

Mill's widened intellectual sympathies were shown by his reviews of Tennyson's poems and of Carlyle's *French Revolution* in 1835 and 1837. The articles on Bentham and on Coleridge, published in 1838 and 1840 respectively, disclose his modified philosophical outlook and the exact measure of his new mental independence. From the position now occupied he did not seriously depart throughout the strenuous literary work of his mature years. The influence of the new spirit, which he identified with the thinking of Coleridge, did not noticeably develop further; if anything, perhaps, his later writings adhered more nearly to the traditional views than might have been anticipated from some indications in his early articles on Bentham and Coleridge.

These two articles provide the key for understanding Mill's own thought. He looks upon Bentham as a great constructive genius who had first brought light and system

into regions formerly chaotic. No finer or juster appreciation of Bentham's work has ever been written. Mill agrees with Bentham's fundamental principle and approves his method. Bentham made morals and politics scientific. But his knowledge of life was limited. "It is wholly empirical and the empiricism of one who has had little experience." The deeper things of life did not touch him; all the subtler workings of mind and its environment were hidden from his view. It is significant that Mill assumes that, for light on these deeper and subtler aspects of life, we must go not to other writers of the empirical tradition but to thinkers of an entirely different school. He disagrees with the latter fundamentally in the systematic presentation of their views—whether these be defended by the easy appeal to intuition or by the more elaborate methods of Schelling or Hegel. What we really get from them are half-lights—glimpses, often fitful and always imperfect, into aspects of truth not seen at all by their opponents. Coleridge represented this type of thought. He had not Bentham's great constructive faculties; but he had insight in regions where Bentham's vision failed, and he appreciated, what Bentham almost entirely overlooked, the significance of historical tradition.

The ideas which Mill derived from the writings of Coleridge, or from his association with younger men who had been influenced by Coleridge, did not bring about any fundamental change in his philosophical standpoint, but they widened his horizon. And in nearly all his books we can trace their effect. He seems conscious that the analysis which satisfied other followers of Bentham is imperfect, and that difficulties remain which they are unable to solve and cannot even see.

Mill's *System of Logic* was published in 1843, and ran through many editions, some of which—especially the third (1850) and the eighth (1872)—were thoroughly revised and supplemented by the incorporation of new, mainly controversial, matter. It is probably the greatest

of his books. In spite of Hobbes's treatise, and of the suggestive discussions in the third book of Locke's *Essay*, the greater English philosophers almost seem to have conspired to neglect the theory of logic. It had kept its place as an academic study, but on traditional lines; Aristotle was supposed to have said the last word on it, and that last word to be enshrined in scholastic manuals. English thought, however, was beginning to emerge from this stage. Richard Whately had written a text-book, *Elements of Logic* (1826), which, by its practical method and modern illustrations, gave a considerable impetus to the study, and Hamilton's more comprehensive researches had begun. From them Mill did not learn much or anything. What he set himself to work out was a theory of evidence in harmony with the first principles of the empirical philosophy; and this was an almost untouched problem. He may have obtained help from Locke; he acknowledges the value for his thinking of Dugald Stewart's analysis of the process of reasoning; he was still more indebted to his discussions with a society of friends. Thus he worked out his theory of terms, propositions, and the syllogism; and then the book was laid aside for five years. When he returned to it, and proceeded to analyse the inductive process, he found rich material to hand not only in Sir John Herschel's *Discourse on the Study of Natural Philosophy* (1830), but also in William Whewell's *History of the Inductive Sciences* (1837). After his theory of induction was substantially complete, he became acquainted with, and derived stimulus and assistance from, the first two volumes of Comte's *Cours de philosophie positive* (1830). These were the chief influences upon his work, and their enumeration serves to bring out the originality of his performance. His work marks an epoch in logical enquiry, not for English philosophy only but in modern thought.

The reputation of Mill's *Logic* was largely due to his analysis of inductive proof. He provided the empirical

sciences with a set of formulae and criteria which might serve the same purpose for them as the time-worn formulae of the syllogism had served for arguments that proceeded from general principles. In this part of his work he derived important material from Whewell, much as he differed from him in general point of view, and he found his own methods implicitly recognised in Herschel's *Discourse*. The importance and originality of Mill's contribution, however, cannot be denied. His analysis is much more precise and complete than any that had been carried out by his immediate predecessors. He seeks to trace the steps by which we pass from statements about particular facts to general truths, and also to justify the transition: though he is more convincing in his psychological account of the process than in his logical justification of its validity. When he is brought face to face with the fundamental problem of knowledge, as Hume had been before him, he does not show Hume's clearness of thought.

Mill's work is not merely a logic in the limited sense of that term which had become customary in England. It is also a theory of knowledge such as Locke and Hume attempted. The whole is rendered more precise by its definite reference to the question of proof or evidence; but the problem is Hume's problem over again. The ultimate elements of knowledge are subjective entities—"feelings or states of consciousness"—but knowledge has objective validity. The elements are distinct, though the laws of association bind them into groups and may even fuse them into inseparable wholes—but knowledge unites and distinguishes in an order which is not that of the laws of association. The theory of knowledge, accordingly, has to explain how our thinking, especially in the transition from assertion to assertion which we call 'proof,' has validity for objective reality, and, in doing so, it has to give a tenable account of the universal principles postulated in these transitions. In Mill's case, as in Hume's, this has to be done on the assumption that the immediate

object in experience is something itself mental, and that there are no *à priori* principles determining the connections of objects. In his doctrine of terms and propositions Mill emphasises the objective reference in knowledge, although he cannot be said to meet, or even fully to recognise, the difficulty of reconciling this view with his psychological analysis. He faces much more directly the problem of the universal element in knowledge. He contends that, ultimately, proof is always from particulars to particulars. The general proposition which stands as major premiss in a syllogism is only a shorthand record of a number of particular observations, which facilitates and tests the transition to the conclusion. All the general principles involved in thinking, even the mathematical axioms, are interpreted as arrived at in this way from experience: so that the assertion of their universal validity stands in need of justification.

In induction the essential inference is to new particulars, not to the general statement or law. And here he faces the crucial point for his theory. Induction, as he expounds it, is based upon the causal principle. Mill followed Hume in his analysis of cause. Now the sting of Hume's doctrine lay in its subjectivity—the reduction of the causal relation to a mental habit. Mill did not succeed in extracting the sting; he could only ignore it. Throughout, the relation of cause and effect is treated by him as something objective: not, indeed, as implying anything in the nature of power, but as signifying a certain constancy (which he unwarrantably describes as invariable) in the succession of phenomena. He never hesitates to speak of it as an objective characteristic of events, but without ever enquiring into its objective grounds. According to Mill it is only when we are able to discover a causal connection among phenomena that strict inductive inference is possible either to a general law or to new empirical particulars. But the law of universal causation, on his view, is itself an inference from a number of par-

ticular cases. Thus it is established by inductive inference and yet, at the same time, all inductive inference depends upon it. Mill seeks to resolve the contradiction by maintaining that this general truth, that is to say, the law of causation, is indeed itself arrived at by induction, but by a weaker form of induction, called *per enumerationem simplicem*, in which the causal law is not itself assumed. Such a bare catalogue of facts, not penetrating to the principle of their connection, would not, in ordinary cases, justify an inference that can be relied on. But Mill thinks that the variety of experience that supports it in this case, its constant verification by new experience and the probability that, had there been any exception to it, that exception would have come to light, justify our confidence in it as the ground of all the laws of nature. He does not recognise that these grounds for belief—whatever their value may be—all assume the postulate of uniformity which he is endeavouring to justify.

A later and more comprehensive discussion of his philosophical views, especially in a psychological regard, is given in his *Examination of Sir William Hamilton's Philosophy and of the principal philosophical questions discussed in his writings*. This work was published in 1865; and, as his habit was, the author amplified it greatly in subsequent editions by replies to his critics. In this case the criticisms were exceptionally numerous. The book focused the whole controversial energy of the period belonging to the two opposed schools, the intuitional and the empirical; and, in spite of its controversial character, it became the leading text-book of that psychological philosophy which had been adumbrated by Hume. It is a work which shows Mill's powers at their most mature stage. He criticises with severity the theory which he sets out to examine; but he is alive to the awkward places in his own position. Among the numerous doctrines on which he left the impress of his workmanship, none excited more attention at the time of the book's publication, or are of greater

permanent importance, than his doctrines of the external world and of the self. There is nothing fundamentally original about his views on these topics; but his discussion of both illustrates his ability to see further into the facts than his predecessors, and his candour in recording what he sees, along however with a certain disinclination to pursue an enquiry which might land him definitely on the other side of the traditional lines. Mill's doctrine is essentially Humean though, as regards the external world, he prefers to call it Berkeleyan; and here he is the inventor of a phrase: matter is "permanent possibility of sensation." The phrase is striking and useful; but a possibility of sensation is not sensation, and the permanence which he attributes to the possibility of sensation implies an objective order: so that the reduction of matter to sensation is implicitly relinquished when it appears to be affirmed in words. Mind, in somewhat similar fashion, is reduced to a succession of feelings or states of consciousness. But the fact of memory proves a stumblingblock in his way; he cannot explain how a succession of feelings should be conscious of itself as a succession; and he implicitly admits the need of a principle of unity. Thus he almost relinquishes his own theory and only avoids doing so explicitly by falling back on the assertion that here we are in presence of the final inexplicability in which ultimate questions always merge.

In spite of the prominence of the ethical interest in his mind, and in spite also of numerous ethical discussions in his other writings, Mill's sole contribution to the fundamental problem of ethical theory was his small volume *Utilitarianism*, which first appeared in *Fraser's Magazine* in 1861 and was reprinted in book-form in 1863. Perhaps he regarded the fundamental positions of Benthamism as too secure to need much elaboration. What he offers is a finely conceived and finely written defence of utilitarian ethics, into which his own modifications of Bentham's doctrine of life are worked. He holds that the sanctions

of this doctrine are not weaker than those of any other doctrine, and that, in its own nature, it is neither a selfish nor a sensual theory. It is not selfish, because it regards the pleasures of all men as of equal moment; it is not sensual, because it recognises the superior value of intellectual, artistic, and social pleasures as compared with those of the senses. But Mill fails in trying to establish a logical connection between the universal reference of the ethical doctrine and the egoistic analysis of individual action to which his psychology committed him. And he is so determined to emphasise the superiority of the pleasures commonly called 'higher,' that he maintains that, merely as pleasures, they are superior in kind to the pleasures of the senses, irrespective of any excess of the latter in respect of quantity. In so doing he strikes at the root of hedonism, for he makes the ultimate criterion of value reside not in pleasure itself but in that characteristic—whatever it may turn out to be—which makes one kind of pleasure superior to another.

Mill's social and political writings, in addition to occasional articles, consist of the short treatise *Considerations on Representative Government* (1860), *Thoughts on Parliamentary Reform* (1859), the essays *On Liberty* (1859) and *On the Subjection of Women* (1869), *Essays on some Unsettled Questions of Political Economy* (1831, 1844) and *Principles of Political Economy* (1848). The method appropriate to these topics had been already discussed in the chapters on 'the Logic of the Moral Sciences' included in his *Logic*. He sought a *via media* between the purely empirical method and the deductive method. The latter, as employed by his father, was modelled on the reasonings of geometry, which is not a science of causation. The method of politics, if it is to be deductive, must belong to a different type, and will (he holds) be the same as that used in mathematical physics. Dynamics is a deductive science because the law of the composition of forces holds; similarly, politics is a deductive science because the causes

with which it deals follow this law: the effects of these causes, when conjoined, are the same as the sum of the effects which the same causes produce when acting separately—a striking and unproved assumption. Like his predecessors, Mill postulated certain forces as determining human conduct: especially self-interest and mental association. From their working he deduced political and social consequences. He did not diverge from the principles agreed upon by those with whom he was associated. Perhaps he did not add very much to them. But he saw their limitations more clearly than others did: the hypothetical nature of economic theory, and the danger that democratic government might prove antagonistic to the causes of individual freedom and of the common welfare. To guard against these dangers he proposed certain modifications of the representative system. But his contemporaries, and even his successors, of the same way of thinking in general, for long looked upon the dangers as imaginary, and his proposals for their removal were ignored. The essay *On Liberty*—the most popular of all his works—is an eloquent defence of the thesis " that the sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number, is self-protection"; but, as an argument, it meets everywhere with the difficulty of determining the precise point at which the distinction between self-regarding and social (even directly social) activity is to be drawn. Sir James Fitzjames Stephen, accepting Mill's utilitarian criterion, raked his positions with a fire of brilliant and incisive, if unsympathetic, criticism in *Liberty, Equality, Fraternity* (1873).

Mill's *Political Economy* has been variously regarded as an improved Adam Smith and as a popularised Ricardo. Perhaps the latter description is nearer the mark. Its essential doctrines differ little, if at all, from those of Ricardo; the theory of the ' wages fund,' for example, is formulated quite in the spirit of Ricardo, though this

theory was afterwards relinquished or modified by Mill in consequence of the criticisms of William Thomas Thornton. But the work has a breadth of treatment which sometimes reminds one of Adam Smith: the hypothetical nature of economic theory was not overlooked, and the "applications to social philosophy" were kept in view. In spite of his adherence to the maxim of *laissez faire*, Mill recognised the possibility of modifying the system of distribution, and, with regard to that system, he displayed a leaning to the socialist ideal, which grew stronger as his life advanced. His methodical and thorough treatment of economics made his work a text-book for more than a generation, and largely determined the scope of most of the treatises of his own and the succeeding period, even of those written by independent thinkers.

Mill died at Avignon in 1873. After his death were published his *Autobiography* (1873) and *Three Essays on Religion: Nature, the Utility of Religion, and Theism* (1874). These essays were written between 1850 and 1870 and include the author's latest thoughts on ultimate questions. He had been educated in the belief that speculation on ultimate questions is futile; in his works he had always maintained the attitude afterwards called agnosticism, for which he was willing to adopt Comte's term positivism; he accepted also in general Comte's doctrine on this point, though always dissociating himself from the latter's political and social theories. But, even while, in his book *Auguste Comte and Positivism* (1865), accepting the view that the essential nature and ultimate causes of things are inscrutable, he holds that this "positive mode of thought is not necessarily a denial of the supernatural," but only throws it back beyond the limits of science. His posthumous essays show a further development. In that on nature (the earliest of the series) he dwells upon the imperfections of the cosmic order as showing that it cannot have been the creation of a being of infinite goodness and power; in the last essay of the volume he approaches a

tentative and limited form of theism—the doctrine of a finite God.

For more than a generation Mill's influence was dominant in all departments of philosophical and political thought; he had the initiative, and set the problems for his opponents as well as for his adherents; and his works became university text-books. This holds of politics, economics, ethics, psychology, and logic. A striking reaction against his influence is shown in the work of William Stanley Jevons, professor at Manchester and afterwards in London, whose economic and logical writings are distinguished by important original ideas. In his *Theory of Political Economy* (1871) he introduced the conception of final (or marginal) utility, which has been greatly developed subsequently in the analytic and mathematical treatment of the subject. In logic also he laid the foundations for a mathematical treatment in his *Pure Logic* (1864) and *Substitution of Similars* (1869); and, in his *Principles of Science* (1874), he fully elaborated his theory of scientific inference, a theory which diverged widely from the view of induction expounded by Mill. As time went on, Jevons became more and more critical of the foundations of Mill's empirical philosophy, which he attacked unsparingly in discussions contributed to *Mind*.

George Grote, the historian of Greece, an older contemporary and early associate of Mill, deserves mention here not only for his works on the philosophies of Plato and Aristotle, but also for some independent contributions to ethics, published together under the title *Fragments on Ethical Subjects* (1876). He had little sympathy with Mill's approximations to types of thought opposed to the traditional utilitarianism. In this respect he agreed with Alexander Bain, professor at Aberdeen, a writer of far greater importance in a philosophical regard. Bain was younger than Mill and long outlived him; he assisted him in some of his works, especially the *Logic*; he wrote

numerous works himself; but his pre-eminence was in psychology, to which his chief contributions were two elaborate books, *The Senses and the Intellect* (1855) and *The Emotions and the Will* (1859). The psychology of James Mill and of J. S. Mill was, in the main, derived from Hartley; but it was Hartley as expurgated by Priestley, Hartley with the physiology left out. Bain reinstated the physiological factor, not in Hartley's rather speculative manner, but by introducing facts of nerve and muscle whenever they could serve to elucidate mental process. That came to be, as a rule, whenever the mental process itself was obscure or difficult. The result is sometimes confusing, because it mixes two different orders of scientific conceptions. But Bain's work is wonderfully complete as a treatment of the principle of the association of ideas; and perhaps he has said the last word that can be said in favour of this principle as the ultimate explanation of mind. His range of vision may have been narrow, but he had a keen eye for everything within that range. He was persistent in his search for facts and shrewd in examining them; and he had no illusions—except the great illusion that mind is a bundle of sensations tied together by laws of association. It is interesting to note how this clear-sighted and unimaginative writer made observations which suggest doctrines, different from his own, which have gained prominence later. His observations on spontaneous movement and his teaching as to fixed ideas strike at the roots of the analysis of volition to which he adhered, and might lead naturally to a view of mind as essentially active and no mere grouping of sensations or feelings. He offered also a new analysis of belief (though he subsequently withdrew it) which resolved it into a preparedness to act; and here the latent 'activism' in his thinking might have led, if developed, to something of the nature of pragmatism.

George Croom Robertson, professor in University College, London, was in general sympathy with Mill's

school of thought—sympathy tempered, however, by wide knowledge and appreciation of other developments, including those of recent philosophy. Circumstances prevented his producing much literary work beyond a few articles and an admirable monograph on Hobbes (1886). He is remembered not only for these, and for his lectures, some of which have been published (1896), but also for his skilful and successful work as editor of *Mind* during the first sixteen years of its existence. *Mind* was the first English journal devoted to psychology and philosophy, and its origin in 1876 is a landmark in the history of British philosophy.

In Mill's day and afterwards there was an active, though not very widespread, propaganda of the positive philosophy of Comte. The study of Comte's system was greatly facilitated by the admirable condensed translation of his *Positive Philosophy* issued by Harriet Martineau in 1853. The chief teachers of positivist doctrine in England were a group of writers who had been contemporaries at Oxford; but a serious disagreement arose amongst them regarding the prominence to be given to the inculcation of Comte's 'religion of humanity.' Their activity was shown in lectures and addresses and in many translations of Comte's works. *The Catechism of Positive Religion* was translated by Richard Congreve in 1858; *Comte's General View of Positivism* by John Henry Bridges in 1865; and *System of Positive Polity* by Bridges and Frederic Harrison in 1875. Their independent writings were inspired by the positivist spirit, even when they did not add much to its defence on philosophical grounds. In *The Unity of Comte's Life and Doctrine* (1866), Bridges replied to the criticisms of J. S. Mill. He published also *Five Discourses on Positive Religion* in 1882; and his *Essays and Addresses* (1907) were collected and edited after his death.

IV. Rational and Religious Philosophers

Although Mill's fame overshadowed the other philosophers of his day, there were a number of contemporary writers who were not merely his followers or critics, but independent thinkers. Of note among these was John Grote, younger brother of the historian, who held the chair of moral philosophy at Cambridge from 1855 to 1866. Grote himself issued only one volume on philosophy—*Exploratio Philosophica*, Part I (1865). After his death three volumes were compiled from his manuscripts: *An Examination of the Utilitarian Philosophy* in 1870, *A Treatise on the Moral Ideals* in 1876, and the second part of *Exploratio* in 1900. They are all "rough notes"—as the author himself describes the first on its title-page. They have no place in literature. Grote thought and wrote simply to get at the truth of things and without any view of impressing the public. A "belief in thought" upheld him: "a feeling that things were worth thinking about, that thought was worth effort[1]." He did not seek reputation as a philosophical writer, and he has not gained it. His direct influence has been restricted to a limited number of other thinkers, through whom it has passed to wider circles without any definite trace of its origin. His books are largely filled with criticism of contemporary writers. But none of the criticism is merely destructive: it aims always at elucidating the core of truth in other men's opinions, with a view to a comprehensive synthesis. Often it leads to bringing out important doctrines which, if not altogether new, are set in a new light. An instance of this is his whole doctrine of "the scale of sensation or knowledge," and, in particular, the elaboration and application of the distinction of two kinds of knowledge, or rather the twofold process of knowledge, which he formulated as the distinction between *acquaintance with* a thing and *knowing about* it. He sought to assign its due value

[1] *Exploratio Philosophica*, I, p. xxxv.

to phenomenalism or positivism, at the same time as he contended for the more complete view—" rationary " or idealist—which recognised in positivism " an abstraction from the complete view of knowledge[1]." Similarly, in moral philosophy, there was a science of virtue, or " aretaics," existing side by side with " eudaemonics," or the science of happiness. Fundamentally, his theory is a doctrine of thought: "the fact that *we know* is prior to, and logically more comprehensive than, the fact that what we know *is*." To be known, things must be knowable, or fitted for knowledge. " Knowledge is the sympathy of intelligence with intelligence, through the medium of qualified or particular existence[2]."

Religious philosophy in England was stimulated and advanced by the work of three men all born in the year 1805. These were Maurice, Newman, and Martineau. Frederick Denison Maurice had already an ecclesiastical career behind him when, in 1866, he succeeded Grote as professor at Cambridge. Of his numerous works only a few deal with philosophy; the most important of these, *Moral and Metaphysical Philosophy*, originally appeared in the *Encyclopaedia Metropolitana* in 1847 and is a historical sketch which is chiefly devoted to ancient thought. Maurice's influence was due to his personality more than to his books; and he was a social reformer and religious teacher rather than a philosopher. But his work, both in social reform and in religion, derived stimulus and direction from philosophical ideas. John Henry Newman was still less of a philosopher, though his *Grammar of Assent* propounds a theory of the nature and grounds of belief. More significant, however, is the appearance in Newman's work of the idea of development, which was beginning to transform all departments of thought. He had started in his thinking with the quasi-mechanical view of a fixed

[1] *Exploratio Philosophica*, II, p. 298.
[2] *Ibid.* II, 296.

norm of belief existing in the past; but for this (in his *Essay on the Development of Christian Doctrine*, 1846) he substituted the view of the church as an organism whose life and doctrine were in process of growth. The only philosopher among those who joined the Roman Church about the same time as Newman was William George Ward, who, in various articles, carried on a controversy with Mill concerning free-will and necessary truth. These and other articles by him were collected after his death and published as *Essays on the Philosophy of Theism* (1884).

Of much greater importance than these, in a philosophical regard, was James Martineau. His philosophy also was essentially religious philosophy; individual freedom and the being and presence of God were his fundamental certainties, and these he defended in many writings during his long life. His earlier works were mainly religious rather than philosophical, though, in a series of essays, he showed his power as a critic of materialism and naturalism, and gave an outline of the ethical views which he afterwards worked out in detail. He was eighty years old, or upwards, when his chief books appeared—*Types of Ethical Theory* (1885), *A Study of Religion* (1888), and *The Seat of Authority in Religion* (1890). The first of these is the most notable, and works out the original view of the moral criterion which had been previously indicated by him. It suffers from faulty arrangement, from the undue prominence given to the psychological factor in moral judgment, and from the incompleteness of the psychological analysis. As a whole it does not impress the reader. But, taken in detail, it is seen to be full of penetrating criticism and to be inspired by insight into the spiritual meaning of life. Traces of age are to be found only in its defective order and perhaps in its diffuseness; its style shows no marks of weariness: it is brilliant, pellucid, eloquent, rhetorical sometimes, and coloured by emotion, but never falling below the dignity of his theme. Martineau did not make any important advance in specu-

lative construction; he was not in sympathy with the idealist metaphysic that had risen to the ascendant in England even before his books were published; the ideas which he elucidated and defended were those which had been distinctive of spiritual thought for many centuries. In his criticisms, on the other hand, he did not restrict himself to the older forms of materialist and sensationalist doctrine; he was prompt to recognise the difference made by more recent scientific views, and he showed no lack of power or effectiveness in dealing with the claims of the philosophy of evolution.

V. Herbert Spencer and the Philosophy of Evolution

The publication of Darwin's *Origin of Species* in 1859 marks a turning-point in the history of thought. It had a revolutionary effect upon the view of the world held by educated men similar to that which had been produced more slowly, three centuries before, by the work of Copernicus; on philosophical ideas its influence may, perhaps, be better compared with that of the theory of mechanics chiefly due to Galileo. The latter contributed to philosophy the conception of nature as a mechanical system; Darwin contributed the conception of evolution and, owing largely to his influence, biological ideas gained greater prominence than mathematical in philosophical construction.

The acknowledged leader of the new movement in philosophy was Herbert Spencer. He was born at Derby on 27 April 1820, and his early training was as an engineer. This profession he relinquished at the age of twenty-five. He had previously, in 1842, contributed a series of letters on 'the Proper Sphere of Government' to *The Nonconformist*, and from 1848 to 1853 he acted as sub-editor of *The Economist*. In these years he wrote his book *Social Statics* (1850) and began the publication of longer essays in reviews, among which mention should

be made of the essays 'The Development Hypothesis' (1852), 'The Genesis of Science' (1854), and 'Progress: its law and cause' (1857). He also published *Principles of Psychology*, in one volume, in 1855. His essays show, even by their titles, that he was working towards a theory of evolution before he had any knowledge of Darwin's researches, the results of which were still unpublished. Then, in 1860, he issued his 'Programme of a System of Synthetic Philosophy,' on which he had been at work for some time, and to the elaboration of which he devoted his life. It is impossible to speak too highly of the single-minded purpose with which he carried out his task, in spite of inherent and extraneous difficulties. He continued to work, without haste and without rest, publishing *First Principles* in 1862, *Principles of Biology* (two volumes) in 1864—7, *Principles of Psychology* (two volumes) in 1870—2, *Principles of Sociology* (three volumes) in 1876—96 and *Principles of Ethics* (two volumes) in 1879—92. Besides these he designed a series of charts of *Descriptive Sociology*, which were compiled by his assistants, until the work had to be suspended from lack of funds; and he also produced smaller works on *Education* (1861), *The Classification of the Sciences* (1864), *The Study of Sociology* (1872), *The Man* versus *The State* (1884), and *Factors of Organic Evolution* (1887). Thus his perseverance enabled him to complete his scheme: except, indeed, that he omitted the detailed treatment of inorganic evolution, and thus gained the incidental advantage of avoiding the awkward problem of the origin of life. And he produced a considerable amount of subsidiary writing, including an *Autobiography* (published in 1904, the year after his death), which contains a minute and elaborate account of his life, character, and work.

Spencer's idea of philosophy is a system of completely coordinated knowledge—the sciences consisting of knowledge partially coordinated. In this sense his system is synthetic. It is a scheme in which everything is to find

its place, and is to be seen as a resultant of a single principle. His elaboration of this scheme approaches completeness, and, in this respect, his system stands by itself: no other English thinker since Bacon and Hobbes had even attempted anything so vast. The system itself fitted in admirably also with the scientific conceptions of the early Darwinians, and thus obtained wide currency in all English-speaking countries and, to a less extent, on the continent of Europe. Darwin hailed him as "our great philosopher," for he made evolution a universal solvent and not merely a means for explaining the different forms of plants and animals. At the same time, the support which it received from modern science seemed to give Spencer's philosophy a more secure position than that of those speculative systems of which the English mind tended to be suspicious.

The view of philosophy as science further coordinated brings Spencer's doctrine into line with positivism. He did not, however, entirely ignore the question of the nature of ultimate reality. Perhaps he was not much interested in questions of the kind, and he had certainly small acquaintance with previous speculation regarding them. But he had great skill in adapting current doctrines to his uses; and he found what he needed in the doctrine of the relativity of knowledge set forth by Hamilton and Mansel. On this he based his doctrine of the limits of knowledge. But he found, as others have found, that it was necessary to recognise something which lay beyond the sphere of exact knowledge. Hamilton had called this the sphere of belief; Spencer says that we have an indefinite consciousness of what he nevertheless calls the unknowable. The nature of this indefinite consciousness is not explained by him; yet its object is not treated by him, as one would expect it to be, as a mere blank; it is said to be "growing clearer"; the unknowable is constantly referred to as a power, and it is even asserted that it makes for the happiness of mankind. These inconsistencies soften

his paradox that religion and science can be reconciled by assigning to the latter the region of the knowable and restricting the former to the unknowable. On his view all that we know consists of manifestations of the inscrutable power behind phenomena; and these manifestations depend ultimately upon a single first principle—the persistence of force. Spencer's interpretation of this principle is somewhat flexible and has been attacked by mathematicians and physicists as loose and unscientific. Nevertheless Spencer holds that from it every other scientific principle must be deduced—even the law of evolution itself. He has provided a "formula," or rather definition, of evolution. He defines it as "an integration of matter and concomitant dissipation of motion; during which the matter passes from an indefinite incoherent homogeneity to a definite coherent heterogeneity; and during which the retained motion undergoes a parallel transformation." All phenomena of whatever kind are subject to this law. It is throughout conceived as a law of progress, which will issue in a highest state establishing "the extremest multiformity and most complete moving equilibrium." But this stage also cannot be permanent; and Spencer contemplates the history of the universe as a succession of cycles—"alternate eras of evolution and dissolution."

Spencer displayed much ingenuity in fitting organic, mental, and social facts into this mechanical framework. His early training as an engineer seems to have influenced his ideas. He built a system as he might have built a bridge. It was a problem of strains and of the adaptation of material. Regarded thus, the whole problem was mechanical and had to be solved in terms of matter and motion. His purpose was, as he says, "to interpret the phenomena of life, mind, and society in terms of matter, motion, and force." Hence, life, mind, and society are treated as stages of increasing complexity in phenomena of the same kind, and—so far as this treatment is adhered

to—the characteristic functions of each stage are left unexplained. But the method of treatment is supplemented by another in which the facts are dealt with more directly. This is seen especially in psychology, where the "subjective aspect" is recognised with only a suggestion of an attempt to deduce it from the objective aspect. Spencer was a keen observer and fertile in his reflections on what he observed. His power of coordinating facts may perhaps be seen at its best in his *Psychology* and *Sociology*. His generalisations may be often unsound; but, if we compare these works with earlier and then with later treatises on the same subjects, it is not possible to deny the great stimulus to thought which they gave.

Spencer himself set the greatest store upon his work on ethics. To it, he said, all his other work led up; and this induced him to issue the first part of it—called *The Data of Ethics*—out of due order and before his *Sociology* was completed. The first part is undoubtedly the most instructive section of the book as ultimately finished. The facts of morality are regarded as belonging to the same order of evolution as the facts dealt with in previous volumes, being only more special and complicated; full consideration is given to their biological, sociological, and psychological aspects; the respective rights of egoism and of altruism are defended; and the ethics of evolution is distinguished from the utilitarian ethics not by having some other ultimate end than happiness but by its different method and working criterion. Where the author fails is in giving any adequate proof for his assumption that evolution tends to greatest happiness—an assumption upon which his ethical theory depends. And, like all the exponents of the ethics of evolution who have followed him, he does not distinguish clearly between the historical process explained by the law of evolution and the ground of its authority for conduct—if such authority be claimed for it. He finds the standard for right conduct in what he calls "absolute ethics," by which he means a description

of the conduct of fully-evolved man in fully-evolved surroundings. In this state there will be complete adaptation between the individual and his environment; so that, even if action is still possible, no choice of better or worse will remain. The system of absolute ethics is worked out in the succeeding parts of the work, but with very meagre success. Indeed, at the end, the author is fain to admit that evolution had not helped him to the extent he had anticipated.

In his ethical, and still more in his political, writings we see the supreme value set by Spencer on the individual, and the very restricted functions which he allowed to the state or other organised community of individuals. Perhaps the point is not easy to reconcile with the doctrine of evolution as otherwise expounded by him. But there were two things which seem to have been more fundamental in his thought than evolution itself. One of these has been already referred to as the group of ideas which may be described as mechanism and which is exhibited both in the basis and in the plan of his whole structure. The other is his strong bias towards individualism. If the former may plausibly be connected with his training as an engineer, the origin of the latter may, with still greater probability, be traced to the doctrines current in that circle of liberalism in which he was nurtured. He wrote political essays and a political treatise (*Social Statics*) before his mind seems to have been attracted by the conception of evolution; and, although in some points he afterwards modified the teaching of that treatise, its essential ideas and its spirit characterise his latest writings on political theory. It showed ingenuity rather than insight on his part to bring them within the grasp of the evolution doctrine; but, in spite of many criticisms, he held steadfastly to his doctrine of what has been called "administrative nihilism."

No other writer rivalled Spencer's attempt at a recon-

struction of the whole range of human thought. But many of his contemporaries preceded or followed him in applying the new doctrine of evolution to the problems of life, mind, and society. Some of these were men of science, who felt that an instrument had been put into their hands for extending its frontiers; others were primarily interested in moral and political questions, or in philosophy generally, and evolution seemed to provide them with a key to old difficulties and a new view of the unity of reality. Darwin himself, though he never posed as a philosopher, was aware of the revolutionary effect which his researches had upon men's views of the universe as a whole; what was more important, he made a number of shrewd and suggestive observations on morals and on psychology in his *Descent of Man* and also in his later volume *The Expression of the Emotions*. But his contributions were only incidental to his biological work. Others, writing under the intellectual influence which he originated, were concerned more directly with problems of philosophy.

Among these writers the first place may be given to George Henry Lewes, although in his earlier works he was influenced by Comte, not by Darwin. Lewes was a man of marvellous literary versatility as essayist, novelist, biographer, and expositor of popular science. This versatility also marks his work in philosophy. At first Comte's influence was supreme. His philosophical publications began with *The Biographical History of Philosophy* (1845—6), a slight and inaccurate attempt to survey a vast field, and apparently designed to show that the field was not worth the tillage; later editions of this work, however, not only greatly increased its extent and removed many blemishes but showed the author's ability to appreciate other points of view than that from which he had started. After an interval he produced books entitled *Comte's Philosophy of the Sciences* (1853), and *Aristotle: a chapter from the history of science* (1864). But, for a long time, Lewes had been at work on investigations of a more

constructive and original kind, partly philosophical and partly scientific, the results of which were not fully published at the time of his death in 1878. These results were contained in *Problems of Life and Mind*, the first two volumes of which, entitled *The Foundations of a Creed*, appeared in 1874—5, and the fifth and final volume in 1879.

In this work the author has advanced far from his early Comtism, and it shows in many respects a much more adequate comprehension of philosophical problems than can be found in Spencer, whose knowledge of the history of thought was limited and sketchy, and whose criticisms of other philosophers were nearly always external—in the worst sense of the word. But Lewes had fitted himself for writing, not only by original researches in physiology and related branches of science, but also by a considerable and sympathetic study of modern philosophy. He is thus able to appeal to other readers than those who have limited their intellectual enquiries to a predetermined range. He rejected as 'metempirical' what lay beyond possible experience; but he would not, like Spencer, affect to derive comfort from the unknowable. There was room for metaphysics, he thought, as the science of the highest generalities, or the codification of the most abstract laws of cause, and he sought to transform it by reducing it to the method of science. In working out this aim, he relied on and illustrated the distinction between immediate experience or 'feeling' and the symbols or conceptual constructions used for its codification. He also criticised the current mechanical interpretation of organic processes, holding that sensibility was inherent in nervous substance. And he was one of the first to emphasise the importance of the social factor in the development of mind and to exhibit its working. He defended the conception of the 'general mind,' not as expressing a separate entity, but as a symbol; and, for him, the individual mind also was a symbol. The problems with which he dealt were partly general—

enquiries into knowledge, truth, and certitude—partly psychophysical and psychological. His *Problems* shows the prolonged and eager reflection of an active mind. In it the multifarious writings of many years were reduced and expanded. But it may be doubted whether the reduction was carried far enough. There is a good deal of repetition, but hardly a central argument; the separate discussions are often important and suggestive; but the fundamental position regarding subject and object does not seem to be adequately defended or even made perfectly clear. Lewes had more philosophical insight than Spencer, but he had not the latter's architectonic genius.

Thomas Henry Huxley, the distinguished zoologist and advocate of Darwinism, made many incursions into philosophy, and always with effect. From his youth he had studied its problems unsystematically; he had a way of going straight to the point in any discussion; and, judged by a literary standard, he was a great master of expository and argumentative prose. Apart from his special work in science, he had an important influence upon English thought through his numerous addresses and essays on topics of science, philosophy, religion, and politics. Among the most important of his papers relevant here are those entitled 'The Physical Basis of Life' (1868), and 'On the Hypothesis that Animals are Automata' (1874), along with a monograph on Hume (1879) and the Romanes lecture *Ethics and Evolution* (1893). Huxley is credited with the invention of the term 'agnosticism' to describe his philosophical position: it expresses his attitude towards certain traditional questions without giving any clear delimitation of the frontiers of the knowable. He regards consciousness as a collateral effect of certain physical causes, and only an effect—never also a cause. But, on the other hand, he holds that matter is only a symbol, and that all physical phenomena can be analysed into states of consciousness. This leaves mental facts in the peculiar position of being collateral effects of

something that, after all, is only a symbol for a mental fact; and the contradiction is left without remark. His contributions to ethics are still more remarkable. In a paper entitled 'Science and Morals' (1888), he concluded that the safety of morality lay "in a real and living belief in that fixed order of nature which sends social disorganisation on the track of immorality." His Romanes lecture reveals a different tone. In it the moral order is contrasted with the cosmic order; evolution shows constant struggle; instead of looking to it for moral guidance, he "repudiates the gladiatorial theory of existence." He saw that the facts of historical process did not constitute validity for moral conduct; and his plain language compelled others to see the same truth. But he exaggerated the opposition between them and did not leave room for the influence of moral ideas as a factor in the historical process.

Another man of science, William Kingdon Clifford, professor of mathematics in London, dealt in occasional essays with some central points in the theory of knowledge, ethics, and religion. In these essays he aimed at an interpretation of life in the light of the new science. There was insight as well as courage in all he wrote, and it was conveyed in a brilliant style. But his work was cut short by his early death in 1879, and his contributions to philosophy remain suggestions only.

It was natural that men of science with a philosophical turn of mind should be among the first to work out the more general consequences of the theory of evolution. But the wide range which the theory might cover was fairly obvious, and was seen by others who approached philosophy from the point of view of studies other than the natural sciences. Foremost among these was Leslie Stephen, a man of letters keenly interested in the moral sciences. The portion of his writings which bear upon philosophy is small only in relation to his total literary output. His *History of English Thought in the Eighteenth*

Century (1876) places the philosophers and moralists in their due position in the whole literary activity of the period, and is penetrating and usually just in its estimate of their work. A further stage of the same history—*The English Utilitarians* (1900)—was completed towards the end of his life. His own independent contribution is given in *The Science of Ethics* (1882). After Spencer's *Data*, this is the first book which worked out an ethical view determined by the theory of evolution. As such it is significant. The author had sat at the feet of John Stuart Mill; he had eagerly welcomed Darwin as an ally of the empirical and utilitarian creed; but he came to see that more extensive changes were necessary. Spencer's compromise between hedonism and evolutionism failed to satisfy him, and he found the ethical bearing of evolution better expressed by the conception of social vitality than by that of pleasure. The great merit of the work consists in its presentation of the social content of morality in the individual mind as well as in the community; but it does not sufficiently recognise the distinction between the historical process traced by the evolution theory and the ethical validity which evolution is assumed to possess.

The transformation of the biological sciences by the theory of evolution was connected with a wider movement, which consisted in the greatly extended use of the historical method in explaining the nature of things. This applies chiefly to the social sciences. It is to be remembered that both Darwin and Wallace owed the suggestion of their hypothesis of natural selection to a work on social theory. The underlying doctrine was, simply, that facts were to be understood by tracing their origins and historical connections. How far this historical understanding could take the enquirer became the point at issue between what may be called the evolution philosophy and its critics: it may be expressed in the question whether or not origin determines validity. It was only gradually,

however, that the point of controversy became clear; and meanwhile the application of the historical method vastly aided the understanding of the social order. In this reference the treatise entitled *Ancient Law* (1861) by Sir Henry Maine marks an epoch in the study of law and institutions, and it had a much wider influence upon thought generally by furthering the use of the method which it employed. An early example of the application of the same method in economics may be found in the series of essays by Thomas Edward Cliffe Leslie, republished as *Essays in Political Economy* (1888); and the historical side of economics has subsequently been exhaustively worked.

Walter Bagehot's *Physics and Politics* (1869) is still more closely connected with the doctrine of evolution. It is described on the title-page as 'thoughts on the application of the principles of natural selection and inheritance to political society.' Luminous and suggestive though these studies are, it cannot be said that the influence of the theory of evolution expresses the leading characteristic of Bagehot's mind, especially as shown in his other political and economic works—*The English Constitution* (1867), *Lombard Street* (1873), and *Economic Studies* (1880). It was his insight into the actual forces, especially the human forces, at work that chiefly distinguished his treatment. Whereas even Mill looked upon economic and political processes as due to the composition of a few simple forces such as desire of wealth and aversion from labour, Bagehot knew the actual men who were doing the work, and he recognised the complexity of their motives and the degree in which they were influenced by habit, tradition, and imitation. In this way he gave a great impulse to realistic study, as contrasted with the abstract method of the older economics and politics.

VI. Henry Sidgwick and Shadworth Hodgson

These writers had not much in common beyond the two points which have led to their being placed together here. They both saw that evolution was not an 'open sesame' to the secrets of philosophy, and neither owed allegiance to the idealist movement which rose to prominence in their time. They were probably the ablest and most influential writers who made independent advances on lines more closely connected with the older English tradition.

Sidgwick taught philosophy for many years at Cambridge, and held the chair of moral philosophy there from 1883 until 1900, the year of his death. His reputation as a philosophical writer was made by his first book, *The Methods of Ethics* (1874). He afterwards published treatises on a similar scale on political economy and on politics; and, after his death, various occasional articles were issued in collected form, and a considerable series of books was compiled from his manuscripts, dealing with general philosophy, with contemporary ethical systems, and with political constitutions. Within certain limits Sidgwick may be regarded as a follower of John Stuart Mill, at least in ethics, politics, and economics. In these subjects he took Mill's views as the basis of his own criticisms and reflections, and he accepted the utilitarian criterion. At the same time he gave much more weight than Mill had done to the intellectualist tradition in philosophy. He saw that the empirical philosophy was based on conceptions which it was unable to justify by its customary method of tracing their origin in experience. This did not lead, however, to any agreement with Kant's analysis of knowledge. He was an adverse and somewhat unsympathetic critic of the Kantian theory. He inclined, rather, to a return to the 'natural realism' of Thomas Reid, on the question of the knowledge of external reality;

and his ethical doctrine includes a synthesis of the views of Clarke and Butler with those of Mill.

His first book remains his most striking contribution to philosophy and the most accurate index of his philosophical attitude. In spite of his utilitarian sympathies, its starting-point and most fundamental ideas show the influence of a different type of thought. He starts with the fundamental notion of 'ought' or duty, and argues that enquiries into its origin in our consciousness do not affect its validity. The knowledge that there is something right or rational to be done depends, in the last resort, upon an intuition or immediate view of what is right or reasonable. All the old arguments of the utilitarians are swept away; the analysis of conduct into pursuit of pleasure is shown not only to be itself incorrect, but to be irreconcilable with the acceptance of general happiness as the ethical end. His own utilitarianism is based upon a new synthesis of intuitionism and empiricism. Here enters his central doctrine of the 'axioms of the practical reason.' These do not prescribe any concrete end as good —that has to be determined in another way; but they are formal principles eternally valid whatever the nature of goodness may prove to be. To these formal principles are given the names prudence, benevolence, and justice; but they include much less than is usually covered by these terms and may, perhaps, be adequately summed up in the statement that neither the time at which, nor the person by whom, a good is enjoyed affects the degree of its goodness. From the distinction and yet equal validity of the axioms of prudence and benevolence, Sidgwick's ethical theory terminates in a doctrine of 'the dualism of the practical reason.' It would appear, however, that this dualism was not adequately tested by him and that it really arises from the ambiguity of the term prudence. Prudence may mean either "regard for one's own good on the whole" or (what is not the same thing) the principle that "hereafter as such is neither less nor more

valuable than now." Both forms of statement are used by Sidgwick; but only the latter has a claim to express an absolute ethical principle; and it is not inconsistent with the axiom of benevolence. The other side of his utilitarianism—the reduction of goodness to terms of pleasure—is carried out by analysing conscious life into its elements and showing that each in its turn (except pleasure), when taken alone, cannot be regarded as ultimate good. This analytic method is characteristic of Sidgwick's thinking, as it was of that of most of his predecessors—intuitionist as well as empirical. It rests on the assumption that the nature of a thing can be completely ascertained by examination of the separate elements into which it can be distinguished by reflection—an assumption which was definitely discarded by the contemporary school of idealists, and on which the evolutionist writers also do not seem to have relied.

As was natural, therefore, Sidgwick did not produce a system of philosophy. He made many suggestions towards construction, but, in the main, his work was critical. He was severely critical of the attempts at speculative construction made in his day, and he carried on some controversies in which his subtlety and wit had full play: neither Spencer nor Green was his match in dialectics. It was not, however, of systems and theories only that he was a great critic. His powers are seen at their highest when he analysed and described the moral opinions of ordinary men, not as they are reflectively set down in philosophical books, but as they are expressed in life, compact of reason and tradition, fused by emotion and desire. The third book of his *Methods of Ethics* consists, in large part, of an examination of the morality of commonsense. It is an elucidation and sifting of the ideas under which men act, often without clear consciousness of them; and it shows the sympathetic apprehension of a mind which shares the thoughts it describes and can yet see them in perspective and sum up their significance. Both

the excellence of the matter and the distinction of the style should give at least this portion of his work a permanent place in literature.

Shadworth Hodgson's life was an example of rare devotion to philosophy. He had no profession and filled no public office, but spent his time in systematic reflection and writing; and his long life gave him the opportunity of reviewing, confirming, and improving upon his first thoughts. There were two periods in his activity. In the former of these he published three books: *Time and Space* in 1865, *The Theory of Practice* in 1870, and *The Philosophy of Reflection* in 1878. Shortly thereafter he was instrumental in founding 'the Aristotelian Society for the systematic study of philosophy,' and he remained its president for fourteen years. This led to contact with other minds who looked at the same subjects from different points of view. He read many papers to the society, which were published in pamphlet form and in its *Proceedings*, and he built up his own system afresh in the light of familiar criticism. It took final form in *The Metaphysic of Experience*, a work of four volumes published in 1898.

As an analysis of experience, Hodgson's philosophy falls into line with a characteristic English tradition. It agrees with this tradition also in taking the simple feeling as the ultimate datum of experience. But, even here, and wherever there is experience, there is a distinction to be drawn—not the traditional distinction between subject and object, but that between consciousness and its object. There are always two aspects in any bit of experience—that of the object itself or the objective aspect, and that of the awareness of it or the subjective aspect; and these two are connected by the relation of knowledge. The sciences are concerned with the objective aspect only; philosophy has to deal with the subjective aspect, or the conscious process which is fundamental and common to all the various objects. Beyond this conscious reference

there is nothing. "The *mirage* of absolute existence, wholly apart from knowledge, is a common-sense prejudice[1]." Consciousness is commensurate with being; all existence has a subjective aspect. But this doctrine, he holds, is misinterpreted when mind and body are supposed to interact or when mental and bodily facts are regarded as parallel aspects of the same substance. In psychology Hodgson may be called a materialist, unfit as that name would be to describe his final philosophical attitude. Ideas do not determine one another, nor does desire cause volition; the only real condition known to us is matter. And yet matter itself is a composite existence; it can be analysed into empirical percepts; and therefore it is itself conditioned by something which is not material: the very term *existence* implies relativity to some ort of consciousness or other. This is the conclusion of the general analysis of experience. Of the unseen world which lies beyond the material part of the world we cannot, he contends, have any speculative knowledge. But the ethical judgment and our own moral nature bring us into practical relation with that unseen world and thus permit a positive, although not a speculative, knowledge of it[2]. In this way, in the final issue of his philosophy as well as in its fundamental positions, Hodgson regards himself as correcting and completing the work of Kant.

VII. Idealists

The latter half of the nineteenth century was marked by the work of a number of writers who were influenced by the speculations which, in Germany, had turned the results of Kant's criticism into a direction which he had not anticipated. This influence, shared by them all, and their constant controversy with current empirical philosophy united these writers into what may be termed a school; and this school is sometimes described as neo-

[1] *Metaphysic of Experience*, I, p. 17. [2] *Ibid.* IV, p. 401.

Kantian, more commonly as Hegelian or neo-Hegelian. But its members describe it simply as idealism, though it is an idealism of a form new in English thought. Before them Kant's speculative successors had not obtained currency in England, unless perhaps in a slight measure through some of the utterances of Coleridge; and the powerful influence of Hamilton's criticism had been almost sufficient to put a ban on what he called "the philosophy of the unconditioned."

The first important work of the new movement was *The Institutes of Metaphysic* (1854) by James Frederick Ferrier, professor at St Andrews. Before this date he had written a number of philosophical articles, and in particular a series of papers entitled 'The Philosophy of Consciousness,' which showed the trend of his thinking. After his death these were collected and published together along with a series of lectures as *Lectures on Greek Philosophy and other philosophical remains* (1866). As a historian of philosophy Ferrier did not pretend to exceptional research; but he had a remarkable power of entering into the mind of earlier thinkers and of giving a living presentation of their views. The history of philosophy was, for him, no mere record of discarded systems but "philosophy itself taking its time." He was a sympathetic student also of the German philosophers banned by his friend Hamilton. It is difficult to trace any direct influence of Hegel upon his own doctrine, and indeed he said that he could not understand Hegel. But both his earlier and his later writings have an affinity with Fichte —especially in their central doctrine: the stress laid on self-consciousness, and its distinction from the 'mental states' with which the psychologist is concerned. This doctrine connects him with Berkeley also. He was one of the first to appreciate the true nature of Berkeley's thought, as not a mere transition-stage between Locke and Hume, but as a discovery of the spiritual nature of reality.

The philosophy which he worked out in *The Institutes of Metaphysic* is, however, strikingly original. He claimed that it was "Scottish to the core." But it is very different from the traditional Scottish philosophy. It disclaims all connection with psychology. He even formulates a false and psychological theorem as the counterpart of each true and metaphysical theorem. And this reiterated opposition, it must be confessed, grows a little wearisome, and can be excused only by the backward state of psychology, and its confusion with philosophy, at the time when the book was written. Further, the Scottish philosophy relied on intuition or immediate apprehension of reality; Ferrier's method is that of rational deduction from a first principle. Philosophy is "reasoned truth," he says; and "it is more proper that philosophy should be reasoned, than that it should be true." Unfortunately he takes Spinoza's method as his model, though he does not follow the model in all details. There is no array of definitions, axioms, and postulates, but only propositions, each deduced from the preceding. Thus a heavy weight is thrown on the first proposition of the series. This proposition formulates the primary law or condition of all knowledge, and is stated in the words, "Along with whatever any intelligence knows it must, as the ground or condition of its knowledge, have some cognisance of itself." What follows is little more than the elaboration of this statement. Ferrier has not only an epistemology, or theory of knowledge, but also an agnoiology, or theory of ignorance, the main doctrine of which is that we can be ignorant only of what can possibly be known. Through this, in his ontology or theory of being, he reaches the conclusion that absolute existence is "a supreme and infinite and everlasting mind in synthesis with all things." Ferrier's writings had, and continue to have, a considerable reputation, yet a reputation hardly commensurate with their philosophical insight and perfect style. Perhaps the formalism of his method counteracted the lucidity of the

thought. Soon after his death (1864) English philosophy came under the influence of the more comprehensive genius of Hegel.

The first English work directly due to the influence of Hegel was *The Secret of Hegel* (1865) by James Hutchison Stirling. Educated as a physician, he first heard of Hegel in accidental conversation. Hegel was described as the reconciler of philosophy and religion, and Stirling, fascinated by the thought, soon afterwards threw up his practice, settled for some years on the continent—in Germany and in France—and devoted himself with ardour to philosophical study, especially to the mastery of Hegel's system. He returned to publish the results of his work; and, although he wrote many books afterwards—especially an important *Text-book to Kant* (1881)—*The Secret of Hegel* remains his greatest work. It consists of translation, commentary, introduction, and original discourse; and it shows the process by which the author approached and grappled with his subject. Sometimes it is as difficult as its original; more frequently it illuminates Hegel both by a persistent effort of thought and by occasional flashes of insight. Its style is characteristic. Altogether lacking in the placid flow of the academic commentator, and suggesting the influence of Carlyle, it is irregular but forceful and imaginative, a fit medium for the thinking which it expressed. What Stirling meant by the 'secret' of Hegel was presumably the relation of Hegel's philosophy to that of Kant. In Hegel's construction he found a method and point of view which justified the fundamental ideas of religion, and, at the same time, made clear the one-sidedness of the conceptions of the "age of enlightenment," at the end of which Kant stood, still hampered by its negations and abstractions. And Stirling's favourite and most lively criticisms were directed against the apostles of the enlightenment and their followers of the nineteenth century.

Stirling was first in the field, and, although cut off from any academic position, he continued to exercise a strong intellectual influence. Independently of him, and soon after he began to publish, the influence of Hegel was shown by a number of other writers, most of whom were connected with Oxford or Glasgow. Like Stirling, they brought out the ideas in Kant which pointed to Hegel's view; but, on the other hand, most of them paid little attention to, or altogether disregarded, the details of the Hegelian method. Of these writers one of the earliest and, in some respects, the most important was Thomas Hill Green, professor of moral philosophy at Oxford. His work was constructive in aim and, to a large extent, in achievement; and it was inspired by a belief in the importance of right thinking for life. The latter characteristic Green shared with most of the writers who sympathised with his philosophical views, and it accounted for much of the enthusiasm with which these views were received. His constructive work, however, was preceded by a very thorough criticism. He saw that it was necessary, first of all, to expose the assumptions and inconsistencies involved in the systems of Mill and Spencer, and to show that these systems were derived from the philosophy of Hume. Green's dissection of the latter appeared in 1874 in the form of two elaborate 'introductions' to a new edition of Hume's *Treatise*. This work, as he confesses, was "an irksome labour." He deals at length with Locke and Hume, more shortly with Berkeley and some of the moralists; and he follows these writers from point to point of their argument with unwearying, though sometimes wearisome, persistence. But he was an unsympathetic critic. Locke and Hume were rather careless of the niceties of terminology, and some of the contradictions which he finds are perhaps only verbal, and might have been avoided by a change of expression. Enough remain, however, amply to justify his accusation that their thought was full of incoherences; and, if these had been

brought into clearer relief, and distinguished from merely verbal inconsistencies, the effectiveness of his criticism might have been increased. But he did succeed in showing "that the philosophy based on the abstraction of feeling, in regard to morals, no less than to nature, was with Hume played out." He appealed to "Englishmen under five-and-twenty" to close their Mill and Spencer and open their Kant and Hegel; and this appeal marks an epoch in English thought in the nineteenth century.

In the years following the 'introductions' to Hume, Green published some occasional articles on philosophical topics. He also exerted a great influence by his academic lectures, the more important of which are printed in his collected *Works* (three volumes, 1885—8). His greatest book, *Prolegomena to Ethics*, appeared in 1883, the year after his death. This book does not profess to be a system either of metaphysics or of ethics; but it supplies the groundwork for such a system. It is a vindication of the spiritual nature of the world and of man. Neither nature nor man can be constructed out of the sensations or feelings which formed the data of the empirical philosophers. Our knowledge "presupposes" that there is a connected world to be known. The relations involved, inexplicable on empirical methods, can be understood only as implying the action of mind. "The action of one self-conditioning and self-determining mind" is, therefore, a postulate of all knowledge, and our knowledge is a "reproduction" of this activity in or as the mind of man. In the same way our moral activity is a reproduction in us of the one eternal mind. Under all the limitations of organic life and of the time-process generally, the mind of man carries with it the characteristic, inexplicable on the theory of naturalism, of "being an object to itself." This position is not to be established by deductive or inductive methods; in this sense it cannot be proved. But it is a point of view from which—and from which alone—we can understand both the world and ourselves and see

how it is that "we are and do what we consciously are and do." In the later books of his *Prolegomena* this doctrine is applied to the interpretation of the history of the moral life and of moral ideas; and this portion of his work shows his powers as a writer at their best. In other writings the same conception is applied to social and religious questions. It is conspicuous in his *Lectures on the Principles of Political Obligation*, where he maintains that will, not force, is the basis of the state, and gives a fresh reading of the doctrine of the 'general will.'

In his metaphysics, Green does not follow the method of Hegel's dialectic; and in his reading of history there is no trace of the Hegelian theory that development in time follows the same stages as logical development. The gradual steps by which the realisation of reason or of self is brought about in the time-process are not investigated. Only, it is assumed that the process is purposive and that history is the "reproduction" of the eternal mind. How it comes about that error and moral evil affect the process is not explained, and the metaphor of "reproduction," as well as the whole relation of the time-process to eternal reality, is left somewhat vague.

Of the numerous writers who represent a type of thought similar to Green's in origin and outlook only a few can be mentioned here. In 1874, the year in which Green's 'introductions' to Hume were published, there appeared also *The Logic of Hegel*, translated from the latter's *Encyklopädie* by William Wallace, who was afterwards Green's successor in the chair of moral philosophy at Oxford. A second edition of this work, in which the introductory matter was considerably extended, was issued in 1892; and this was followed, in 1894, by *Hegel's Philosophy of Mind*, and in 1898 (after the author's death), by *Lectures and Essays on Natural Theology and Ethics*. Wallace devoted himself more directly than his associates to the elucidation of Hegel's thought; but it may be doubted whether he himself adhered any more closely than they

did to the details of the dialectic. The prolegomena and introductory essays, by which his translations were prefaced, are not merely explanatory of difficulties. They have often the character of original interpretations; they approach the subject from different points of view and show a rare power of selecting essential factors. Wallace had wide intellectual sympathies and found matter of agreement with philosophers of different schools; but all, in his hands, led towards a central idealism. His work consisted in pointing out the various avenues of approach to the temple of idealism, rather than in unveiling its mysteries.

In *An Introduction to the Philosophy of Religion* (1880), John Caird, principal of the University of Glasgow, produced a work, original in manner, but essentially Hegelian in doctrine. A similar character marked all the work of his younger brother, Edward Caird, professor of moral philosophy at Glasgow, and afterwards master of Balliol College, Oxford. The influence of Edward Caird rivalled that of his friend Green, and their teaching was in fundamental agreement. Caird, however, had a facility of literary expression such as Green did not possess; he was also more inclined to attack questions by the method of tracing the historical development of thought. His first important work was *A Critical Account of the Philosophy of Kant* (1877), which was superseded by *The Critical Philosophy of Immanuel Kant* (two volumes, 1889). This work is a triumph of philosophical exposition and criticism, in the interests of a type of thought different from Kant's own. Based upon a mastery of the whole range of Kantian scholarship, it brings into relief the leading ideas by which Kant himself was guided, and, through criticism of his arguments, gives an interpretation of it as tending, when consistently worked out, towards a system of speculative idealism. A brilliant and sympathetic exposition is contained in his monograph on Hegel (1883). His Gifford lectures, *The Evolution of Religion* (1893), deal less than

his other works with the criticism of philosophers; they are a study of the nature of religion, especially as exhibited in the development of the Christian faith.

The writings of Francis Herbert Bradley gave a new direction to the idealistic movement of the nineteenth century. His achievement has been differently viewed: sometimes as being the finest exposition of idealism, sometimes as marking its dissolution. His first philosophical work, *Ethical Studies*, appeared in 1876, about the same date as the first books of Green and Caird. It is full of brilliant criticism of conventional ethical ideas. The manner was different; but the doctrine seemed to agree with that which was beginning to be taught in the lecture-rooms. Here also "self-realisation," that is, the realisation of the "true self," was the watchword. His *Principles of Logic*, published in 1883, broke new ground and showed also a further development of the dialectical manner. The inadequacy of the "particular," the implication of the "universal" in all knowledge, were familiar enough, but the defects of empirical logic had never been exposed with such depth of insight, such subtlety of reasoning, such severity of phrase. The work was a triumph for the idealistic theory of knowledge. It is noteworthy that these two books have never been reprinted in England, presumably because the author became more or less dissatisfied with their teaching. There is, at least, a difference of emphasis in the teaching of his next and greatest work, *Appearance and Reality* (1893), which has been allowed to pass through several editions.

This remarkable book has probably exerted more influence upon metaphysical thinking in English-speaking countries than any other treatise of the last thirty years. But no summary can convey a clear idea of its teaching. The conceptions of popular thought and of metaphysics alike are in it subjected to detailed, relentless criticism. Even the distinction, within the book, between the chapters devoted to "appearance" and those described as

" reality " seems artificial, for everything is found to be riddled with contradictions. And these contradictions all belong to our thought because it is relational. Green had held that experience requires relations, and had argued thence to the need for a relating mind as the principle of reality. Bradley too insists that " for thought what is not relative is nothing " but he draws the very different conclusion that " our experience, where relational, is not true." Of this doctrine all the brilliant disquisitions that follow are applications, with the exception of the author's own assertions about the absolute, which however, being relational, must also be affected by the same vice of contradiction. If his argument about relations is valid, the idealism of Green and Caird falls to the ground. His method is more akin to Hegel's than theirs was; but he also ignores the Hegelian triad; he does not attempt any consecutive evolution of the categories; even his doctrine of " degrees of reality " is more Spinozistic than Hegelian. As a whole, the book is a great original achievement—a highly abstract dialectical exercise, in which the validity of every argument depends upon the fundamental position that relations necessarily involve contradiction. A later book, *Essays on Truth and Reality* (1914), deals in great part with controversies which belong to the twentieth century; without giving up the positions of the earlier work, it is much less negative in its tendency and more devoted to the discovery of elements of truth than to the exposure of contradictions.

The work of Bernard Bosanquet has affinity on fundamental points with that of Bradley. Before the turn of the century he had made his mark by a comprehensive treatise on *Logic* (1888) and by a book on the *Philosophical Theory of the State* (1899) as well as by other writings. But the full development of his philosophical views is contained in two books (*The Principle of Individuality and Value*, 1912; *The Value and Destiny of the Individual*, 1913) which belong to the twentieth century.

VIII. Other Writers

In the latter part of the nineteenth century there were other philosophical tendencies at work than those already mentioned. There were idealist writers whose idealism was of a different type, resembling Berkeley's rather than Hegel's, and who are sometimes called personal idealists; there was a movement of reaction from the type of idealism last described in the direction of philosophical realism or naturalism; and there were indications of the new movements of thought which have characterised the early years of the twentieth century.

Among the writers classed as personal idealists may be counted Alexander Campbell Fraser. His philosophical career, as student, professor, and thinker, began before the Victorian era and lasted into the present reign. He was a pupil of Hamilton at Edinburgh, was for ten years professor of philosophy in New College there and succeeded to the university chair on Hamilton's death in 1856. His first book, *Essays in Philosophy*, was published in 1856, his last, a small monograph entitled *Berkeley and Spiritual Realism*, in 1908. Apart from minor works, among which special mention should be made of his monographs on Locke (1890) and Berkeley (1881), he is best known as the editor of the standard editions of Berkeley's *Works* (1871) and of Locke's *Essay* (1894), and as the author of Gifford lectures on *The Philosophy of Theism* (1896). He also wrote an interesting and valuable account of his life and views entitled *Biographia Philosophica* (1904).

For a great many years, Fraser, Caird, and Bain powerfully affected philosophical thought in Scotland through their university teaching. Owing to the position of philosophy in the academic curriculum, their influence upon the wider intellectual life of the country was almost equally great, though less easy to trace with any exactness. From Bain, his pupils learned precision in thinking and an

interest in psychology as a science, but a somewhat limited comprehension of philosophical problems. Caird gave an insight into the history of thought and provided a point of view from which the world and man's life might be understood; many of his pupils have shown in their writings that they had learned his language and were able to develop and apply his ideas. Fraser did not teach a system or found a school; he awakened and stimulated thought, without controlling its direction; he called forth in his hearers a sense of the mysteries of existence, and he encouraged in many the spirit of reflection. He had no system; but his thought was essentially constructive, though the construction was based on an almost Humean scepticism. On one point, however, he never yielded to sceptical analysis—the reality of the self as conscious activity. He found the same thought in Berkeley, and he may almost be said to have rediscovered Berkeley for modern readers. Of the world beyond self he could find no theory which could be satisfactorily established by strict reasoning. But he saw (as Hume saw in his first work) that science has its assumptions as well as theology. In particular, he looked upon the postulate of uniformity as an act of moral faith in the rationality of the universe, and it was as a "venture of faith" that he interpreted the universe as grounded in the reason and goodness of God.

Philosophy was the supreme interest of Simon Laurie, though his career as an educationalist restricted his pursuit of that interest to hours of leisure. In the middle of the sixties he published two contributions to ethics. Nearly twenty years later he issued, under the pseudonym of Scotus Novanticus, two books—one on metaphysics, the other on ethics: the former being described by him as "a return to dualism." When, after another twenty years, the fruits of his reflection were garnered in two volumes of meditations entitled *Synthetica* (1906), his system might still be called, as it has been called, natural realism.

But the realism is " transfigured " by the vision of an Absolute which is in all things and through which they form a unity. His process of thought is a dialectic—not uninfluenced by Hegel, yet differing from his in method and results. It is less formal and systematic—it is not the slave of a triad. The starting point is individual experience—"the feeling of a 'somewhat' which is *not* the being that feels." Here is subject-object; and criticism of it forms his method of advance. The whole argument rests on a criticism of knowledge—from pure feeling, through ascending planes or levels, until the plane of reason is reached, "and passes again into feeling as now supra-rational intuition." The absolute is always given, but it is apprehended with increasing clearness though never perfectly. " The God whom we have been trying to unveil does not ' transcend ' experience, as Kant would say: He is the presupposition and possibility of all experience, and also its end and sum."

The most important work of living writers belongs in most cases to the present century. Amongst them only one other will be mentioned here, because of the influence which he had upon philosophy even before the end of the Victorian era.

The writings of James Ward, professor at Cambridge, are partly psychological, partly metaphysical. His article on ' Psychology,' which was published in the ninth edition of the *Encyclopaedia Britannica* in 1886, exercised an influence upon psychological enquiry which is probably without precedent among writings which were not published independently. It marks a definite break with the traditional doctrine of ' presentationism,' and it gives a new analysis and interpretation of the facts of association. Experience is no longer regarded as an automatic combination of data of sensation given in isolation, but as a *continuum* into which distinctions and connections are gradually introduced by the action of selective attention; the development of mind is shown to be ruled by subjective selection

as well as by natural selection; and all mental process to depend upon and imply a subjective reference. Two other articles on the same subject in later editions of the *Encyclopaedia* and many contributions to journals prepared the way for his classical treatment of *Psychological Principles*, published in 1918. In *Naturalism and Agnosticism* (1899) the two doctrines named are subjected to exhaustive and perhaps final criticism, a theory of scientific conceptions is worked out, and a constructive view of reality, idealistic or spiritual in character, is maintained. Founding on the implication of subject and object in all experience, the author reaches a metaphysical position according to which the universe is throughout interpreted as spiritual; and this spiritual nature is found in a plurality of finite conscious centres of experience. In a later work, *The Realm of Ends, or Pluralism and Theism* (1911), he brings into prominence the conception of worth, and passes from a review of non-theistic pluralism to a discussion and defence of the theistic view of the world. The metaphysic worked out in these two books may be regarded as a return to monadism in contrast with the monism of Green. But the new monadism differs from that of Leibniz as much as Green's monism differs from the monism of Spinoza. It is in many respects more in harmony with the 'spiritual realism' of Berkeley. For its monads are regarded as influencing one another and as working out their ends in interaction both with one another and with an environment of laws and values which express the infinite mind.

The reaction from idealism is most strikingly illustrated in the writings of Robert Adamson. The most learned of his contemporary philosophers, his earlier works were written from the standpoint of a neo-Hegelian idealism. These works are a small volume *On the Philosophy of Kant* (1879), a monograph on Fichte (1861), and an article on logic (1882), long afterwards (1911) republished in book

form. The fundamental opposition of philosophical doctrines he regarded as " the opposition between Hegelianism on the one hand and scientific naturalism or realism on the other "; and he rejected the latter doctrine because its explanation of thought as the product of antecedent conditions was incompetent to explain thought as self-consciousness. The problem which he set himself was to re-think from the former point of view the new material concerning nature, mind, and history provided by modern science. He came gradually to the opinion that this could not be done—that idealism was inadequate. His posthumously published lectures entitled *The Development of Modern Philosophy* (1903) show that he was engaged in working out a reconstruction from the point of view which he had at first held incompetent—that of realism. But his suggestions do not point to a theory of mechanism or materialism. Although mind has come into being, it is as essential as nature: both are partial manifestations of reality. But he had not an opportunity fully to work out his constructive theory or to examine its adequacy and coherence.

The new tendencies which distinguish more recent philosophy illustrate also the increasing reaction of the literature of the United States of America upon English thought. The theory known as pragmatism is definitely of trans-Atlantic origin, and forms of what is called the new realism seem to have been started independently in the United States and in this country. The latter theory is largely a revival of older views: both the natural realism of Reid and the scholastic doctrine of the reality of universals appear to have contributed to its formation. Pragmatism is a more original doctrine; but its seeds also lie in the past: it has been connected with the prevailingly practical tone of much English thought; and more definite anticipations of its leading idea might be found in some of the later English writers of the nineteenth century.

CHAPTER XIII

RETROSPECT

THE preceding survey of English philosophy breaks off at a moment when the interest is at its height. Nevertheless, the end of a century and the close of a long reign do also, in this case, mark a period in the history of thought. The leading schools, evolutionary and idealistic, had elaborated their views very fully; both had been subjected to thorough criticism; and interest was beginning to turn to new questions or new ways of putting old ones. The year 1900 is thus a convenient date for ending an historical record. Reviewing this record as a whole, it may be possible to make some general remarks on the features which characterise three centuries of English thought.

English philosophy is one of the results of the awakening of the European mind known as the Renaissance. It had its roots in the older learning of the Scholastics; but its national character is seen clearly only after it began to be written in the English language. The intellectual ferment of the time, the wide sweep of its imagination, and its confidence in the future triumphs of mind were expressed by Bacon. Hobbes seized upon a leading conception of the new science, and by its aid constructed a system. Both made use of the ideas of their day, but in philosophy they were pioneers. After them English thought, like European thought generally, came under the influence of Descartes. But, from this time onwards, until the influence of Kant and Hegel made itself felt in the nineteenth century, English philosophy pursued an independent course. Spinoza was little known and

avoided—possibly for theological reasons. Leibniz was equally neglected—perhaps, in some measure, owing to the controversy with Newton. No doubt the disregard of these great thinkers entailed some loss; but it gave free course to original developments, and it did not prevent a powerful reaction of English upon continental philosophy. In France, Condillac and Helvétius drew their ideas from Locke; his influence and that of his followers among the deists were prominent in the period of the "Enlightenment" in France and Germany; and one side of his work culminated in Hume and stimulated Kant to a new criticism of knowledge. After Kant, and in the brilliant period of German speculation which followed, English influence diminished. The Scottish philosophy, it is true, had its echo in France; and, later in the nineteenth century, the empirical logic of John Stuart Mill, and the ideas of Darwin, which Spencer worked into a system, left their mark upon philosophy throughout the world. But, on the whole, philosophy in Great Britain not only lost its influence abroad but at home also began to pay the penalty for its independence. For a vigorous life the influence of new ideas from other strains of thought was needed; and these new ideas came from many quarters, but chiefly from the group of thinkers of whom Hegel was the greatest.

Before this influence made itself felt—especially in the earlier decades of the last century—English philosophy had suffered a decline: it was written in the minor key; the more speculative topics were avoided; and great figures were scarce. There was never any real gap in the development, any time at which thought was dead. But for the time it dwindled, whereas other periods, before and since, were marked by greater intensity, wider interests, and more influential thinkers. In the three centuries under review perhaps no other country can show more names of the first rank in philosophy and of greater permanent influence upon the course of human thought.

The English philosophers were not great system-builders. Between Hobbes and Herbert Spencer there was no important writer who attempted a complete survey of the whole realm of thought from his point of view and articulated it into a system. The importance of philosophical ideas cannot be estimated rightly by their expression as a compact body of doctrine. Indeed there is a danger in the premature reduction of ideas to system. We need not say with Nietzsche that "the will to system is a lack of rectitude"; but the system-builder in philosophy has many temptations to stray from the path of strict intellectual honesty. Historians of philosophy also are apt to be unjust when they force the ideas of others into system and describe them by some general term. English writers—Locke in particular—have suffered much in this way at the hands of erudite German historians on the look-out for system rather than for thought; and Kuno Fischer has even described English philosophy as a whole as a stage in the development of realism or empiricism. It is unnecessary to discuss such a view, for it does not admit of defence and hardly of excuse. English philosophy produces a very different impression when its documents are read at first hand and without theoretical preconceptions. It is true that the problems and the issue of a particular type of thought may be traced, better than anywhere else, in the works of Hobbes, Locke, Hume, John Stuart Mill, and Spencer. But even their message is not exhausted by the term 'empiricism'; there is as good reason, for instance, to describe Locke as the first 'critical' philosopher as to call him the apostle of empiricism. Besides, there were never wanting representatives of a different outlook. Berkeley is improperly regarded as a thinker half-way between Locke and Hume; and the idealistic tradition was maintained throughout the centuries by Herbert of Cherbury, More, Cudworth, Norris, Shaftesbury, Reid, and many others—thinkers who fell short of the first rank but bear witness to the speculative insight of the English mind.

Comprehensiveness rather than system marked the attitude. Most of the greater writers are characterised by the width of their interests; and they did not take a narrow, or rigidly professional, view of the boundaries of philosophy. In this matter, as in so many others, Locke is representative of the national tradition. He dealt with questions of theology, of politics, of economics, and of education, as well as with the fundamental problems of knowledge. He had no ambition to bring these writings together into a compact whole; and, unless in the eyes of some academic student, his work has not suffered. The lack of system has even given freer play to his ideas and encouraged freer criticism of them. Yet his individual point of view may be seen in all that he wrote. He had a clue and he followed it wherever it promised to lead to discovery. It was the same with others. There is no national philosophy which is less a concern of the school than the English. Many of its great writers have been men of leisure or men of affairs, who were not occupied with philosophy professionally but were attracted by the perennial interest of its problems. They did not easily unite into schools of thought; they were too careless sometimes of logical technique; each was apt to look from his own angle of vision; but all were intent upon arriving at some understanding of the position of the individual self in the universe. These are features in that "individual character" which marks English philosophy and which—to quote a recent judgment[1]—"entitles it to rank as one of the most important phases in the history of human thought."

[1] J. T. Merz, *A Fragment on the Human Mind* (1919), p. 1.

COMPARATIVE CHRONOLOGICAL TABLE

giving the dates of the chief works in English philosophy along with the dates of some other writings, English and foreign, and of some leading events.

English philosophy	*English literature and science*
	Bacon, Essays. 1597
	Gilbert, De magnete. 1600
	Shakespeare, Hamlet. 1602
	Florio, transl. of Montaigne, 1603
1605 Bacon, Advancement of Learning	Ben Jonson, Volpone. 1605
	Beaumont and Fletcher, Philaster. 1608
	Donne, Anatomy of the World. 1610
	'Authorised' transl. of the Bible. 1611
	Ralegh, History of the World. 1614
1620 Bacon, Novum organum	
	Burton, Anatomy of Melancholy. 1621
1623 Bacon, De augmentis	Shakespeare, first folio. 1623
1624 Herbert, De veritate	
	Harvey, De motu cordis et sanguinis. 1628
	George Herbert, The Temple. 1633
	Milton, Comus. 1637 (written 1634)
1640 Hobbes, Elements of Law (circulated in manuscript)	
1641 Brooke, Nature of Truth	
1642 Hobbes, De cive	Sir T. Browne, Religio medici. 1642
	J. Taylor, Liberty of Prophesying. 1647
1651 Hobbes, Leviathan	
1652 Culverwel, Light of Nature	
1653 More, Antidote against Atheism	
	Harrington, Oceana. 1656
1659 More, Immortality of the Soul	
1660 Taylor, Ductor Dubitantium	
Sanderson, De obligatione conscientiae	
1661 Glanvill, Vanity of Dogmatizing	
1662 More, Philosophical Writings	

Foreign philosophy, literature, and science	*Events*
Mariana, De rege. 1599	English East India Co. founded. 1600
	Bruno burned at Rome. 1600
Althusius, Politica. 1603	Union of English and Scottish crowns. 1603
Cervantes, Don Quixote, part i. 1605	
Kepler, Astronomia nova. 1609	Plantation of Virginia. 1607
	Plantation of Ulster. 1609
Böhme, Aurora. 1612	
	Deaths of Shakespeare and Cervantes. 1616
Suarez, De legibus ac Deo legislatore. 1617	
	Thirty Years' War begun. 1618
Kepler, Harmonia mundi. 1619	
Campanella, De sensu rerum. 1620	The "Mayflower" takes English emigrants from Leyden to America. 1620
Grotius, De jure belli et pacis. 1625	
	Petition of Right. 1628
Galileo, Dialogo dei due massimi sistemi del mondo. 1632	
	Laud archbp. of Canterbury. 1633
Corneille, Le cid. 1636	French Academy founded. 1635
Descartes, Discours de la méthode. 1637	
	Scottish National Covenant. 1638
Descartes, Meditationes. 1641–2	
	English Civil War begins. 1642
Descartes, Principia philosophiae. 1644	Westminster Assembly of Divines. 1643
	Execution of Laud. 1645
	Origin of the Society, afterwards (1662) the Royal Society. 1645
Escobar, Theologia moralis. 1646	
	Treaty of Westphalia. 1648
	Execution of Charles I. 1649
Descartes, Les passions de l'âme. 1650	
	Cromwell Lord Protector. 1653
Pascal, Lettres à un provincial. 1656	Vaudois Persecution. 1656
Molière, Les précieuses ridicules. 1659	
	Restoration of the Stuarts. 1660
Arnauld and Nicole, L'art de penser. 1662	
Geulincx, Logica. 1662	Act of Uniformity. 1662
Leibniz, De principio individui. 1663	

English philosophy	*English literature and science*
	Butler, Hudibras. 1662–78
1666 More, Enchiridion ethicum	
	Milton, Paradise Lost. 1667
1671 More, Enchiridion metaphysicum	
1678 Cudworth, True Intellectual System Burthogge, Organum vetus et novum	Bunyan, Pilgrim's Progress. 1678
	Dryden, Absalom and Achitophel. 1681 Petty, Political Arithmetic. 1682
	Newton, Principia. 1687
1689 Locke, Epistola de tolerantia 1690 Locke, Treatises of Government Locke, Essay concerning Human Understanding 1694 Burthogge, Reason and the Nature of Spirits 1695 Locke, Reasonableness of Christianity 1696 Toland, Christianity not mysterious Sergeant, Method to Science 1697 Sergeant, Solid Philosophy	
1701–4 Norris, Ideal or Intelligible World	
	Newton, Optics. 1704 Clarendon, History of the Rebellion (written 1646–48, 1668–70). 1704
1705 Clarke, Being and Attributes of God	
1709 Berkeley, New Theory of Vision 1710 Berkeley, Principles of Human Knowledge	
1711 Shaftesbury, Characteristics	Pope, Essay on Criticism. 1711 Addison, Spectator. 1711–14
1713 Berkeley, Hylas and Philonous Collier, Clavis universalis Collins, Discourse of Free-thinking	

Foreign philosophy, literature, and science	*Events*
La Rochefoucauld, Maximes. 1665	Great Plague. 1665
Journal des savants (begun). 1665	
	Great Fire in London. 1666
Racine, Andromache. 1667	Acquisition of Bombay. 1668
Bossuet, Oraisons funèbres. 1669–87	
Pascal, Pensées. 1670	
Spinoza, Tractatus theologico-politicus. 1670	
Boileau, L'art poétique. 1674	
Malebranche, Recherche de la vérité. 1674	
Geulincx, Ethica. 1675	
Spinoza, Ethica. 1677	
Racine, Phèdre. 1677	
Borelli, De motu animalium. 1680–81	Accession of Peter the Great. 1682
Acta eruditorum (begun). 1682	
	Edict of Nantes (1598) revoked. 1685
La Bruyère, Les Caractères. 1688–94	
Perrault, Parallèle des anciens et des modernes. 1688	English Revolution. 1688
Malebranche, Entretiens sur la métaphysique. 1688	
Malpighi, De structura glandularum. 1689	Toleration Act. 1689
	Bill of Rights. 1689
	Bank of England founded. 1694
Leibniz, Système nouveau de la nature. 1695	Freedom of the English Press. 1695
Bayle, Dictionnaire historique et critique. 1697	Treaty of Ryswick. 1697
	Berlin Academy of Sciences (with Leibniz as president) founded. 1700
	English Act of Settlement. 1701
	First daily newspaper in England. 1702
	Battle of Blenheim. 1704
Muratori, Della perfetta poesia. 1705–6	
Vauban, Dîme royale. 1707	Union of English and Scottish Parliaments. 1707
	Battle of Pultowa. 1709
Leibniz, Théodicée. 1710	
Wolf, Vernünftige Gedanken von den Kräften des menschlichen Verstandes. 1712	
	Treaty of Utrecht. 1713
Leibniz, Monadologie. 1714	Accession of George I. 1714
Fénelon, Traité de l'existence de Dieu. 1715	Death of Louis XIV. 1715

English philosophy	*English literature and science*
	Defoe, Robinson Crusoe. 1719
1722 Wollaston, Religion of Nature	
	Burnet, History of my own time. 1724
1725 Hutcheson, Inquiry into Beauty and Virtue	
1726 Butler, Sermons	Swift, Gulliver's Travels. 1726
	Law, A Serious Call. 1729
1730 Tindal, Christianity as old as the Creation	
1731 Cudworth, Eternal and Immutable Morality	
1732 Berkeley, Alciphron	Pope, Essay on Man. 1732
1736 Butler, Analogy	
	Bolingbroke, A Patriot King. 1738
1739 Hume, Human Nature	
1741–2 Hume, Essays moral and political	Fielding, Joseph Andrews. 1742
1744 Berkeley, Siris	
1748 Hume, Philosophical Essays (afterwards entitled Enquiry) concerning Human Understanding	Richardson, Clarissa Harlowe. 1748
1749 Hartley, Observations on Man	Fielding, Tom Jones. 1749
	Johnson, Vanity of Human Wishes. 1749
1751 Hume, Enquiry concerning the Principles of Morals	
	Hume, History of England, vol. i. 1754
1755 Hutcheson, System of Moral Philosophy	Johnson, Dictionary. 1755
	Burke, Sublime and Beautiful. 1756
1757 Price, Principal Questions in Morals	
1759 Adam Smith, Moral Sentiments	Goldsmith, Citizen of the World. 1759
	Johnson, Rasselas. 1759
	Sterne, Tristram Shandy. 1760
	Macpherson, Ossian. 1760
	Wallace, Prospects of Mankind. 1761
	Lord Kames, Elements of Criticism. 1762
1764 Reid, Inquiry into the Human Mind	Goldsmith, Traveller. 1764

Foreign philosophy, literature, and science	*Events*
Wolf, Ver. Ged. von Gott, Welt und Seele. 1719	
Voltaire, Henriade. 1723	
Vico, Scienza nuova. 1725	
	Voltaire in England. 1726–9
Voltaire, Lettres sur les Anglais. 1734	
Linnaeus, Systema naturae. 1735	
	Repeal of English statutes against witchcraft. 1736
	Accession of Frederick the Great. 1740
Brucker, Historia philosophiae. 1741	
D'Alembert, Dynamique. 1743	Fall of Walpole. 1742
	First Methodist conference. 1744
Lamettrie, Histoire naturelle de l'âme. 1745	
Vauvenargues, Maximes et pensées. 1746	Battle of Culloden. 1746
Condillac, Origines des connaissances humaines. 1746	
Diderot, Pensées philosophiques. 1746	
Montesquieu, Esprit des lois. 1748	Treaty of Aix-la-Chapelle. 1748
Lamettrie, L'homme machine. 1748.	
Buffon, Histoire naturelle. 1749	
Baumgarten, Aesthetica. 1750	
Diderot and D'Alembert, Encyclopédie, vols. i, ii. 1751	
S. Johnson (America), Elementa philosophica. 1752	
J. Edwards (America), Freedom of the Will. 1754	
Condillac, Traité des sensations. 1754	
Rousseau, Sur l'origine de l'inégalité. 1755	
Kant, Allgemeine Naturgeschichte. 1755	Seven Years' War begun. 1756
Haller, Elementa physiologiae. 1757–60	Battle of Plassey. 1757
Boscovitch, Philosophia naturalis. 1758	
Helvétius, De l'esprit. 1758	
Quesnay, Tableau économique. 1758	
Voltaire, Candide. 1759	
Rousseau, La nouvelle Héloïse. 1760. Contrat social. 1762. Emile. 1764	Accession of George III. 1760
	First proceedings against Wilkes. 1763
Voltaire, Dictionnaire philosophique. 1764	
Beccaria, Dei delitti e delle pene. 1764	

English philosophy	*English literature and science*
	Blackstone, Commentaries. 1765
	Percy, Reliques. 1765
	Goldsmith, Vicar of Wakefield. 1766
	Ferguson, Essay on Civil Society. 1767
1768 Priestley, First Principles of Government	
1768–78 Tucker, Light of Nature	Letters of Junius. 1769
	Goldsmith, Deserted Village. 1770
	Burke, Thoughts on the Present Discontents. 1770
1776 Adam Smith, Wealth of Nations	Gibbon, Decline and Fall, vol. i. 1776
Price, Nature of Civil Liberty	
Bentham, Fragment on Government	
1777 Priestley, Disquisition on Matter and Spirit	
	Johnson, Lives of the Poets. 1779
	Cowper and Newton, Olney Hymns. 1779
1785 Paley, Moral Philosophy	
Reid, Essays on the Intellectual Powers	Burns, Poems. 1786
1788 Reid, Essays on the Active Powers	
1789 Bentham, Principles of Morals and Legislation	Blake, Songs of Innocence. 1789
	White, Natural History of Selborne. 1789
	Burke, Reflections on the Revolution. 1789
	Boswell, Life of Johnson. 1791
	Mackintosh, Vindiciae Gallicae. 1791
	T. Paine, Rights of Man. 1791
1792 Dugald Stewart, Philosophy of the Human Mind, vol. i	M. Wolstonecraft, Rights of Women. 1792
	Godwin, Political Justice. 1793
	T. Paine, Age of Reason. 1794
	E. Darwin, Zoonomia. 1794
	Hutton, Theory of the Earth. 1795
	W. Wilberforce, A Practical View. 1797
	The Anti-Jacobin. 1797

Foreign philosophy, literature, and science	*Events*
Lessing, Laocoön. 1766	
Turgot, Réflexions sur la formation et la distribution des richesses. 1766	
Holbach, Système de la nature. 1770	
Kant, De mundi forma et principiis. 1770	
	First partition of Poland. 1772
Goethe, Leiden des jungen Werthers. 1774	
Lessing, Wolfenbütteler Fragmente (of Reimarus). 1774–8	
Kant, Anthropologie. 1775	
	American Declaration of Independence. 1776
	Death of Hume. 1776
Lessing, Erziehung d. mensch. Geschlechts. 1780	
Schiller, Die Räuber. 1781	
Kant, Kritik der reinen Vernunft. 1781	
Herder, Ideen zur Philosophie der Geschichte. 1784–91	
Jacobi, Briefe über Spinoza. 1785	
	Federal Constitution of U.S.A. framed. 1787
Lagrange, Mécanique analytique. 1788	
Kant, Kritik der praktischen Vernunft. 1788	
Marten, Précis du droit des gens moderne. 1789	French Revolution. 1789
Lavoisier, Traité élémentaire de chimie. 1789	
Alfieri, Tragedie. 1789	
Kant, Kritik der Urtheilskraft. 1790	
Fichte, Kritik aller Offenbarung. 1792	French Convention establishes a republic. 1792
Schulze, Aenesidemus. 1792	
Condorcet, Esquisse d'un tableau historique. 1793	Second partition of Poland. 1793
Fichte, Wissenschaftslehre. 1794	
Wolf, Prolegomena ad Homerum. 1795	Institute of France (in place of the academies, abolished in 1793) founded. 1795
	Third partition of Poland. 1795
Laplace, Système du monde. 1796	

English philosophy	*English literature and science*
1798 Malthus, Essay on Population	Wordsworth and Coleridge, Lyrical Ballads. 1798
1802 Paley, Natural Theology	Edinburgh Review (begun). 1802
1805 T. Brown, Relation of Cause and Effect	Scott, Lay of the Last Minstrel. 1805 Colebrooke, Essay on the Vedas. 1805
	Lamb, Specimens of the English Dramatists. 1808 Dalton, New System of Chemical Philosophy. 1808-27 Byron, English Bards and Scotch Reviewers. 1809 Coleridge, The Friend. 1809 Hazlitt, Characters of Shakespeare. 1811 Jane Austen, Sense and Sensibility. 1811
	Owen, New View of Human Society. 1813 Walter Scott, Waverley. 1814
1817 Coleridge, Biographia literaria	Ricardo, Pol. Econ. and Taxation. 1817 Shelley, Revolt of Islam. 1818 Keats, Endymion. 1818 Hallam, History of the Middle Ages. 1818 James Mill, History of British India. 1818 Byron, Don Juan. 1819
1820 T. Brown, Lectures	

Foreign philosophy, literature, and science	*Events*
	Battle of the Nile. 1798
Schleiermacher, Reden über die Religion. 1799	Napoleon Bonaparte first consul. 1799
Laplace, Mécanique céleste. 1799–1825	
Herder, Metakritik. 1799	
Schelling, System des transcendentalen Idealismus. 1800	Union of parliaments of Great Britain and Ireland. 1800
Mme de Staël, De la littérature. 1800	
Gauss, Disquisitiones arithmeticae. 1801	First English census. 1801
	C.M.S. established. 1801
Chateaubriand, Génie du christianisme. 1802	First English Factory Act. 1802
Schelling and Hegel, Krit. Journ. d. Phil. 1802	
Maine de Biran, Mémoires sur l'habitude. 1803	
Schleiermacher, Kritik der bisherigen Sittenlehre. 1803	
Senancour, Obermann. 1804	Napoleon emperor. 1804
Jean Paul Richter, Flegeljahre. 1804–05	French Code civil. 1804
Destutt de Tracy, Élémens d'idéologie. 1804	
Krause, Entwurf des Systems d. Phil. 1804	
	Battle of Trafalgar. 1805
	Battle of Austerlitz. 1805
Herbart, Hauptpunkte der Metaphysik. 1806	Battle of Jena. 1806
	Holy Roman Empire formally terminated. 1806
Fries, Neue Kritik der Vernunft. 1807	Act abolishing slavery in British dominions. 1807
Hegel, Phänomenologie des Geistes. 1807	
Goethe, Faust, part i. 1808	Peninsula War. 1808–13
Oken, Naturphilosophie. 1809	
	Berlin University founded. 1810
Cabanis, Rapports du physique et du moral. 1812	Napoleon's Retreat from Moscow. 1812
Niebuhr, Römische Geschichte. 1812	
Hegel, Wissenschaft der Logik. 1812	
	Battle of Leipzig. 1813
Savigny, Vom Beruf unserer Zeit für Gesetzgebung. 1814	Abdication of Napoleon. 1814
Lamarck, Histoire naturelle des animaux sans vertèbres. 1815	Battle of Waterloo. 1815
	French Academy revived. 1816
Cuvier, Regne animal. 1817	
Schopenhaur, Welt als Wille und Vorstellung. 1819	
Lamartine, Médiations poétiques. 1820	

English philosophy	*English literature and science*
	Chalmers, Christian and Civic Economy of Large Towns. 1821–6
	Combe, Constitution of Man. 1828
1829 James Mill, Analysis of the Phenomena of the Human Mind Hamilton, Philosophy of the Unconditioned (article)	
	Lyell, Principles of Geology, 1830–32
1832 Austin, Province of Jurisprudence determined	Tennyson, Poems. 1832
	Carlyle, Sartor Resartus (in Fraser's Mag.). 1833
	Browning, Paracelsus. 1835
	Dickens, Pickwick. 1836
1838 J. S. Mill, Bentham (article) 1840 J. S. Mill, Coleridge (article) Whewell, Philosophy of the Inductive Sciences	
	Newman, Tract No. XC. 1841
1843 J. S. Mill, System of Logic	Joule, Mechanical Value of Heat (paper at Brit. Ass.). 1843 Faraday, Experimental Researches in Electricity. 1844–55
1846 Hamilton, ed. of Reid	W. G. Ward, Ideal of a Christian Church. 1844 J. H. Newman, Essay on the Development of Christian Doctrine. 1846
1847 De Morgan, Formal Logic	Grote, History of Greece. 1846–56 Thackeray, Vanity Fair. 1848 J. S. Mill, Political Economy. 1848

Foreign philosophy, literature, and science	*Events*
De Maistre, Soirées de St Pétersbourg. 1821	
Schleiermacher, Der christliche Glaube. 1821–22	
Hegel, Philosophie des Rechts. 1821	
Heine, Gedichte. 1821	
Baader, Fermenta cognitionis. 1822	
Herbart, Psychologie als Wissenschaft. 1824	
Leopardi, Canzoni. 1824	
Manzoni, I promessi sposi. 1827	
Cousin, Introduction à l'hist. de la phil. 1828	
	Catholic Emancipation Act. 1829
Victor Hugo, Hernani. 1830	
Rosmini, Sull'origine delle idee. 1830	
Comte, Philosophie positive. 1830–42	
Victor Hugo, Notre Dame. 1831	'Young Italy' founded by Mazzini. 1831
Goethe, Faust, part ii. 1832	English Reform Act. 1832
Hegel, Religionsphilosophie. 1832	French Academy of moral and political sciences revived. 1833
Jouffroy, Mélanges philosophiques. 1833	New English Poor Law. 1834
Joh. Muller, Handbuch der Physiologie. 1833–40	
Saint-Simon, Réorganisation de la société européenne. 1834	
Balzac, Père Goriot. 1834	
Maine de Biran, Rapports du physique et du moral. 1834	
Lamennais, Paroles d'un croyant. 1834	
De Tocqueville, Démocratie en Amérique. 1835	
Quetelet, La physique sociale. 1835	
Grimm, Deutsche Mythologie. 1835	
Strauss, Leben Jesu. 1835	
De Musset, Confession d'un enfant du siècle. 1836	
Cournot, Recherches sur les principes mathématiques de la théorie des richesses. 1838	Accession of Victoria. 1837 Chartist movement begun. 1838
Trendelenburg, Logische Untersuchungen. 1840	
Proudhon, Qu'est-ce que la propriété. 1840	
Lamennais, Esquisse d'une philosophie. 1841–46	
Vatke, Die menschliche Freiheit. 1841	
Feuerbach, Wesen des Christenthums. 1841	
List, Das nationale System der politischen Ökonomie. 1841	
Emerson, Essays (first series). 1841	
George Sand, Consuelo. 1842–44	
Stirner [C. Schmidt], Der Einzige und sein Eigenthum. 1844	
Rothe, Theologische Ethik. 1845	
A. v. Humbolt, Kosmos. 1845	Abolition of duty on Corn in England. 1846
Helmholtz, Erhaltung der Kraft. 1847	Communist manifesto by Marx and Engels. 1847

English philosophy	*English literature and science*
	Macaulay, History of England. 1848–50
1850 Spencer, Social Statics	Tennyson, In Memoriam. 1850
1851 Mansel, Prolegomena logica	Ruskin, Stones of Venice. 1851
1853 H. Martineau, transl. of Comte	
1854 Ferrier, Institutes of Metaphysic	
Boole, Laws of Thought	
1855 Bain, The Senses and the Intellect	
Spencer, Principles of Psychology	
	George Eliot, Scenes of Clerical Life. 1857
	Buckle, History of Civilisation. 1857
1858 Mansel, Limits of Religious Thought	Meredith, Ordeal of Richard Feverel. 1858
1858–60 Hamilton, Lectures	FitzGerald, Rubaiyat of Omar Khayyam. 1858
	Darwin, Origin of Species. 1859
	Essays and Reviews. 1860
	Maine, Ancient Law. 1861
1862 Spencer, First Principles	
1863 J. S. Mill, Utilitarianism	Lyell, Antiquity of Man. 1863
	Huxley, Man's Place in Nature. 1863
	J. H. Newman, Apologia. 1864
1865 J. S. Mill, on Hamilton	Seeley, Ecce homo. 1865
J. Grote, Exploratio philosophica, part i	M. Arnold, Essays in Criticism. 1865
Hodgson, Time and Space	Lubbock, Pre-historic Times. 1865
Stirling, Secret of Hegel	Tylor, Early History of Mankind. 1865
	McLennan, Primitive Marriage. 1865
	Thomson and Tait, Natural Philosophy. 1867
	Bagehot, English Constitution. 1867
	Browning, Ring and the Book. 1868–69
1869 Barratt, Physical Ethics	Bagehot, Physics and Politics. 1869
1870 J. Grote, Examination of the Utilitarian Philosophy	Galton, Hereditary Genius. 1870
J. H. Newman, Grammar of Assent	Crookes, Spiritualism and Science. 1870
1871 Fraser, ed. of Berkeley	Jevons, Theory of Political Economy. 1871
	Darwin, Descent of Man. 1871
1872 Maurice, Moral and Metaphysical Philosophy	M. Arnold, Literature and Dogma. 1872

Foreign philosophy, literature, and science	*Events*
Sainte-Beuve, Causeries du lundi (begun). 1849	Second French Republic; revolutions and insurrections in Italy, Germany, Austria, Bohemia, Poland. 1848
	Fugitive Slave Law, U.S.A. 1850
Turgueniev, Papers of a Sportsman. 1852	*Coup d'état* of Louis Napoleon. 1851
Leconte de Lisle, Poèmes antiques. 1853	Gladstone's first Budget. 1853
Renouvier, Essais de critique générale. 1854–64	
Fischer, Geschichte der Philosophie. 1854	Crimean War. 1854–56
Büchner, Kraft und Stoff. 1855	
Victor Hugo, Les Contemplations. 1856	
Lotze, Mikrokosmus. 1856–64	
Flaubert, Madame Bovary. 1857	
Baudelaire, Fleurs du mal. 1857	Indian Mutiny. 1857–58
Taine, Philosophes français. 1857	
Renan, Études d'histoire religieuse. 1857	
Vacherot, La métaphysique et la science. 1858	
Lazarus and Steinthal, Zeitschrift für Völkerpsychologie und Sprachwissenschaft (begun). 1859	War of Italy and France against Austria. 1859
Fechner, Elem. d. Psychophysik. 1860	
Tolstoy, War and Peace. 1860	
	Victor Emanuel King of Italy. 1861
Victor Hugo, Les Misérables. 1862	American Civil War. 1861–65
Renan, Vie de Jésus. 1863	
Fustel de Coulanges, La cité antique. 1864	
Pasteur, Études sur le vin. 1866	Atlantic cable laid. 1866
Ibsen, Brand. 1866	Battle of Königgrätz. 1866
Dostoevsky, Crime and Punishment. 1866	
Lange, Geschichte des Materialismus. 1866	
Karl Marx, Das Kapital. 1867	English Reform Act. 1867
W. T. Harris, Journal of Speculative Philosophy (St Louis, U.S.A., begun). 1867	North German Confederation. 1867
Helmholtz, Physiologische Optik. 1867	
Haeckel, Natürliche Schöpfungsgeschichte. 1868	Suez Canal opened. 1869
Hartmann, Philosophie des Unbewussten. 1869	Irish Church disestablished. 1869
Taine, Théorie de l'intelligence. 1870	English Education Act. 1870
Ritschl, Lehre von der Rechtfertigung. 1870–74	Papal Infallibility decreed. 1870
	Battle of Sedan. 1870
	German Empire proclaimed. 1871
	Third French Republic. 1871
Janet, Problèmes du XIX^{e} siècle. 1872	Political Reformation in Japan. 1871
Strauss, Der alte und der neue Glaube. 1872	

English philosophy	*English literature and science*
1873 J. F. Stephen, Liberty, Equality, Fraternity	Clerk Maxwell, Electricity and Magnetism. 1873
1874 Jevons, Principles of Science Lewes, Problems, vol. i Green, Introductions to Hume Wallace, Logic of Hegel Sidgwick, Methods of Ethics Flint, Philosophy of History	Hardy, Far from the Madding Crowd. 1874
1876 Bradley, Ethical Studies L. Stephen, English Thought in the Eighteenth Century J. Grote, Moral Ideals	
1877 E. Caird, Critical Account of the Philosophy of Kant Flint, Theism	G. Allen, Physiological Aesthetics. 1877
1879 Spencer, Data of Ethics Adamson, On the Philosophy of Kant Balfour, Defence of Philosophic Doubt	
1880 J. Caird, Philosophy of Religion	
1881 Venn, Symbolic Logic	
1882 L. Stephen, Science of Ethics	Seeley, Natural Religion. 1882
1883 Barratt, Physical Metempiric Green, Prolegomena to Ethics Bradley, Principles of Logic	Seebohm, English Village Community. 1883 Sidgwick, Political Economy. 1883 Seeley, Expansion of England, 1883
1885 J. Martineau, Types of Ethical Theory	Pater, Marius the Epicurean. 1885
1886 J. Ward, Psychology (article)	Dicey, Law of the Constitution. 1886
1887 Seth (Pringle Pattison), Hegelianism and Personality	J. C. Morison, Service of Man. 1887
1888 J. Martineau, Study of Religion Bosanquet, Logic	
1889 E. Caird, Critical Philosophy of Kant	Bryce, American Commonwealth. 1889

Foreign philosophy, literature, and science	*Events*
Sigwart, Logik. 1873–78	
Wundt, Physiologische Psychologie. 1874	
Boutroux, Contingence des lois de la nature. 1874	
Brentano, Psychologie vom empirischen Standpunkte. 1874	
Fiske, Cosmic Philosophy. 1874	
	Ethical Societies founded in America. 1875
Renan, Dialogues et fragments philosophiques. 1876	
Riehl, Der philosophische Kriticismus. 1876–87	
Tiele, Geschiedenis van den Godsdienst. 1876	
Lombroso, L'uomo delinquente. 1876	
Carducci, Le odi barbare. 1877	Russo-Turkish War. 1877–78
Strindberg, Mäster Oluf. 1878	
Nietzsche, Menschliches, allzumenschliches. 1878–90	
Pope Leo XIII, Encyclical Aeterni Patris. 1879	
Zola, L'assommoir. 1879	
Treitschke, Deutsche Geschichte, vol. i. 1879	
Henry George, Progress and Poverty. 1881	
Ribot, L'hérédité psychologique. 1882	Triple Alliance. 1882
Bourget, Essais de psychologie contemporaine. 1883	
Lester Ward, Dynamic Sociology. 1883	
Dilthey, Einleitung in die Geisteswissenschaften. 1883–89	
Nietzsche, Also sprach Zarathustra. 1883–91	
	New Franchise Act in Great Britain. 1884
Jung Deutschland (poems). 1885	
Royce, Religious Aspect of Philosophy. 1885	
Lachelier, Psychologie et Métaphysique (article). 1885	
Ardigo, La morale dei positivisti. 1885	
Guyau, Esquisse d'une morale. 1885	
Mach, Beiträge zur Analyse der Empfindungen. 1886	Gladstone's first Home Rule Bill. 1886
Nietzsche, Jenseits von Gut und Böse. 1886	
Sudermann, Frau Sorge. 1886	
Anatole France, La vie littéraire. 1888	
Avenarius, Kritik der reinen Erfahrung. 1888–90	
Bergson, Données immédiates de la conscience. 1889	

English philosophy	*English literature and science*
1889 Alexander, Moral Order and Progress	
	Marshall, Principles of Economics. 1890
	Frazer, The Golden Bough. 1890
1891 Sidgwick, Elements of Politics	Westermarck, History of Marriage. 1891
Schiller, Riddles of the Sphinx	C. Booth, Life and Labour of the People in London. 1892–97
1893 Bradley, Appearance and Reality	Pearson, National Life and Character. 1893
E. Caird, Evolution of Religion	
Huxley, Ethics and Evolution	
	Webb, History of Trade Unionism. 1894
	Kidd, Social Evolution. 1894
	Pollock and Maitland, History of English Law. 1894
1895 Balfour, Foundations of Belief	Seeley, Growth of British Policy. 1895
Fraser, Philosophy of Theism	Hardy, Jude the Obscure. 1895
1896 Stout, Analytic Psychology	Lecky, Democracy and Liberty. 1896
McTaggart, Studies in the Hegelian Dialectic	
Hobhouse, Theory of Knowledge	
1896–1914 Merz, History of European Thought in the nineteenth century	
	Crozier, History of Intellectual Development. 1897
	Webb, Industrial Democracy. 1897
1898 Hodgson, Metaphysic of Experience	Bodley, France. 1898
Wallace, Natural Theology and Ethics	
1899 J. Ward, Naturalism and Agnosticism	
Bosanquet, Philosophical Theory of the State	

Foreign philosophy, literature, and science	*Events*
Wundt, System der Philosophie. 1889	
Tarde, Lois de l'imitation. 1890	Fall of Bismarck. 1890
W. James, Principles of Psychology. 1890	
Brunetière, L'évolution des genres, vol. i. 1890	
Böhm-Bawerk, Positive Theorie des Kapitals. 1891	
Simmel, Moralwissenschaft. 1892	
Sardou, Madame Sans-Gêne. 1893	
Fouillée, Psychologie des idées-forces. 1893	
Durkheim, Division du travail social. 1893	
Giddings, Principles of Sociology. 1893	
Meinong, Psy.-eth. Unters. zur Werththeorie. 1894	
	Röntgen's discovery of X-rays. 1895
Bergson, Matière et mémoire. 1896	
Sabatier, Philosophie de la religion. 1897	
W. James, The Will to Believe. 1897	
Ehrenfels, System der Werttheorie. 1897–8	
	The Tsar's Peace Rescript. 1898
	Spanish-American War. 1898
Meinong, Ueber Gegenstände hoherer Ordnung (article). 1899	First Hague Conference. 1899
	South African War. 1899–1902
Royce, The World and the Individual. 1900	Death of Queen Victoria. 1901

In the following bibliography the names of writers are arranged chronologically, the date of each writer being determined by the date of publication of the earliest work whose title appears in the list. The list does not profess to be exhaustive. It does not include medieval writers; it has been found necessary to apply a more rigorous principle of selection as recent times are approached; articles in journals are omitted; and writers whose important works are subsequent to 1900 are not mentioned. Following upon the list of his books, in certain cases references are given to critical estimates of the writer's work.

The views of the more important writers mentioned are summarised or discussed in the leading histories of modern philosophy. There are also two books which deal with English philosophy as a whole: J. Seth's English Philosophers and Schools of Philosophy, 1912; and T. M. Forsyth's English Philosophy, 1910.

The following deal with periods in the history of English philosophy: C. de Rémusat, Histoire de la philosophie en Angleterre depuis Bacon jusqu'à Locke, 1875; J. Tulloch, Rational Theology and Christian Philosophy in England in the Seventeenth Century, 2nd ed., 1874; J. Leland, View of the Principal Deistical Writers, 1754–6; G. V. Lechler, Geschichte des englischen Deismus, 1841; A. S. Farrar, Critical History of Free Thought, 1862; J. Hunt, Religious Thought in England, 1870–2; L. Stephen, English Thought in the Eighteenth Century, 1876; G. Lyon, L'idéalisme en Angleterre au XVIII^e siècle, 1888; J. McCosh, The Scottish Philosophy, 1875; A. S. Pringle Pattison, Scottish Philosophy, 1885; J. Bonar, Philosophy and Political Economy, 1893; L. Stephen, The English Utilitarians, 1900; E. Halévy, Formation du Radicalisme philosophique, 1901–4; E. Albee, History of English Utilitarianism, 1902; J. T. Merz, History of European Thought in the Nineteenth Century (especially vols. III, IV), 1896–1914; A. W. Benn, English Rationalism in the Nineteenth Century, 1906; D. Masson, Recent British Philosophy, 1865; G. Dawes Hicks, in Ueberweg-Heinze, Geschichte der Philosophie, 10th ed., part IV, §§ 54-62, 1910; H. Höffding, Die englische Philosophie unserer Zeit (German transl.), 1889.

BIBLIOGRAPHY

Sir Thomas More

Libellvs vere avrevs nec minvs salvtaris qvam festiuus, de optimo reip. statu. deque noua Insula Vtopia. (Louvain, 1516; rptd, Paris, 1518; 2nd ed., Basle, 1518.)

A fruteful and pleasaunt worke of the beste state of a publyque weale, and of the newe yle called Utopia...translated into Englyshe by Ralphe Robynson. 1551.

William Baldwin

Treatise of moral Phylosophie, contayning the Sayinges of the Wyse. 1547.

Thomas Wilson

The Rule of Reason, conteining the arte of logique. 1552.

The Arte of Rhetorique. 1553.

Ralph Lever

Arte of Reason rightly termed Witcraft. 1573.

Everard Digby

Theoria analytica, Viam ad Monarchiam Scientiarum demonstrans, totius Philosophiae et reliquarum Scientiarum, necnon primorum postremorumque Philosophorum mysteria arcanaque dogmata enucleans. 1579.

De duplici methodo libri duo, unicam P. Rami methodum refutantes. 1580.

Everardi Digbei Cantabrigiensis admonitioni Francisci Mildapetti... responsio. 1580.

De Arte Natandi. 1587. [Believed to be the earliest treatise on swimming published in England; transl. C. Middleton, 1595.]

Cp. J. Freudenthal, Beiträge zur Geschichte der englischen Philosophie (two articles) in Archiv für Geschichte der Philosophie, vol. IV, 1891.

William Temple

Francisci Mildapetti·Navarreni ad Everardum Digbeium Anglum Admonitio de unica P. Rami Methodo rejectis ceteris retinenda. 1580.

Pro Mildapetti de unica methodo defensione contra Diplodophilum, commentatio Gulielmi Tempelli, e Regio Collegio Cantabrigiensis. Huc accessit nonnullarum e physicis et ethicis quaestionum explicatio,

una cum epistola de Rami dialectica ad Joannem Piscatorem Argentinensem. 1581. Frankfort, 1584.

P. Rami Dialecticae libri duo, scholiis G. Tempelli Cantabrigiensis illustrati. Cambridge, 1584. Frankfort, 1591, 1595.

Jacobi Martini Scoti Dunkeldensis philosophiae professoris publici, in Academia Taurinensi, de prima simplicium et concretorum corporum generatione disputatio. Cambridge, 1584. Frankfort, 1591, 1595. (Martin's book was first published at Turin, 1577.)

Cp. J. Freudenthal, Beiträge zur Geschichte der englischen Philosophie in Archiv für Geschichte der Philosophie, vol. v, 1892.

JOHN CASE

Summa veterum interpretum in universam Dialecticam Aristotelis. 1584. Oxford, 1592. Frankfort, 1593.

Speculum moralium questionum in universam ethicen Aristotelis. Oxford, 1585. Frankfort, 1589.

Sphaera civitatis. Oxford, 1588.

Reflexus speculi moralis. Oxford, 1596.

Thesaurus Oeconomicae. Oxford, 1597.

Lapis philosophicus. Oxford, 1599. London, 1612.

Ancilla philosophiae. Oxford, 1599.

JOHN SANDERSON

Institutionum dialecticarum libri quatuor. Antwerp, 1589. Oxford, 1594, 1602.

WILLIAM PERKINS

Armilla aurea. 1590. Eng. transl. 1600.

The Whole Treatise of the Cases of Conscience. 1608.

FRANCIS BACON[1]

Philosophical Works

i. Parts of the Instauratio Magna

Instauratio magna. 1620. (After two pages beginning 'Franciscus de Verulamio sic cogitavit,' an epistle dedicated to the king, preface, distributio operis, and a page announcing 'deest pars prima instaurationis, quae complectitur partitiones scientiarum,' there follows a second title-page: Pars Secunda Operis, quae dicitur Novum Organum, sive Indicia Vera de interpretatione naturae. The same volume also contains: Parasceve ad Historiam Naturalem et Experimentalem.)

Opera. Tomus primus. Qui continet De Augmentis Scientiarum libros IX. 1623. (The second title is: de Dignitate et Augmentis Scientiarum libri IX.)

[1] In enumerating Bacon's separate works, Spedding's arrangement (instead of chronological order) has been followed.

Historia Naturalis et Experimentalis ad condendam philosophiam: sive Phaenomena Universi: quae est Instaurationis Magnae pars tertia. 1622. (This volume contains Historia Ventorum, also titles and 'aditus' to five other Historiae, namely, Densi et Rari, Gravis et Levis, Sympathiae et Antipathiae Rerum, Sulphuris Mercurii et Salis, Vitae et Mortis.)

Historia Vitae et Mortis. Sive Titulus Secundus in Historia Naturali et Experimentali ad condendam philosophiam: quae est Instaurationis Magnae pars tertia. 1623.

Historia Densi et Rari (1658)[1].

Sylva Sylvarum: or A Natural History. In ten centuries. Written by the Right Honourable Francis Lord Verulam, Viscount St Alban. Published after the author's death by William Rawley. 1627.

Scala intellectus, sive Filum Labyrinthi (1653) (a preface intended for the fourth part of the Instauratio).

Prodromi, sive Anticipationes Philosophiae Secundae (1653) (a preface intended for the fifth part of the Instauratio).

ii. Works connected with the Instauratio, but not intended to be included in it.

Cogitationes de natura rerum (1653).

De Fluxu et Refluxu Maris (1653).

De Principiis atque Originibus secundum Fabulas Cupidinis et Coeli (1653).

New Atlantis: a work unfinished. (First published by Rawley at the end of the volume containing Sylva Sylvarum in 1627. Ed. G. C. M. Smith, Cambridge, 1900.)

iii. Works originally designed for parts of the Instauratio but superseded or abandoned.

Cogitationes de Scientia Humana. (A series of fragments of uncertain date, first published by Spedding (Bacon's Works, vol. III), who supplied the title.)

Valerius Terminus of the Interpretation of Nature; with the annotations of Hermes Stella (1734).

The Twoo Bookes of Francis Bacon of the Proficience and Advancement of Learning Divine and Humane. 1605.

Filum Labyrinthi, sive Formula Inquisitionis (1734) (little else than an English version of the Cogitata et Visa).

De Interpretatione Naturae Prooemium (1653).

Temporis Partus Masculus sive Instauratio Magna Imperii Humani in Universum (1653).

Partis Instaurationis Secundae Delineatio et Argumentum, et Redargutio philosophiarum (1653, in part).

[1] Writings published for the first time in posthumous collections have the date of the collection given in parentheses. Titles will be found under 'Editions.'

Cogitata et Visa: de Interpretatione Naturae, sive de Scientia Operativa (1653).
Filum Labyrinthi; sive Inquisitio Legitima de Motu (1653).
Sequela Cartarum; sive Inquisitio Legitima de Calore et Frigore (1734).
Historia et Inquisitio Prima de Sono et Auditu, et de Forma Soni et Latente Processu Soni; sive Sylva Soni et Auditus (1658).
Phaenomena Universi; sive Historia Naturalis ad Condendam Philosophiam (1653).
Descriptio Globi Intellectualis et Thema Coeli (1653).
De Interpretatione Naturae Sententiae XII (1653).
Aphorismi et Consilia (1653).

Literary Works

Essayes. Religious Meditations. Places of perswasion and disswasion. Seene and allowed. 1597. (There are ten essays in this volume. The Religious Meditations are in Latin and are entitled Meditationes Sacrae; the Places of perswasion and disswasion are in English and are entitled Coulers of Good and Evill; a fragment. Reprinted in 1598, 1604 and 1606.)
The Essaies of Sir Francis Bacon Knight the kings solliciter generall. 1612. (This volume contains essays only—thirty-eight in number, twenty-nine of them new, and the rest corrected and enlarged.)
The Essayes or Counsels, Civill and Morall, of Francis Lo. Verulam, Viscount St Alban. 1625. (This volume contains fifty-eight essays, twenty of them being new and most of the rest altered and enlarged.)
De Sapientia Veterum Liber, ad inclytam academiam Cantabrigiensem. 1609.
The Historie of the Raigne of King Henry the Seventh. 1622.
Advertisement touching an Holy Warre. Written in the year 1622. 1629.
Of the True Greatness of the Kingdom of Britain (1734).
Apothegmes new and old. 1625.
Promus of Formularies and Elegancies (begun 1594, published 1882, and in part by Spedding, vol. VII).
Translation of Certain Psalmes into English Verse. 1625.

Professional Works

Maxims of the Law (written about 1597; first printed 1630).
Reading on the Statute of Uses (read at Gray's Inn in the Lent vacation, 1600; first printed in 1642).
The Arguments of Law of Sir Francis Bacon, Knight, The King's Solicitor-General, in certain great and difficult cases. (Revised by Bacon in 1616, but not published by him; first printed by Blackbourne in 1730.)
Argument in Chudleigh's Case. (Easter Term, 1594.) (Translated from Law French and printed in Spedding's edition, vol. VII.)

The Argument of Sir Francis Bacon, Knight, His Majesty's Solicitor-general, in the Case of the Post-Nati of Scotland. (Delivered before Easter Term, 1608; first printed in 1641.)

The Argument of Sir Francis Bacon, Knight, Attorney-General in the King's Bench, in the Case De Rege Inconsulto. (Delivered Jan. 25, 1616; first printed in Collectanea Jurid.)

A Preparation towards the Union of Laws.

Occasional Writings (a selection)

An Advertisement touching the Controversies of the Church of England (written 1589; first published as pamphlet, 1640).

A Declaration of the Practices and Treasons attempted and committed by Robert, late Earle of Essex. 1601.

A Brief Discourse touching the Happy Union of the Kingdoms of England and Scotland (written 1603).

Certain Considerations touching the better Pacification and Edification of the Church of England (written 1603).

Sir Francis Bacon his Apologie, in certaine imputations concerning the late Earle of Essex. 1604.

A Proposition to His Majesty...touching the Compiling and Amendment of the Laws of England (written 1616, first published 1653).

Editions

1. Collections chiefly of works unpublished in his life-time:
   (*a*) Collected by W. Rawley:—Certaine Miscellany works. 1629. Operum moralium et civilium tomus primus. 1638. Resuscitatio. 1657. Opuscula varia posthuma. 1658.
   (*b*) Collected by I. Gruter:—Scripta in naturali et universali philosophia. Amsterdam, 1653.
   (*c*) Collected by R. Stephens:—Letters written during the reign of King James. 1702. Letters and Remains. 1734.
2. Editions of collected works: by Schönwetter and Gruter, Frankfort, 1665; Mallet, 4 vols., 1740; Stephens, Locker and Birch, 5 vols., 1765; A. Lasalle, French translation, 15 vols., Dijon, 1801–4; Montagu, 16 vols., 1825–36; J. Spedding, R. L. Ellis and D. D. Heath, 14 vols., 1857–74. In the last-named edition, vols. I–III contain the Philosophical Works, vols. IV–V translations of the same, vols. VI–VII Literary and Professional Works, vols. VIII–XIV the Letters and the Life. The Philosophical Works were edited in one volume by J. M. Robertson, 1905.
3. Among editions of separate works mention may be made of the editions of the Advancement of Learning by W. A. Wright, Oxford, 1869, 5th ed., 1900, and by T. Case, Oxford, 1906, and of the Novum Organum by T. Fowler, Oxford, 1878, 2nd ed., 1889.

Works on Bacon's Life and Philosophy

E. A. Abbott. Bacon and Essex. 1877.
— Bacon: an account of his life and works. 1885.
R. Adamson. In Encyclopaedia Britannica, 9th ed.
H. W. Blunt. Bacon's Method. Proc. of Aristotelian Soc. N.S. IV.
E. Cassirer. In his Erkenntnisproblem in der Phil. u. Wissenschaft.
R. W. Church. Bacon. 1884.
R. L. Ellis. General Preface to the Philosophical Works, Bacon's Works, vol. I. 1857.
Fischer, Kuno. Francis Bacon und seine Schule. Entwicklungsgeschichte der Erfahrungsphilosophie. Vol. X of the Jubiläumsausgabe of his Gesch. d. neuern Phil. Heidelberg, 1904. (Third revised edition of a work originally published in 1856, translated into English by J. Oxenford, 1857.)
T. Fowler. Bacon. 1881.
J. v. Liebig. Ueber Francis Bacon und die Methode der Naturforschung. Munich, 1863.
Lord Macaulay. In Edinburgh Review, July 1837; rptd in Essays.
J. Nichol. Bacon, Edinburgh, 1888–9.
C. de Rémusat. Bacon: sa vie, son temps, sa philosophie, et son influence jusqu'à nos jours. Paris, 1857.
W. Whewell. Philosophy of Discovery. Chaps. XV, XVI. 1860.

SIR RICHARD BARCKLEY

A Discourse of the Felicitie of Man: or his *Summum bonum*. 1598.

SIR JOHN DAVIES

Nosce Teipsum. This Oracle expounded in two Elegies. 1. Of Humane knowledge. 2. Of the Soule of Man, and the immortalitie thereof. 1599. [The Complete Poems. Ed. A. B. Grosart, 1869, 1876.]

WILLIAM GILBERT

Guilielmi Gilberti Colcestrensis, medici londinensis, de Magnete, magneticisque corporibus, et de magno magnete tellure; Physiologia nova, plurimis et argumentis, et experimentis demonstrata. 1600.
De Mundo nostro Sublunari Philosophia Nova. Opus posthumum. Amsterdam, 1651.

GEORGE DOWNHAM

In Petri Rami Dialecticam. 1606.

JOSEPH HALL

Characters of Vertues and Vices. 1608.
Resolutions and Decisions of Diverse practicall cases of Conscience. 1649.

JOHN SELDEN

The Duello or Single Combat. 1610.

De Dis Syris Syntagmata II. 1617.
The Historie of Tithes. 1618.
Mare Clausum seu de dominio maris. 1635.
De Successionibus ad leges Ebraeorum. 1638.
De jure naturali et gentium juxta disciplinam Hebraeorum. 1640.
Brief Discourse of the Powers of the Peers and Commons. 1640.
Table Talk...edited by R. Milward. 1689.
Opera Omnia. Ed. D. Wilkins. 1723.

ROBERT SANDERSON

Logicae artis compendium. Oxford, 1615.
De juramenti promissorii obligatione praelectiones septem. Habitae... A.D. MDCXLVI. 1647.
— translated into English by his Majesties speciall command. 1655.
De obligatione conscientiae praelectiones decem...habitae A.D. MDCXLVII. 1660. (Ed., with Eng. notes, by W. Whewell, Cambridge, 1851, and in Eng. trans. by Wordsworth, bp Chr., Lincoln, 1877.)
Works. Ed. W. Jacobson. Oxford, 1854.

ROBERT FLUDD

Utriusque Cosmi majoris scilicet et minoris, Metaphysica, physica atque technica Historia. Frankfort, 1617.
Medicina Catholica, seu mysticum artis medicandi sacrarum (Integrum Morborum mysterium). Frankfort, 1629.
Clavis Philosophiae et Alchymiae. Frankfort, 1633.
Philosophia Moysaica. Gouda, 1638 (in English, 1659).

RICHARD CRAKANTHORP

Introductio in metaphysicam. Oxford, 1619.
Logicae libri quinque de praedicabilibus. 1622.
De Providentia Dei tractatus. Cambridge, 1623.

NATHANAEL CARPENTER

Philosophia libera, triplici exercitationum Decade proposita, in qua adversus hujus temporis Philosophos dogmata quaedam nova discutiuntur. Ed. secunda. Oxford, 1622. (1st ed. in 1621.)

MARTIN FOTHERBY

Atheomastix; clearing foure truthes, against atheists and infidels. 1622.

EDWARD HERBERT

De Veritate, prout distinguitur a Revelatione, a Verisimili, a Possibili, et a Falso. Paris, 1624.
De Religione Gentilium, errorumque apud eos causis. Amsterdam, 1663. Eng. transl. 1709.
Cp. C. Güttler, Lord Herbert von Cherbury, 1897; G. V. Lechler,

Geschichte des englischen Deismus, 1841; C. de Rémusat, Lord Herbert de Cherbury, 1874; W. R. Sorley, in Mind, October, 1894.

GEORGE HAKEWILL

An Apologie or Declaration of the Power and Providence of God. Oxford, 1627.

THOMAS HOBBES

Eight Books of the Peloponnesian War written by Thucydides the son of Olorus interpreted with faith and diligence immediately out of the Greek. 1629.

De Mirabilibus Pecci. 1636. [With Eng. trans. 'by a person of quality.' 1678.]

The Elements of Law Natural and Politic. (Circulated in MS. 1640, first published as a whole and under this title by F. Tönnies, 1889.)

Objectiones ad Cartesii Meditationes de prima philosophia vulgo dictae Objectiones Tertiae. (First published in Descartes's Meditationes, 1641.)

Tractatus Opticus. (Published by Mersenne in his Cogitata Physico-Mathematica, 1644.)

Elementorum Philosophiae, Sectio tertia, De Cive. Paris, 1642. [The 2nd ed., with new notes and preface, was entitled Elementa Philosophica De Cive, Amsterdam, 1647.]

Humane Nature; or the Fundamental Elements of Policy. 1650. [Consists of chaps. I–XIII of The Elements of Law.]

De Corpore Politico; or the Elements of Law, Moral and Politick. 1650. [Consists of chaps. XIV–end of The Elements of Law.]

Epistolica dissertatio de principiis justi et decori; continens apologiam pro tractatu de cive. Amsterdam, 1651.

Philosophicall Rudiments concerning Government and Society. 1651. [An English version of De Cive.]

Leviathan Or the Matter, Forme, and Power of a Commonwealth Ecclesiasticall and Civil. 1651.

Of Liberty and Necessity. 1654. [A publication, not authorized by Hobbes, of a reply by him to the arguments of Bishop Bramhall, written for the marquis of Newcastle in 1646.]

Elementorum Philosophiae Sectio prima, De Corpore. 1655. (Eng. trans. with an appendix entitled 'Six Lessons to the Professors of Mathematics,' 1656.)

The Questions concerning Liberty, Necessity, and Chance. 1656.

Στιγμαι Αγεωμετρίας, Αγροικίας, Αντίπολιτείας, Αμαθείας, or Marks of the Absurd Geometry, Rural Language, Scottish Church Politics, and Barbarisms, of John Wallis. 1657.

Elementorum Philosophiae sectio secunda, De Homine. 1658.

Examinatio et Emendatio Mathematicae hodiernae qualis explicatur in libris Johannis Wallisii. 1660.

Dialogus Physicus, sive de Natura Aeris....Item de duplicatione cubi. 1661.
Seven Philosophical Problems and Two Propositions of Geometry...with an Apology for Himself and his Writings. 1662.
Problemata Physica. 1662.
Mr Hobbes considered in his loyalty, religion, reputation and manners. 1662, 1680. [The latter ed. entitled Considerations upon the Reputation, etc.]
De Principiis et Ratiocinatione Geometrarum. 1666.
Opera Philosophica, quae Latine scripsit, Omnia. Amsterdam, 1668. [Part I rpts De Corpore, De Homine and De Cive; Part II, other mathematical and physical pieces; Part III is a Latin trans. of Leviathan, with a new appendix instead of the former 'Review and Conclusion.']
Quadratura Circuli. Cubatio Sphaerae. Duplicatio Cubi. 1669.
Rosetum Geometricum...cum censura brevi doctrinae Wallisianae de motu. 1671.
Three Papers presented to the Royal Society against Dr Wallis. 1671.
Lux Mathematica excussa collisionibus Johannis Wallisii et Thomae Hobbesii. 1672.
Principia et Problemata aliquot geometrica antehac desperata nunc breviter explicata et demonstrata. 1674.
The Travels of Ulysses, as they were related by himself in Homer's 9th, 10th, 11th, and 12th books of his Odysses. 1673.
The Iliads and Odysses of Homer. Translated out of Greek into English. 1676.
Decamerum Physiologicum; or Ten Dialogues of Natural Philosophy. 1678.
Behemoth; The History of the Civil Wars of England. 1679 (imperfect), 1682.
Thomae Hobbes Malmesburiensis Vita carmine expressa. 1679. (Eng. trans. 1680.)
An Historical Narration concerning Heresie and the punishment thereof. 1680.
A Dialogue between a Philosopher and a Student of the Common Laws of England. 1681.
The Whole Art of Rhetoric. 1681 (written some thirty years before).
An answer to a Book published by Dr Bramhall called the 'Catching of the Leviathan.' 1682 (written 1668).
Historia Ecclesiastica carmine elegiaco concinnata. 1688. (Eng. trans. 1722.)

Editions of Hobbes' Works

The only complete edition of the works is that by Sir W. Molesworth, Latin Works, 5 vols., English Works, 11 vols., 1839–45. Elements of Law and Behemoth were ed. from a revision of the MSS. by F. Tönnies, in 1889. Leviathan has been rptd, Oxford, 1881 and 1909, and the text ed. by A. R. Waller, Cambridge, 1904.

Works on Hobbes

J. J. Baumann. Lehren von Raum, Zeit und Mathematik. 1868. (1. pp. 237–356.)
G. Lyon. La philosophie de Hobbes. 1893.
R. Mondolfo. La morale di T. Hobbes. 1903.
G. C. Robertson. Hobbes. 1886.
Sir L. Stephen. Hobbes. 1904.
G. Tarantino. Saggio sulle idee morali e politiche di T. Hobbes. 1900.
A. E. Taylor. Hobbes. 1909.
F. Tönnies. Hobbes, Leben und Lehre. 1896; 2nd ed., 1912.
— Anmerkungen über die Philosophie des Hobbes (4 articles), in Vierteljahrsschrift für wissenschaftliche Philosophie. 1879–81.

William Ames

De conscientia et ejus jure vel casibus. 1630. (English trans. 1639.)

Robert Greville, Lord Brooke

A Discourse opening the nature of that Episcopacie which is exercised in England. 1641.
The Nature of Truth, its union and unity with the Soule. 1641.
Cp. J. Freudenthal, Beiträge zur Geschichte der englischen Philosophie (two articles), in Archiv für Geschichte der Philosophie, VI, 1893.

Henry More

Psychozoia Platonica: or a Platonicall Song of the Soul. 1642.
Philosophical Poems [including the above]. 1647. Edited by A. B. Grosart, 1878.
An Antidote against Atheism. 1653.
Conjectiva Cabbalistica. 1653.
Enthusiasmus Triumphatus. 1656.
The Immortality of the Soule. 1659.
The Grande Mystery of Godliness. 1660.
A Collection of several Philosophical Writings, 2nd ed., 1662.
Enchiridion Ethicum. 1666.
Divine Dialogues. 1668.
Enchiridion Metaphysicum. 1671.
Opera omnia. 1675–79.

Ralph Cudworth

Discourse concerning the true notion of the Lord's Supper. 1642.
Sermon preached before the House of Commons, 31 March 1647.
The True Intellectual System of The Universe. 1678; Latin trans. with notes by J. L. Mosheim. Jena, 1733.
A Treatise concerning Eternal and Immutable Morality. With preface by E. Chandler. 1731.

JOHN WALLIS

Truth tried, or Animadversions on a Treatise published by Robert lord Brook. 1643.

Elenchus geometriae Hobbianae. Oxford, 1655.

Due correction for Mr Hobbes; or schoole discipline, for not saying his lessons right. Oxford, 1656.

Hobbiani puncti dispunctio...in answer to M. Hobs's στιγμαί. Oxford, 1657.

Hobbius heauton-timorumenos. Oxford, 1662.

Thomae Hobbes quadratura circuli...confutata. Oxford, 1669.

SIR KENELM DIGBY

Two Treatises, in the one of which, the Nature of Bodies; in the other, the Nature of Mans soule; is looked into: in way of Discovery of the Immortality of reasonable soules. Paris, 1644.

Of bodies, and of man's soul. To discover the immortality of reasonable souls. With two discourses of the power of sympathy and of the vegetation of plants. 1669.

JOHN BRAMHALL

The Serpent Salve; or, A Remedy for the biting of an Aspe. 1643/4. [A defence of monarchy, and criticism of the view that all power is derived from the people.]

A Defence of the True Liberty of Human Actions from Antecedent and Extrinsicall Necessity. 1655.

Castigations of Mr Hobbes his last Animadversions in the case concerning Liberty and Universal Necessity. With an appendix concerning the catching of Leviathan or the great Whale. 1658.

Works. Dublin, 1674–7; Oxford, 1842.

ALEXANDER ROSS

The Philosophicall Touch-Stone; or Observations upon Sir K. Digbie's Discourses. 1645.

Arcana Microcosmi. 1652.

Παισέβεια: or, a View of all Religions in the World. 1653.

Leviathan drawn out with a hook; or Animadversions on Mr Hobbes his Leviathan. 1653.

THOMAS WHITE

Institutionum Peripateticarum ad mentem...K. Digbaei pars theorica. Leyden, 1646 (in Eng. 1656).

The Grounds of Obedience and Government. 1655.

Sciri, sive sceptices et scepticorum à jure disputationis exclusio. 1663.

SIR ROBERT FILMER

The Free-holders Grand Inquest, Touching our Sovereign Lord the King And His Parliament. 1647.

The Anarchy of a Limited or Mixed Monarchy. 1648.
The Necessity of the Absolute Power of all Kings. 1648.
Observations concerning the Originall of Government. 1652.
Patriarcha: or the Natural Power of Kings. 1680.

SETH WARD

A philosophicall essay towards an eviction of the being and attributes of God. 1652.
Vindiciae academiarum,...with an appendix concerning what M. Hobbs and M. Dell have published on this argument. 1654.
In Tho. Hobbii philosophiam exercitatio epistolica. 1656.

NATHANAEL CULVERWEL

An Elegant and Learned Discourse of the Light of Nature. 1652. (Ed. J. Brown. Edinburgh, 1857; Selections in Campagnac, The Cambridge Platonists, 1901, pp. 211–321.)

JOHN WORTHINGTON

The Christian's Pattern: a translation of the De Imitatione of Thomas à Kempis. 1654.
Select Discourses. 1725.
Diary and Correspondence; ed. by J. Crossley. Manchester, 1847–86.

THOMAS STANLEY

The History of Philosophy: containing The Lives, Opinions, Actions and Discourses of the Philosophers of every Sect. 1655.

JOHN PORDAGE

Truth appearing. 1655.
Theologia mystica. 1683.

JAMES HARRINGTON

The Common-wealth of Oceana. 1656.
The Prerogative of Popular Government. 1658.
A Discourse shewing that the spirit of Parliaments with a Council in the interval, is not to be trusted for a Settlement. 1659.
A Discourse upon this saying 'the Spirit of the nation is not yet to be trusted with Liberty.' 1659.
The Art of Law-giving: in III books. 1659.
Aphorisms political. [1659.]
Political Discourses: tending to the introduction of a free...Common-wealth in England. 1660.
The Oceana and other Works...collected...by John Toland. 1700.
Cp. J. Russell Smith, Harrington and his Oceana. 1914.

MATTHEW WREN

Considerations on Mr Harrington's...Oceana. 1657.
Monarchy asserted...in vindication of the Considerations upon Mr Harrington's Oceana. Oxford, 1659.

THOMAS PIERCE

Αὐτοκατακρισις...with occasional reflexions on...Master Hobbs. 1658.

JEREMY TAYLOR

Ductor Dubitantium, or the Rule of Conscience in all her measures; serving as a great Instrument for the determination of Cases of Conscience. 1660.

HENRY STUBBE

The Commonwealth of Oceana put into the Ballance. 1660.

Campanella revived, or an inquiry into the history of the Royal Society. 1670.

HON. ROBERT BOYLE

New Experiments Physico-mechanical. 1660.

An Examen of Mr T. Hobbes his Dialogus physicus de natura aeris. 1662.

New Experiments and Observations touching Cold...To which are added an Examen of antiperistasis, and an examen of Mr Hobs's doctrine about cold. 1665. (3rd ed. with defence against Hobbes's objections. 1682.)

Tracts, containing...2 Animadversions upon Mr Hobbes's problemata de vacuo. 1674.

JOHN SMITH

Select Discourses. 1660. (Selections in Campagnac, The Cambridge Platonists, 1901, pp. 77–157.)

JOSEPH GLANVILL

The Vanity of Dogmatizing: or Confidence in Opinions. 1661.

Scepsis Scientifica: or, Confest Ignorance, the Way to Science. 1665.

Plus Ultra; or the Progress and Advancement of Knowledge since the days of Aristotle. 1668.

Philosophia Pia; or, a discourse of the religious temper, and tendencies of the experimental philosophy which is profest by the Royal Society. 1671.

Essays on Several Important Subjects in Philosophy and Religion. 1676. [Contains: (i) Against Confidence in Philosophy; (ii) Of Scepticism and Certainty; (iii) Modern Improvements of Knowledg; (iv) The Usefulness of Philosophy to Theology; (v) The Agreement of Reason and Religion; (vi) Against Sadducism in the Matter of Witchcraft; (vii) Antifanatick Theologie, and Free Philosophy. In a continuation of the New Atlantis.]

Sadducismus Triumphatus; or, Full and Plain Evidence concerning Witches and Apparitions. 1681.

SIMON PATRICK

A brief account of the new Sect of Latitude-Men together with some reflections on the New Philosophy. 1662.

WILLIAM LUCY

Observations, Censures and Confutations of notorious errours in Mr Hobbes his Leviathan and other his bookes [a revised issue of two tracts, published in 1656 (?) and 1657, under the pseudonym of William Pyke]. 1663.

Cp. T. Loveday, in Mind, N.S., vol. XVII, pp. 493–501.

GEORGE LAWSON

An Examination of the Political part of Mr Hobbs his Leviathan. 1663.

JOSEPH BEAUMONT (1616–99)

Some Observations upon the Apologie of Dr H. More for his Mystery of Godliness. Cambridge, 1665.

SAMUEL PARKER

Tentamina physico-theologica de Deo. 1665.

A free and impartial censure of the Platonick Philosophie. Oxford, 1666.

An account of the nature and extent of the Divine Dominion and Goodness, especially as they refer to the Origenian Hypothesis concerning the Pre-existence of Souls. Oxford, 1667.

A Discourse of Ecclesiastical Politie, wherein the authority of the Civil Magistrate over the Consciences of Subjects in matters of external religion, is asserted; the mischiefs and inconveniences of Toleration are reprobated, and all pretences pleaded on behalf of Liberty of Conscience are fully answered. 1670 [answered by John Owen. Truth and Innocence Vindicated. 1670].

Disputationes de Deo et divina providentia. 1678.

A demonstration of the divine authority of the Law of Nature and of the Christian Religion. 1681.

JOHN WILKINS

An Essay towards a real Character and a Philosophical Language. 1668.

On the Principles and Duties of Natural Religion. 1678.

THEOPHILUS GALE

The Court of the Gentiles. 1669–77.

Idea Theologiae. 1673.

Philosophia Generalis. 1676.

THOMAS TENISON

The Creed of Mr Hobbes examined. 1670.

ANTOINE LEGRAND

Philosophia veterum e mente Renati Descartes more scholastico breviter digesta. 1671.

Institutio philosophiae secundum principia Renati Descartes. 1672.

Apologia pro R. Des-Cartes contra Samuelum Parkerum. 1679.
An entire body of Philosophy, according to the principles of R. Des-Cartes ...translated...by R. Blome. 1694.

FRANCIS GLISSON

Tractatus de Natura Substantiae energetica, seu de vita naturae ejusque tribus primis facultatibus. 1672.

JOHN MILTON

Artis logicae plenior institutio. 1672.

RICHARD BURTHOGGE

Ταγαθον, or Divine Goodness explicated and vindicated. 1672.
Causa Dei; or, an Apology for God. 1675.
Organum vetus et novum; or, a Discourse of Reason, and Truth. 1678.
An Essay upon Reason, and the Nature of Spirits. 1694.
Of the Soul of the World, and of Particular Souls. 1699.
Cp. G. Lyon, L'Idéalisme en Angleterre au XVIII^e siècle, 1888, pp. 72–96; E. Cassirer, Das Erkenntnisproblem, 1906, vol. I, pp. 464–473.

JOHN EACHARD

Mr Hobbs's State of Nature Considered, In a Dialogue between Philautus and Timothy. 1672.
Some Opinions of Mr Hobbs considered in a second dialogue between Philautus and Timothy. 1673.

RICHARD CUMBERLAND

De legibus Naturae disquisitio philosophica. 1672. [English trans. by John Maxwell, 1727; by J. Towers, Dublin, 1750.]

GEORGE RUST

A Discourse of Truth. 1677; Edited by Glanvill. 1682.

JOHN WHITEHALL

The Leviathan found out: or the Answer to Mr Hobbes's Leviathan. 1679.

CHARLES BLOUNT

Anima Mundi. 1679.
Great is Diana of the Ephesians. 1680.
The Two First Books of Philostratus concerning the Life of Apollonius Tyaneus. 1680.
Miscellaneous Works, with preface by Charles Gildon. 1695.

JAMES TYRRELL

Patriarcha non Monarcha. 1681.
A Brief Disquisition of the Law of Nature...as also confutations of... Hobbs's principles. 1692.

THOMAS BURNET

Telluris theoria sacra. 1681–9.
The Theory of the Earth. 1684.
Remarks upon an Essay concerning Humane Understanding. 1697.
Second Remarks upon an Essay, etc. 1697.
Third Remarks upon an Essay, etc. 1699.

JOHN DOWELL

The Leviathan heretical: or...refutation of a book of his, entituled The Historical Narration of Heresie. Oxford, 1683.

JOHN NORRIS

A Collection of Miscellanies. 1687.
The Theory and Regulation of Love, a Moral Essay, to which are added Letters Philosophical and Moral between the Author and Dr Henry More. 1688.
Christian Blessedness...to which is added Reflections upon a late Essay concerning the Human Understanding. 1690.
Letters concerning the Love of God. 1695.
An Account of Reason and Faith in relation to the Mysteries of Christianity. 1697.
An Essay towards the Theory of the Ideal or Intelligible World, design'd for two parts. 1701–4.
A Philosophical Discourse concerning the Natural Immortality of the Soul. 1708.
Cp. G. Lyon, L'Idéalisme en Angleterre, Paris, 1888; F. I. Mackinnon, The Philosophy of John Norris of Bemerton, Baltimore, 1910.

JOHN LOCKE

Epistola de Tolerantia ad clarissimum virum T. A. R. P. T. O. L. A. [i.e., theologiae apud Remonstrantes professorem, tyrannidis osorem, Limburgium Amstelodamensem] scripta a P. A. P. O. J. L. A. [i.e., pacis amico, persecutionis osore, Joanne Lockio Anglo]. Tergou, 1689. (Translated into English by William Popple, 1689.)
Two Treatises of Government. In the former, the false Principles and Foundation of Sir Robert Filmer and his Followers, are Detected and Overthrown. The Latter is an Essay concerning the True Original, Extent, and End of Civil Government. 1690. (French transl. 1795; German transl. 1718; Italian transl. 1778.)
An Essay concerning Humane Understanding. 1690. (French transl. 1700; Latin transl. 1701; Dutch transl. 1736; German transl. 1757.)
A second Letter concerning Toleration. 1690.
Some Considerations of The Consequences of the Lowering of Interest, and Raising the Value of Money. 1691.
A Third Letter for Toleration. 1692.

Some Thoughts concerning Education. 1693. (French transl. 1695; German transl. 1729; Italian transl. 1782.)
Further Considerations concerning Raising the Value of Money. 1695.
The Reasonableness of Christianity as delivered in the Scriptures. 1695. (Dutch transl. 1729; German transl. 1733; French transl. 1740.)
A Vindication of The Reasonableness of Christianity, from Mr Edwards's Reflections. 1695.
A Second Vindication of the Reasonableness of Christianity. 1697.
A Letter to the Right Reverend Edward Ld. Bishop of Worcester, concerning Some Passages relating to Mr Locke's Essay of Humane Understanding: in a late Discourse of his Lordships in Vindication of the Trinity. 1697.
Mr Locke's Reply to the Right Reverend the Lord Bishop of Worcester's Answer to his Letter. 1697.
Mr Locke's Reply to the Right Reverend the Lord Bishop of Worcester's Answer to his Second Letter. 1699.
A Paraphrase and Notes on the Epistle of St Paul to the Galatians, &c. 1705.
Posthumous Works. 1706.
Some Familiar Letters between Mr Locke and several of his friends. 1708.
A Collection of Several Pieces of Mr John Locke, published by M. Des Maiseaux under the direction of Mr Anthony Collins. 1720.
Original Letters of Locke, Algernon Sidney, and Lord Shaftesbury. By T. Forster. 1830.
Lettres inédites à ses amis. Publiées par M. H. Ollion. La Haye, 1913.

Collected Editions of Locke's Works

In three volumes folio, 1714 etc.; in four vols. quarto, 1768 etc.; in nine vols. octavo, 1791; in ten vols. 1801, 1812, 1823.
The Philosophical Works. Ed. J. A. St John. 1843, 1854.

Editions of separate works

Essay concerning Human Understanding. By A. C. Fraser. Oxford, 1894.
On the Conduct of the Understanding. By T. Fowler. Oxford, 1881.
Some Thoughts concerning Education. By R. H. Quick. Cambridge, 1880.

Selected Works on Locke's Life and Philosophy

S. Alexander. Locke. (Philosophies Ancient and Modern.) 1908.
J. J. Baumann. Lehren von Raum, Zeit und Mathematik, vol. I, pp. 357–472. Berlin, 1868.
H. R. Fox Bourne. Life of John Locke. 1876.
John Brown. Locke and Sydenham, in Horae Subsecivae. 1858.
Pierre Coste. Éloge de M. Locke, Nouvelles de la République des Lettres, February, 1705.
M. Ferrari. Locke e il sensismo francese. Milan, 1900.
P. Fischer. Die Religionsphilosophie des John Locke. Erlangen, 1893.

T. Fowler. Locke. (English Men of Letters.) 1880.
A. C. Fraser. Locke. (Blackwood's Philosophical Classics.) 1890.
— Prolegomena to his edition of Locke's Essay. Oxford, 1894.
J. Gibson. Locke's Theory of Knowledge and its historical relations. 1917.
T. H. Green. Introduction to Hume's Treatise, 1874, §§ 1–154. Works, vol. I. 1885.
— Principles of Political Obligation, §§ 51–63. Works, vol. II. 1886.
G. Graf von Hertling. Locke und die Schule von Cambridge. Freiburg i/B., 1892.
Lord King. Life and Letters of John Locke. 1829.
J. Le Clerc. Bibliothèque Choisie. 1716.
G. W. von Leibniz. Nouveaux Essais sur l'entendement humain. First published in Œuvres Philosophiques, publiées par R. E. Raspe. 1765.
Sir F. Pollock. Locke's Theory of the State. Proc. of the British Academy, 1904.
R. Sommer. Lockes Verhaltniss zu Descartes. 1887.
Sir James Fitzjames Stephen. Horae Sabbaticae. 2nd ser. 1892. [Essays 7–10 on Locke.]
T. E. Webb. The Intellectualism of Locke. 1858.

JOHN EDWARDS

A Demonstration of the Existence and Providence of God. 1690.
Some Thoughts concerning the several Causes and Occasions of Atheism... with some brief Reflections on Socinianism and on a late Book entituled "the Reasonableness of Christianity." 1695.
The Socinian Creed. 1697.
A Brief Vindication of the Fundamental Articles of The Christian Faith... from Mr Lock's Reflections. 1697.

JONAS PROAST

The Argument of the Letter concerning Toleration consider'd and answer'd. 1690.
A Third Letter concerning Toleration. 1691.

JOHN RAY

The Wisdom of God manifested in the Works of the Creation. 1691.

RICHARD BENTLEY

Matter and Motion cannot think; or, a Confutation of Atheism from the faculties of the Soul. 1692.
Remarks upon a late Discourse of Free-thinking. By Phileleutherus Lipsiensis. 1713.

WILLIAM MOLYNEUX

Dioptrica Nova. 1692.
A memorial of the life of W. Molyneux; an autobiography. (Published in

An account of the family, etc., by Sir Capel Molyneux. Evesham, 1820.)

MATTHEW TINDAL

Essay of Obedience to the Supreme Powers. 1694.
Essay on the Power of the Magistrate and the Rights of Mankind in Matters of Religion. 1697.
The Liberty of the Press. 1698.
The Rights of the Christian Church. 1706.
Four Discourses on Obedience, Laws of Nations, Power of the Magistrate and Liberty of the Press. 1709.
A Defence of the Rights of the Christian Church. 2nd ed. 1709. [Burned by order of the House of Commons, 1710.]
Christianity as old as the Creation; or the Gospel a Republication of the Religion of Nature. 1730. (German transl., 1741.)

JAMES LOWDE

A Discourse concerning the Nature of Man. 1694.
Moral Essays wherein some of Mr Lock's and Monsi[r] Malbranch's opinions are briefly examin'd. 1699.

JOHN KEILL

Examination of Dr Burnet's Theory of the Earth. 1695.
Introductio ad veram physicam. 1701.

JOHN TOLAND

Christianity not mysterious. 1696.
Life of Milton. 1698.
Amyntor, or a Defence of Milton's Life. 1699.
The Art of Governing by Parties. 1701.
Anglia Libera. 1701.
Vindicius Liberius. 1702.
Letters to Serena. 1704.
An Account of the Courts of Prussia and Hanover. 1705.
Adeisidaemon. The Hague, 1709.
Origines Judaicae. The Hague, 1709.
Nazarenus, or Jewish, Gentile and Mahometan Christianity. 1718.
Tetradymus. 1720.
Pantheisticon, sive Formula celebrandae Sodalitatis Socraticae. 1720.
A Collection of Several Pieces of Mr John Toland (with life by Des Maizeaux). 1726.

Cp. G. Berthold, Johann Toland und der Monismus der Gegenwart. 1876.

CHARLES LESLIE (1650–1722)

The Snake in the Grass. 1696.
A Short and Easy method with the Deists. 1698. 5th ed. 1712.
Theological works. 2 vols. 1721. 7 vols. Oxford, 1832.

JOHN SERGEANT

The Method to Science. 1696.
Solid Philosophy asserted, against the fancies of the Ideists, with Reflexions on Mr Locke's Essay concerning Human Understanding. 1697.
Transnatural Philosophy, or Metaphysicks. 1700.

EDWARD STILLINGFLEET

Discourse in Vindication of the Doctrine of the Trinity. 1696.
The Bishop of Worcester's Answer to Mr Locke's Letter. 1697.
The Bishop of Worcester's Answer to Mr Locke's Second Letter. 1698.

JOHN WYNNE

An Abridgement of Locke's Essay concerning Humane Understanding. 1696.

WILLIAM WHISTON (1667–1752)

A New theory of the Earth. 1696.
Primitive Christianity revived. 5 vols. 1711–12.
Historical memoirs of the life and writings of Dr Samuel Clarke. 1730.
The Works of Josephus translated. 1737.
Memoirs of the life and writings of Mr Whiston, written by himself. 2 vols. 1749–50.

SAMUEL BOLD

Discourse on the True Knowledge of Jesus Christ. 1697.
Consideration of the Objections to the Essay on the Human Understanding. 1699.
A Collection of Tracts publish'd in vindication of Mr Locke's Reasonableness of Christianity. 1706.

BENJAMIN WHICHCOTE

Select Sermons, with a preface by the (third) Earl of Shaftesbury. 1698.
Select Discourses, published by J. Jeffery. 1701.
Moral and Religious Aphorisms, republished with additions by S. Salter. 1753.
(Selections from the Sermons and Aphorisms in Campagnac, The Cambridge Platonists, 1901, pp. 1–75.)

PETER BROWNE (d. 1735)

Letter in answer to a Book entitled Christianity not Mysterious. 1699.
Procedure, Extent, and Limits of the Human Understanding. 1728.
Things Divine and Supernatural conceived by Analogy with Things Natural and Human. 1733.

SAMUEL CLARKE

Some Reflections on that part of a book called Amyntor, or a Defence of Milton's Life, which relates to the Writings of the Primitive Fathers, and the Canon of the New Testament. 1699.

A Discourse concerning the Being and Attributes of God, the Obligations of Natural Religion, and the Truth and Certainty of the Christian Revelation. 1705, 1706. [Two courses of Boyle lectures, 1704 and 1705.]

A Letter to Mr Dodwell, wherein all the arguments in his Epistolary Discourse are particularly answered. 1706.

The Scripture Doctrine of the Trinity. 1712.

A Collection of Papers which passed between the late learned Mr Leibnitz and Dr Clarke (to which are added Remarks upon a book entitled A Philosophical Enquiry concerning Human Liberty). 1717.

A Letter to Benjamin Headly, F.R.S., occasioned by the controversy relating to the proportion of Velocity and Force in Bodies in Motion. (Phil. Trans. No. 401.) 1728.

Cp. J. E. Le Rossignol, Ethical Philosophy of S. Clarke, Leipzig, 1892; G. von Leroy, Die phil. Probleme in dem Briefwechsel zw. Leibniz und Clarke, Giessen, 1893.

JOHN MILNER

An account of Mr Lock's religion, out of his own writings, and in his own words. 1700.

WILLIAM KING

De Origine Mali. Dublin and London, 1702. (Engl. transl. by Edmund Law. 1729.)

A Key to Divinity, or a Philosophical Essay on Free Will. 1715.

HENRY LEE

Anti-scepticism: or, notes upon each chapter of Lock's Essay. 1702.

CATHERINE COCKBURN (NÉE TROTTER)

A Defence of the Essay of Human Understanding. 1702. [In answer to Burnet.]

Remarks upon some writers in the controversy concerning the foundations of moral duty. 1743.

Remarks upon the Principles of Dr Rutherford's essay...in vindication of the contrary principles...of the late Dr Samuel Clarke. 1747.

A Vindication of Mr Locke's Christian Principles from the Injurious Imputations of Dr Holdsworth. 1751. [In posthumous Works.]

JOHN BROUGHTON

Psychologia; or an account of the nature of the rational soul. 1703.

THOMAS TAYLOR

The Two Covenants of God with mankind, or the Divine Justice and Mercy explained and vindicated in an Essay designed to show the use and advantages of some of M^r^ Malebranch's Principles. 1704.

WILLIAM SHERLOCK

Discourse of the Immortality of the Soul. 1705.

THOMAS WOOLSTON

The Old Apology for the Truth of the Christian Religion...revived. 1705.
The Moderator between an Infidel and an Apostate. 1725.
Discourses. 1727–9.

WILLIAM CARROLL

A Dissertation upon the tenth chapter of the Fourth Book of Mr Locke's Essay concerning Humane Understanding; wherein that author's endeavours to establish Spinoza's atheistical hypothesis...are discover'd and confuted. 1706.

HENRY DODWELL (THE ELDER)

An Epistolary Discourse proving from the Scriptures and the first Fathers that the Soul is a principle naturally mortal, but immortalized actually by the pleasure of God. 1706.
A Preliminary Defence of the Epistolary Discourse. 1707.
The Natural Mortality of Human Souls clearly demonstrated. 1708.

ANTHONY COLLINS

Essay concerning the use of Reason in propositions the evidence whereof depends on Human Testimony. 1707.
Priestcraft in Perfection. 1709.
Vindication of the Divine Attributes. 1710.
A Discourse of Free-thinking, occasioned by the Rise and Growth of a Sect called Free-thinkers. 1713.
Inquiry concerning Human Liberty. 1715.
A Discourse of the Grounds and Reasons of the Christian Religion. 1724.
Scheme of Literal Prophecy considered. 1727.
Liberty and Necessity. 1729.

GEORGE BERKELEY

Arithmetica absque Algebra aut Euclide demonstrata. Dublin, 1707.
Miscellanea Mathematica. Dublin, 1707.
An Essay towards a New Theory of Vision. Dublin, 1709.
A Treatise concerning the Principles of Human Knowledge. Part 1. Dublin, 1710. (2nd ed., with "Part 1" omitted from title, London, 1734.)
Passive Obedience: or, The Christian Doctrine of not resisting the Supreme Power, proved and vindicated, upon the Principles of the Law of Nature. 1712.
Three Dialogues between Hylas and Philonous. 1713.
De motu: sive de motus principio et natura, et de causa communicationis motuum. 1721.
An Essay towards preventing the ruin of Great Britain. 1721.
A Proposal for the better supplying of Churches in our Foreign Plantations, and for converting the savage Americans to Christianity, by a College

to be erected in the Summer Islands, otherwise called the Isles of Bermuda. 1725.
Alciphron, or the Minute Philosopher. 1732.
The Theory of Vision, or Visual Language...vindicated and explained. 1733.
The Analyst, or, A Discourse addressed to an infidel mathematician. 1734.
A Defence of Free-Thinking in Mathematics. 1735.
The Querist (three parts, Dublin, 1735, 1736, 1737; published together in revised form, 1750).
Siris, a chain of Philosophical Reflexions and Inquiries concerning the virtues of Tar-water and divers other subjects connected together and arising one from another. 1744.
Farther Thoughts on Tar-water (published in his Miscellany, 1752).
Berkeley and Percival: the correspondence of George Berkeley and Sir John Percival. Ed. by B. Rand. Cambridge, 1914.

Collected Works

Editions appeared in 1784, 1820, 1837, 1843, 1871, 1897–8, 1901. The standard edition is that by A. Campbell Fraser, 4 vols., Oxford, 1871, revised, 1901. This is the first really complete edition, and contains the Commonplace Book, formerly unknown. Fraser has also published Selections from Berkeley, 1874 (frequently re-edited) and Berkeley (in Blackwood's Phil. Classics), 1881. In these and in the 1901 edition of the Works copious bibliographical references will be found. On the text of the Commonplace Book, see T. Lorenz, in Mind, N.S., vol. XIII, and in Archiv für Ges. d. Phil., vol. I, 1897. See also M. C. Tyler, Three Men of Letters. (On G. B. and his American visit.) New York, 1895.

ANTHONY ASTLEY COOPER, THIRD EARL OF SHAFTESBURY

Characteristics of Men, Manners, Opinions, Times, 1711; 2nd ed., 1713. (New reprint by J. M. Robertson, 1900; French transl., 1769; German transl., 1776–9.)
Letters to a Young Man at the University. 1716.
Second Characters, ed. by B. Rand. 1914.

Cp. J. Brown, Essays on The Characteristics, 1751; G. v. Gižycki, Die Phil. Shaftesbury's, Berlin, 1876; G. Zart, Einfluss d. engl. Phil. seit Bacon auf die deutsche Phil. d. 18ten Jahrhunderts, Berlin, 1881; T. Fowler, Shaftesbury and Hutcheson, 1882; B. Rand, Life, Letters, and Philosophical Regimen of Shaftesbury, 1900 [contains much material formerly unpublished].

BERNARD MANDEVILLE

Treatise of the Hypochondriack and Hysterick Passions. 1711.
The Fable of the Bees; or Private Vices, Public Benefits. 1714. (With An Essay on Charity and Charity Schools, and A Search into the Nature of Society, 1723.)

Free Thoughts on Religion. 1720.
The Origin of Honour, and the Usefulness of Christianity in War. 1732.
Cp. P. Sakmann, Mandeville und die Bienenfabel-Controverse. Freiburg i/B., 1897.

BENJAMIN HAMPTON

The Existence of Human Soul after Death proved...Wherein Mr Locke's notion that understanding may be given to matter,...and all other such...opinions, are...confuted. 1711.

ARTHUR COLLIER

Clavis Universalis: or, a New Inquiry after Truth. Being a Demonstration of the Non-Existence, or Impossibility, of an External World. 1713. (Rptd, Edinburgh, 1836 (with letters to Clarke, etc.); in Parr's Metaphysical Tracts, 1837; Chicago, 1909.)
A Specimen of True Philosophy; in a Discourse on Genesis, the first chapter and the first verse. Sarum, 1730. (Rptd in Parr's Metaphysical Tracts, 1837.)
Logology, or a Treatise on the Logos or Word of God, in seven sermons on John, i. 1, 2, 3, 14. 1732.

WILLIAM DERHAM

Physico-Theology (Boyle lectures). 1713.
Astro-Theology. 1715.
Christo-Theology. 1730.

THOMAS CHUBB

The Supremacy of the Father asserted. 1715.
A Discourse concerning Reason. 1731.
The True Gospel of Jesus Christ. 1739.
Posthumous Works. 1748.

JOHN CLARKE (1682–1757)

An Enquiry into the Cause and Origin of Evil. (Boyle lecture, 1720.) [Defended the views of his brother, Samuel Clarke.]

WILLIAM WOLLASTON

The Religion of Nature Delineated. 1722.
Cp. Drechsler, Ueber Wollaston's Moralphil. Erlangen, 1802.

WILLIAM LAW

Remarks upon a late Book entituled the Fable of the Bees. 1723.
The Case of Reason, or Natural Religion, fairly and fully stated. 1732.

FRANCIS HUTCHESON

An Inquiry into the Original of our Ideas of Beauty and Virtue, in two treatises. 1725.

An Essay on the Nature and Conduct of the Passions and Affections, with Illustrations on the Moral Sense. 1728. (French transl., Amsterdam, 1749; German transl., Frankfort, 1762.)
Philosophiae moralis institutio compendiaria. Glasgow, 1742. (English transl., Glasgow, 1747.)
Metaphysicae Synopsis. Glasgow, 1742.
A System of Moral Philosophy. Glasgow, 1755.
Logicae Compendium. Glasgow, 1756.
Cp. T. Fowler, Shaftesbury and Hutcheson, 1882; W. R. Scott, Francis Hutcheson, Cambridge, 1900.

JOHN CLARKE (d. 1730)

An Examination of the [Wollaston's] Notion of Moral Good and Evil. 1725.
The Foundation of Morality in theory and practice. York [1730]. [A criticism of Samuel Clarke.]
An Examination of what has been advanced relating to Moral Obligation. 1730.
An Examination of the Sketch or Plan of an Answer [by C. Middleton] to a Book entitled Christianity as old as the Creation. 1734.

THOMAS MORGAN

Philosophical Principles of Medicine. 1725.
A Collection of Tracts. 1726.
The Moral Philosopher. In a Dialogue between Philalethes a Christian Deist, and Theophanes a Christian Jew. 1737.
— Vol. II. Being a farther Vindication of Moral Truth and Reason. 1739.
— Vol. III. Superstition and Tyranny inconsistent with Theocracy. 1740.

JOHN BALGUY

A Letter to a Deist concerning the Beauty and Excellency of Moral Virtue. 1726.
The Foundation of Moral Goodness. 1727. Part II, 1728.
A Collection of Tracts, Moral and Theological [containing the above and others]. 1734.
Essay on Redemption. 1741.

JOSEPH BUTLER

Fifteen Sermons preached at the Chapel of the Rolls Court. 1726.
The Analogy of Religion, Natural and Revealed, to the Constitution and Course of Nature. 1736.
Works. Ed. S. Halifax, Oxford, 1849; W. E. Gladstone, Oxford, 1896; J. H. Bernard, 1900.

[ZACHARY MAYNE (?)]

Two Dissertations concerning Sense, and the Imagination. With an Essay on Consciousness. 1728.

EDMUND LAW

An Essay on the Origin of Evil. By [Abp] W. King. Translated from the Latin with notes. 1731.

Inquiry into the Ideas of Space, Time, Immensity and Eternity. Cambridge, 1734.

JOHN GAY

A Dissertation concerning the Principle and Criterion of Virtue and the Origin of the Passions. (Prefixed to Law's transl. of King's Essay on the Origin of Evil.) 1731.

JOSEPH CLARKE

Treatise of Space [a criticism of Samuel Clarke]. 1733.

A further examination of Dr Clarke's Notions of Space. 1734.

ANDREW BAXTER

Enquiry into the nature of the Human Soul, wherein the Immateriality of the Soul is evinced from the principles of Reason and Philosophy. [1733.]

JOHN JACKSON

The Existence and Unity of God proved from his Nature and Attributes [a defence of Clarke]. 1734.

VINCENT PERRONET

A Vindication of Mr Locke. 1736.

A Second Vindication of Mr Locke. 1738.

Some Enquiries chiefly relating to Spiritual Beings, in which the opinions of Mr Hobbes...are taken notice of. 1740.

WILLIAM WARBURTON

The Alliance between Church and State. 1736. 10th ed. 1846.

The Divine Legation of Moses demonstrated on the principles of a Religious Deist. In six books. 2 vols. 1738–41. 9th ed. 1765 (vols. III–V in continuation of the 2 vols. of the 4th ed. of the first part).

A Commentary on Mr Pope's Essay on Man. 1739. Remodelled as A Critical and Philosophical Commentary on Mr Pope's Essay...1742.

The Works of Shakespear...with Comments and Notes by Mr Pope and Mr Warburton. 8 vols. 1747.

A Letter to the Editor of the Letters on the Spirit of Patriotism. 1749.

A View of Lord Bolingbroke's Philosophy in four Letters to a Friend. 1754–5.

The Doctrine of Grace, or the Office and Operation of the Holy Spirit vindicated from the Insults of Infidelity and the Abuses of Fanaticism. 2 vols. 1762.

Works. Ed. R. Hurd (bishop of Worcester). 7 vols. 1788.

PETER ANNET

A Collection of the Tracts of a certain Free Enquirer. 1739–45.
The Resurrection of Jesus considered. 3rd ed. 1744.

DAVID HUME

A Treatise of Human Nature: being an Attempt to introduce the experimental Method of Reasoning into Moral Subjects. Vols. I and II, 1739; vol. III, 1740.
Essays Moral and Political. Edinburgh, 1741. Vol. II, 1742.
Philosophical Essays concerning Human Understanding. 1748.
An Enquiry concerning the Principles of Morals. 1751.
Political Discourses. Edinburgh, 1752.
Essays and Treatises on Several Subjects. In four volumes. 1753–4 (final edition, 1777).
The History of England. 1754–61.
Four Dissertations. I. The Natural History of Religion. II. Of the Passions. III. Of Tragedy. IV. Of the Standard of Taste. 1757.
The Life of David Hume, Esq. Written by himself. 1777.
Two Essays [on Suicide and on Immortality]. 1777.
Dialogues concerning Natural Religion. 1779.
Editions of A Treatise of Human Nature and Dialogues concerning Natural Religion, by T. H. Green and T. H. Grose (with philosophical introductions by T. H. Green), 2 vols., 1874; of Essays (complete) by the same (with bibliographical introduction by T. H. Grose), 2 vols., 1875; of the Treatise, Oxford, 1896, and of the two Enquiries, *ib.*, 1894 (with indexes) by L. A. Selby-Bigge; of the Dialogues, by B. McEwen, 1907; of the Political Discourses, by W. B. Robertson, 1908.

Works on Hume

J. Bonar. Philosophy and Political Economy. 1893.
J. H. Burton. Life and Correspondence of David Hume. 1846.
— Letters of Eminent Persons addressed to David Hume. 1849.
G. von Gižycki. Die Ethik Humes. 1878.
T. H. Green. Introductions to Hume's Treatise. Vols. I and II. Works. Vol. I. 1885.
C. Hedvall. Humes Erkenntnistheorie. 1906.
G. Birkbeck Hill. Letters of David Hume to W. Strahan. 1888.
T. H. Huxley. Hume (English Men of Letters Series). 1879.
F. Jodl. Leben und Philosophie Humes. 1872.
M. Klemme. Die volkswirtschaftlichen Anschauungen Humes. 1900.
G. Lechartier. David Hume, moraliste et sociologue. 1900.
E. Marcus. Kant's Revolutionsprinzip. Eine exakte Lösung des Kant-Hume'schen Erkenntnisproblem. 1902.
A. Meinong. Hume-Studien. I, 1877; II, 1882.
E. Pfleiderer. Empirismus und Skepsis in Humes Philosophie. 1874.

O. Quast. Der Begriff der Belief bei Hume. 1903.
M. Teisseire. Les Essais économiques de David Hume. 1902.
A. Thomsen. David Hume. Sein Leben und seine Philosophie. 1912.

HENRY DODWELL (THE YOUNGER)

Christianity not founded on argument. 1742.

DAVID HARTLEY

Conjecturae quaedam de sensu motu et idearum generatione. 1746. In Parr's Metaphysical Tracts, 1837.
Observations on Man, his frame, his duty, and his expectations. 1749. (The edition of 1791 is accompanied by a sketch of the author's life, and by notes and additions translated from the German of H. A. Pistorius.)
Hartley's Theory of the Human Mind, on the principle of the Association of Ideas. With essays by J. Priestley. 1775.
Cp. G. S. Bower. Hartley and James Mill. (English Philosophers Series.) 1881.

THOMAS REID

An Essay on Quantity, in Phil. Trans. 1748.
An Inquiry into the Human Mind on the Principles of Common Sense. 1764.
A Brief Account of Aristotle's Logic, in Lord Kames's History of Man. 1774.
Essays on the Intellectual Powers of Man. Edinburgh, 1785.
Essays on the Active Powers of Man. Edinburgh, 1788.
Works, ed. Sir W. Hamilton. 2 vols. 1846–63.
Cp. A. C. Fraser, Reid (Famous Scots Series), 1898; A. Seth Pringle Pattison, Scottish Philosophy, 1885; Dugald Stewart, in Works, vol. x, and in Hamilton's Reid, vol. i.

JAMES HARRIS

Hermes, or a Philosophical Inquiry concerning Universal Grammar. 1751.
Philosophical Arrangements. 1775.
Philological Inquiries in three parts. 2 vols. 1781.

HENRY HOME, LORD KAMES

Essays on the Principles of Morality and Natural Religion. 1751. (German transl. 1772.)
Introduction to the Art of Thinking. 1761.
Elements of Criticism. 1762.
Sketches of the History of Man. 1774.
Cp. A. F. Tytler (Lord Woodhouselee), Life of Lord Kames. 1807.

HENRY ST JOHN, VISCOUNT BOLINGBROKE

Philosophical Works. Ed. D. Mallet. 1754.

RICHARD PRICE

A Review of the Principal Questions and Difficulties in Morals. 1757. 3rd ed. 1787.
Observations on Reversionary Payments. 1771. 4th ed. 1783.
An Appeal to the Public on the subject of the National Debt. 1772.
Observations on the nature of Civil Liberty, the Principles of Government, and the Justice and Policy of the War with America. 1776.
Additional Observations [on the same subject]. 1777.
The General Introduction and Supplement to the two Tracts on Civil Liberty. 1778.
An Essay on the Population of England. 1780.
A Discourse on the Love of our Country. 1789.

ADAM SMITH

The Theory of Moral Sentiments; or an essay towards an analysis of the principles by which men naturally judge concerning the conduct and character, first of their neighbours, and afterwards of themselves; to which is added, a Dissertation on the Origin of Languages. 1759. 6th ed. 2 vols. 1790.
An Inquiry into the Nature and Causes of the Wealth of Nations. 2 vols. 1776. 6th ed. 3 vols. 1791. Edd. J. R. McCulloch, 1828, etc.; J. E. T. Rogers, 1869; J. S. Nicholson, 1884; E. Cannan, 1904.
Essays on Philosophical Subjects. To which is prefixed an account of the life and writings of the author. By Dugald Stewart. 1795.
Lectures on Justice, Police, Revenue and Arms...reported by a student in 1763. Ed. by E. Cannan. Oxford, 1896.

Works on Adam Smith

W. Bagehot. Economic Studies. 1880.
— Biographical Studies. 1881.
J. Bonar. Philosophy and Political Economy. 1893.
— A Catalogue of the Library of Adam Smith. 1894.
J. A. Farrer. Adam Smith. (English Philosophers series.) 1881.
Viscount Haldane. Adam Smith. (Great Writers series.) 1887.
W. Hasbach. Die allgemeinen philosophischen Grundlagen der von Quesnay und Smith begrundeten politischen Ökonomie. Leipzig, 1890.
— Untersuchungen über Adam Smith. Leipzig, 1891.
F. W. Hirst. Adam Smith. (English Men of Letters series.) 1904.
T. E. Cliffe Leslie. Essays in Political and Moral Philosophy. 1879.
J. S. Nicholson. A Project of Empire. 1909.
A. Oncken. Adam Smith in der Culturgeschichte. 1874.
— Adam Smith und Immanuel Kant. 1877.
John Rae. Life of Adam Smith. 1895.
Dugald Stewart. Biographical Memoir of Adam Smith in Trans. R. S. E. 1793. (In vol. containing also memoirs of Robertson and Reid, 1811; in Works, vol. x, 1858.)

GEORGE CAMPBELL

A Dissertation on Miracles. 1762.
The Philosophy of Rhetoric. 1776.

ABRAHAM TUCKER

Freewill, Foreknowledge and Fate. By Edward Search. 1763.
Man in quest of Himself: or a Defence of the Individuality of the Human Mind. By Cuthbert Comment. 1763.
The Light of Nature Pursued. By Edward Search. 7 vols. 1768–78. (Edited in two vols. by Sir H. P. St John Mildmay, 1836; and, in an abridged form, by W. Hazlitt, 1807.)

JAMES OSWALD

An Appeal to Common Sense in behalf of Religion. Edinburgh, 1766.

ADAM FERGUSON

Essay on the History of Civil Society. 1767.
History of the Progress and Termination of the Roman Republic. 1783.
Principles of Moral and Political Science. Edinburgh, 1792.
Cp. H. Huth, Soziale und individualistische Auffassung...bei Adam Smith und Adam Ferguson. 1907.

SIR JAMES STEUART [DENHAM]

An Inquiry into the Principles of Political Economy: being an Essay on the Science of Domestic Policy in Free Nations. 2 vols. 1767.
Cp. W. Hasbach, Untersuchungen über Adam Smith. 1891. (Pp. 369–381.)

JOSEPH PRIESTLEY

The History and Present State of Electricity. 1767.
An Essay on the First Principles of Government. 1768. 2nd ed. 1771.
A Free Address to Protestant Dissenters as such. 1769.
Institutes of Natural and Revealed Theology. 3 vols. 1772–4.
Experiments and observations on different kinds of Air. 6 vols. 1774–86.
An Examination of Dr Reid's Inquiry..., Dr Beattie's Essay..., and Dr Oswald's Appeal to Common Sense. 1774.
Disquisitions relating to Matter and Spirit. 1777.
The Doctrine of Philosophical Necessity illustrated. 1777.
A Free Discussion on the doctrines of Materialism, etc. 1778.
Observations on the Importance of the American Revolution. 1784.
(And many other works chiefly scientific and theological.)
Theological and Miscellaneous Works, ed. J. T. Rutt. 25 vols. 1817–32.
Cp. T. E. Thorpe, Priestley. (English Men of Science Series.) 1906.

JAMES BEATTIE

An Essay on the Nature and Immutability of Truth in opposition to sophistry and scepticism. Edinburgh, 1770. With other essays. Edinburgh, 1776.

Dissertations moral and critical. 1783.
Elements of Moral Science. 1790–3.
Cp. Sir W. Forbes, Life and Writings of Beattie, 2 vols. 1806; M. Forbes, Beattie and his friends, 1904.

JAMES BURNETT, LORD MONBODDO

Of the Origin and Progress of Language. 3 vols. Edinburgh, 1773–6. 2nd ed. 6 vols. 1774–92.
Antient Metaphysics: or, the Science of Universals. 6 vols. Edinburgh, 1779–99.
Cp. W. Knight, Lord Monboddo and some of his contemporaries, 1900.

JEREMY BENTHAM

Bentham's MSS, largely unpublished, are deposited in University College, London (Catalogue by T. Whittaker, 1892) and in the British Museum.

A. Works published separately

A Fragment on Government; being an examination of what is delivered on the subject of Government in general in the Introduction to Sir William Blackstone's Commentaries: with a Preface in which is given a Critique of the Work at large. 1776. 3rd ed. 1822. Ed. F. C. Montague. 1891.
View of the Hard Labour Bill. 1778.
Defence of Usury. 1787. 2nd ed. 1790. 3rd ed. 1816.
An Introduction to the Principles of Morals and Legislation. 1789. 2nd ed. 1823. Rptd Oxford, 1879.
The Panopticon, or Inspection House. 1791. (Written 1787.)
A Protest against Law Taxes. 1795.
Poor Laws and Pauper Management (in Arthur Young's Annals, Sept. 1797 and later).
The Panopticon versus New South Wales. 1802.
A Plea for the Constitution. 1803.
Scotch Reform, with a Summary View of a Plan for a Judicatory. 1808. 2nd ed. 1811.
Chrestomathia. 1816.
Swear not at all. 1817. (Written 1813.)
A Table of the Springs of Action, printed 1815. (Ed. James Mill.) 1817.
Catechism of Parliamentary Reform, in The Pamphleteer, Jan. 1817. (Written 1809.)
Papers upon Codification and Public Instruction. 1817. (Written 1811–15.)
Church of Englandism and its Catechism examined. 1818.
Radical Reform Bill, with explanations, in The Pamphleteer, Dec. 1819.
Elements of the Art of Packing as applied to Special Juries. 1821. (Written 1809.)

Three Tracts relating to Spanish and Portuguese Affairs. 1821.
On the Liberty of the Press [addressed to Spain]. 1821.
The Analysis of the Influence of Natural Religion upon the Temporal Happiness of Mankind, by Philip Beauchamp. (Ed. G. Grote.) 1822.
Not Paul but Jesus, by Gamaliel Smith. 1823.
Codification Proposals. 1823.
Book of Fallacies. (Ed. P. Bingham.) 1824.
The Rationale of Reward. 1825.
The Rationale of Evidence. (Ed. J. S. Mill.) 5 vols. 1827.
The Rationale of Punishment. 1830. (This work and The Rationale of Reward are translated from Dumont, with assistance from the manuscript of Bentham written about 1775.)
Constitutional Code for the use of all Nations and all Governments professing Liberal Opinions. Vol. I. 1830.
Official Aptitude maximised—Expense minimised. 1831. (A collection of papers written in 1810 and following years.)
Deontology or Science of Morality. (Ed. J. Bowring.) 2 vols. 1834.

B. Works compiled by Étienne Dumont from Bentham's MSS and his Introduction of 1789

Traités de Législation civile et pénale. 3 vols. 1802. 2nd ed. 1820.
Théorie des Peines et des Récompenses. 1811, 1818, 1825.
Tactique des Assemblées délibérantes et Traité des Sophismes politiques. 1816.
Traité des Preuves judiciaires. 1823. (English transl. 1825.)
De l'Organisation judiciaire et de la Codification. 1823.
Theory of Legislation; by Jeremy Bentham. Translated from the French of Étienne Dumont, by R. Hildreth. 1876.

C. Collected Works and Selections

Works. Ed. John Bowring. 11 vols. 1838-43.

Vols. x and xi contain a Life of Bentham and an Index to his Works. The first nine volumes contain the writings published in his life-time (including English versions of those published by Dumont), except the writings on religion. Deontology is not reprinted. The chief contents not previously published in English are:

Principles of the Civil Code (translated from Dumont); Principles of the Penal Code (translated from Dumont); View of a Complete Code of Laws (translated from Dumont); Principles of International Law; Junctiana, Proposal for a junction of the Atlantic and Pacific; Essay on Political Tactics (translated from Dumont); Anarchical Fallacies (summary in Dumont); Protest against Law Taxes; Manual of Political Economy; Pannomial Fragments; Nomography, or the Art of Inditing Laws; Logical Arrangements, or Instruments of Invention and Discovery; Emancipate your Colonies; Securities

against Misrule, addressed to a Mahommedan State; Fragment on Ontology; Essay on Logic; The Constitutional Code (complete).
Benthamiana: or Select Extracts from the works of Jeremy Bentham. Ed. J. H. Burton. Edinburgh, 1843.

D. Biography and Criticism

C. M. Atkinson. Jeremy Bentham. 1905.
A. V. Dicey. Law and Public Opinion in England. Lecture VI. 1905.
C. S. Kenny, in Law Quarterly Review. Vol. XI, nos. 41 and 42. 1895.
J. S. Mill, in London and Westminster Review, August 1838. (Rptd in Dissertations and Discussions. Vol. I. 1859.)
R. v. Mohl. Geschichte und Litteratur der Staatswissenschaften. Book III. 1858.
F. C. Montague. Introduction to edition of A Fragment on Government. 1891.
E. Nys. Études de droit international. 1901.
A. S. Pringle Pattison. The Philosophical Radicals and other essays. 1907.
H. Sidgwick, in Fortnightly Review, May 1877. (Rptd in Miscellaneous Essays and Addresses. 1904.)

THOMAS TAYLOR

Proclus Diadochus. The philosophical and mathematical commentaries... translated. 1778–89.
The mystical...hymns of Orpheus...translated. 1787. New ed. 1896.
A Dissertation on the Eleusinian and Bacchic Mysteries. Amsterdam [1790].
Plato. Works, translated by Sydenham, Floyer, and T. T. 5 vols. 1804.
Aristoteles. Works translated and illustrated with copious elucidations. 10 vols. 1806–12.
Proclus Diadochus. The six books of Proclus on the history of Plato, translated. 1816.
Theoretic Arithmetic. 1816.
Select works of Plotinus translated. 1817. New ed. 1895.
Iamblichus. On the mysteries of the Egyptians...translated. Chiswick, 1821.
Political fragments of Archytas...and other ancient Pythagoreans...translated. Chiswick, 1822.
The Metamorphosis, or, Golden Ass and philosophical works of Apuleius translated. 1822.
Select works of Porphyrius translated. 1823.
The Elements of a new arithmetical notation. 1823.
Pausanias. The description of Greece...translated. New ed. 1824.

WILLIAM PALEY

The Principles of Moral and Political Philosophy. 1785. Ed. R. Whateley, 1859. Ed. A. Bain (Moral Philosophy only). n.d.
Horae Paulinae, or the Truth of the Scripture History of St Paul evinced. 1790.
A View of the Evidences of Christianity. 1794.

Natural Theology, or Evidences of the Existence and Attributes of the Deity collected from the Appearances of Nature. 1802. With notes by Lord Brougham, and Sir C. Bell. 1836.
Works. 7 vols. 1825.

ARCHIBALD ALISON

Essay on the nature and principles of Taste. 1790.

SIR JAMES MACKINTOSH

Vindiciae Gallicae: defence of the French Revolution against Burke including strictures on the late production of de Calonne. 1791.
Discourse on the study of the Law of Nature and Nations. 1799.
Dissertation on the progress of Ethical philosophy chiefly during the 17th and 18th centuries. 1830. 10th ed. 1872.
Miscellaneous Works. 3 vols. 1846.

DUGALD STEWART

Elements of the Philosophy of the Human Mind. Vol. I. 1792. Vol. II. 1814. Vol. III. 1827.
Outlines of Moral Philosophy. 1793.
Philosophical Essays. 1810.
Memoirs of Adam Smith, William Robertson and Thomas Reid. 1811.
A General View of the Progress of Metaphysical, Ethical and Political Philosophy since the Revival of Letters. (Encyclopaedia Britannica Supplementary Dissertation.) Part I. 1815. Part II. 1821.
The Philosophy of the Active and Moral Powers. 1828.
Works. Ed. Sir W. Hamilton. 11 vols. 1854–8.

THOMAS ROBERT MALTHUS

An Essay on the Principle of Population as it affects the Future Improvement of Society, with Remarks on the Speculations of Mr Godwin, M. Condorcet, and other Writers. 1798.
An Essay on the Principle of Population; or, a View of its Past and Present effects on Human Happiness. 2nd ed. [of the preceding]. 1803.
Observations on the effects of the Corn Laws. 1814. 3rd ed. 1815.
An Inquiry into the Nature and Progress of Rent. 1815.
Grounds of an Opinion on the Policy of restricting the Importation of Foreign Corn. 1815.
Principles of Political Economy. 1820. 2nd ed. (with life of the author by Bp Otter). 1836.
The Measure of Value stated and illustrated. 1823.
Definitions in Political Economy. 1827.
Summary View of the Principle of Population. 1830.

Cp. J. Bonar, Malthus and his Work, 1885; Letters of Ricardo to Malthus, 1887; L. Cossa, Il Principio di popolazione di T. R. Malthus, 1895; G. de Molinari, Malthus, essai sur le principe de population, 1889; A. Soetbeer, Stellung der Sozialisten zur Malthusschen Bevölkerungslehre, 1886.

THOMAS BROWN

Observations on the Zoonomia of Erasmus Darwin. 1798.
Observations on the nature and tendency of the doctrine of Mr Hume concerning the relation of cause and effect. 1805. (3rd ed. entitled Inquiry into the relation of cause and effect. 1817.)
Lectures on the Philosophy of the Human Mind. 1820.

SAMUEL TAYLOR COLERIDGE

Biographia Literaria. 1817.
Aids to Reflection. 1825.
Confessions of an Inquiring Spirit. 1840.
Essays on Method. 1845.
Cp. J. H. Green, Spiritual Philosophy. 1865.

DAVID RICARDO

Principles of Political Economy and Taxation. 1817.

GEORGE COMBE

Essays on Phrenology. 1819.
Elements of Phrenology. 1824. 7th ed. 1850.
The Constitution of Man considered in relation to external objects. 1828. 8th ed. 1847.
Lectures on Moral Philosophy. 1840.
Notes on the United States of America. 1841.
Remarks on national education. 1847.
On the Relation between Religion and Science. 1857.
The Currency Question. 1858.

THOMAS CHALMERS

The Christian and Civic Economy of large Towns. 1821–6.
On Political Economy in connection with the moral state and moral prospects of Society. 1832.
The Adaptation of External Nature to the moral and intellectual constitution of Man. 1834.
Sketches of Moral and Mental Philosophy. 1836.
Natural Theology. 1836.

SAMUEL BAILEY

Essays on the formation and publication of opinions and other subjects. 1821.
Critical Dissertation on the nature, measure, and causes of value. 1825.
Essays on the pursuit of Truth and on the progress of Knowledge. 1829.
Rationale of Political Representation. 1835.
Review of Berkeley's Theory of Vision. 1842.
Theory of Reasoning. 1851.
Letters on the Philosophy of the Human Mind. 1855, 1858, 1863.

JAMES MILL

Elements of Political Economy. 1821.
Essays on government, jurisprudence...written for the Supplement to the Encycl. Brit. (privately printed). [1825.]
Analysis of the Phenomena of the Human Mind. 1829. New ed. by J. S. Mill. 1869.
A Fragment on Mackintosh. 1835. New ed. 1870.
The Principles of Toleration. 1837.

Cp. A. Bain, James Mill, a biography, 1882; G. S. Bower, Hartley and James Mill (English Philosophers), 1881.

RICHARD WHATELY

Elements of Logic. 1826.
Elements of Rhetoric. 1828.
Poor Laws. 1834.
Commerce and Absenteeism. 1835.

GEORGE BENTHAM

An Outline of a new System of Logic. 1827.

ISAAC TAYLOR

The Natural History of Enthusiasm. 1829.
Fanaticism. 1833.
Spiritual Despotism. 1835.
The Physical Theory of Another Life. 1836.
Ancient Christianity. 1839–46.

Cf. G. Gilfillan, Isaac Taylor, Second Gallery of Literary Portraits, Edinburgh, 1850.

JOHN ABERCROMBIE

Inquiries concerning the Intellectual Powers or the Investigation of Truth. 1830.
The Philosophy of the Moral Feelings. 1833.

SIR JOHN F. W. HERSCHEL

Discourse on the Study of Natural Philosophy. 1830.

JOHN STUART MILL

Essays on some unsettled questions of Political Economy. 1831, 1844.
A System of Logic, ratiocinative and inductive. 1843. 3rd ed. 1850. 8th ed. 1872.
Principles of Political Economy. 1848. 6th ed. 1865. Ed. W. J. Ashley. 1909.
Thoughts on Parliamentary Reform. 1859.
On Liberty. 1859.
Dissertations and Discussions. Vols. I and II. 1859. Vol. III. 1867. Vol. IV. 1875.

Considerations on Representative Government. 1861.
Utilitarianism. 1863.
Examination of Sir William Hamilton's Philosophy. 1865.
Auguste Comte and Positivism. 1865.
On the Subjection of Women. 1869.
Autobiography. 1873.
Three Essays on Religion. 1874.
Lettres inédites, par Laveleye. Brussels, 1885.
Early Essays, selected by J. W. M. Gibbs. 1897.
Correspondance inédite avec G. d'Eichthal. Paris, 1898.
Lettres inédites à Auguste Comte, publiées par L. Lévy-Bruhl. Paris, 1899.
Letters. Ed. by H. S. R. Elliot. 1910.

Cp. A. Bain, J. S. Mill: a criticism, 1882; W. L. Courteney, Metaphysics of J. S. Mill, 1879; C. Douglas, J. S. Mill: a study of his philosophy, 1895; Ethics of J. S. Mill, 1897; S. Saenger, J. S. Mill (Frommanns Klassiker), 1901; J. Watson, Mill, Comte and Spencer, 1895. (2nd ed. with title An Outline of Philosophy, 1898.)

JOHN AUSTIN

The Province of Jurisprudence Determined. 1832. New ed. 1861.
Lectures on Jurisprudence, or the philosophy of positive law. 1863.

THOMAS CARLYLE

Sartor Resartus. 1834.
Heroes and Hero-worship. 1841.

Cp. P. Hensel, Carlyle (Frommanns Klass. d. Phil.). 1900.

WILLIAM HENRY SMITH (1808–1872)

Ernesto. [Philosophical romance.] 1835.
Thorndale; or, The Conflict of Opinions. 1857.
Gravenhurst; or, Thoughts on Good and Evil. 1862.

JAMES MARTINEAU

The Rationale of Religious Inquiry. 1836.
Essays, Philosophical and Theological. 2 vols. 1868.
Religion as affected by Modern Materialism. 1874.
Modern Materialism: its attitude towards Theology. 1876.
Ideal Substitutes for God considered. 1879.
The Relation between Ethics and Religion. 1881.
A Study of Spinoza. 1882.
Types of Ethical Theory. 1885.
A Study of Religion. 1888.
The Seat of authority in Religion. 1890.

Cp. J. Estlin Carpenter, James Martineau, theologian and teacher, 1905.

WILLIAM WHEWELL

History of the Inductive Sciences. 1837. (German transl. 1839–42.)
Philosophy of the Inductive Sciences founded upon their history. 1840.
The Elements of Morality, including Polity. 1845.
Lectures on Systematic Morality. 1846.

AUGUSTUS DE MORGAN

Essay on Probabilities. 1838.
Formal Logic; or the Calculus of Inference, necessary and probable. 1847.
Syllabus of a proposed System of Logic. 1860.

WILLIAM THOMSON

An Outline of the necessary Laws of Thought. 1842.

HERBERT SPENCER

The Proper Sphere of Government. 1843.
Social Statics. 1850.
Principles of Psychology. 1855.
Essays, scientific, political and speculative. 3 vols. 1858–74. New ed. vol. I. 1891.
Education. 1861.
A System of Synthetic Philosophy: First Principles. 1862. 6th ed. 1899. Principles of Biology. 2 vols. 1864–7. New ed. 1898. Principles of Psychology. 2 vols. 1870–2. 5th ed. 1890. Principles of Sociology. 3 vols. 1876–96. Principles of Ethics. 2 vols. 1879–93.
The Classification of the Sciences. 1864.
The Study of Sociology. 1872.
Descriptive Sociology: or, groups of sociological facts...compiled and abstracted by D. Duncan, R. Scheppig, and J. Collier. 1873, 1880–1.
The Man *versus* the State. 1884.
The Factors of Organic Evolution. 1887.
The Inadequacy of Natural Selection. 1893.
A Rejoinder to Prof. Weismann. 1893.
Weismannism once more. 1894.
Various Fragments. 1897. Enlarged ed. 1900.
Facts and Comments. 1902.
Autobiography. 1904.

Cp. F. H. Collins, An Epitome of the Synthetic Philosophy, 1889; 4th ed. 1899; D. Duncan, Life and Letters of H. S., 1908; J. A. Thomson, Herbert Spencer (English Men of Science), 1906.

GEORGE HENRY LEWES

The Biographical History of Philosophy. 1845–6, 1880.
Comte's Philosophy of the Positive Sciences. 1853.
Aristotle: a chapter from the History of Science. 1864.

Problems of Life and Mind. First Series: The Foundations of a Creed. 1874–5. Second Series: The Physical Basis of Mind. 1877. Third Series: Problem i: A Study of Psychology. 1879. Third Series: Problems ii, iii, iv. 1879.

SIR WILLIAM HAMILTON

The Works of Thomas Reid edited. 1846. 3rd ed. 1852. 6th ed. 1863.
A Letter to A. De Morgan, Esq. on his claim to an independent rediscovery of a new principle in the theory of syllogism. 1847.
Discussions on Philosophy and Literature, Education and University Reform. 1852. 3rd ed. 1866.
Lectures on Metaphysics and Logic, ed. by H. L. Mansel and J. Veitch. 4 vols. 1858–60.

Works on Hamilton

T. S. Baynes. In Edinburgh Essays. 1857.
M. P. W. Bolton. The Scoto-Oxonian Philosophy. 1867.
— Inquisitio philosophica. 1869.
J. S. Mill. Examination of Sir W. Hamilton's Philosophy. 1865.
W. H. S. Monck. Sir W. Hamilton. (English Philosophers.) 1881.
J. H. Stirling. Sir W. Hamilton: being the philosophy of perception. 1865.
J. Veitch. Memoir of Sir W. Hamilton. 1869.
— Hamilton. (Blackwood's Philos. Classics.) 1879.
— Sir W. Hamilton: the man and his philosophy. 1883.

WILLIAM THOMAS THORNTON (1813–1880)

Overpopulation and its Remedy. 1846.
A Plea for Peasant Proprietors. 1848.
On Labour. 1869.
Old-fashioned Ethics and Common-sense Metaphysics. 1873.

JOHN HENRY NEWMAN

An Essay on the Development of Christian Doctrine. 1846.
A Grammar of Assent. 1870.

JOHN DANIEL MORELL (1816–1891)

Historical and Critical View of the Speculative Philosophy of Europe in the nineteenth century. 1846.
The Philosophical Tendencies of the Age. 1848.
The Philosophy of Religion. 1849.
Fichte's Contributions to Moral Philosophy. 1860.
Philosophical Fragments. 1878.
An Introduction to Mental Philosophy on the Inductive Method. 1884.

GEORGE BOOLE

The mathematical analysis of Logic. Cambridge, 1847.
An Analysis of the Laws of Thought on which are founded the mathematical theories of Logic and Probabilities. 1854.

THOMAS SPENCER BAYNES

An Essay on the new analytic of logical forms. 1850.

JAMES M'COSH

Method of Divine government. 1850.
Intuitions of the Mind. 1860.
Present State of Moral Philosophy in England. 1868.
Scottish Philosophy from Hutcheson to Hamilton. 1875.
Development: what it can and what it cannot do. 1884.

HARRIET MARTINEAU

Letters on the laws of man's nature and development. (With H. G. Atkinson.) 1851.
The Positive Philosophy of Auguste Comte freely translated and condensed. 1853.
Autobiography. 1877.

HENRY LONGUEVILLE MANSEL

Artis Logicae Rudimenta. From the text of Aldrich, with notes and marginal references. 1851. 4th ed. 1862.
Prolegomena Logica. An inquiry into the psychological character of logical processes. 1851.
The Limits of Religious Thought examined. 1858.
Metaphysics, or the Philosophy of Consciousness. 1860.
Philosophy of the Conditioned. 1866.
Letters, Lectures and Reviews. 1873.

JAMES FREDERICK FERRIER

The Institutes of Metaphysic. 1854.
Scottish Philosophy: the old and the new. 1856.
Lectures on Greek Philosophy and other philosophical remains. 1866.
Cp. E. S. Haldane, J. F. Ferrier. 1899.

HENRY CALDERWOOD

The Philosophy of the Infinite. 1854. 2nd ed. 1861.
Handbook of moral philosophy. 1872. 14th ed. 1888.
The Relations of Mind and Brain. 1877. 3rd ed. 1892.
The Relations of Science and Religion. 1881.
Evolution and Man's place in nature. 1893.
David Hume. (Famous Scots series.) 1898.
Cp. Life, by W. Calderwood and D. Woodside. 1900.

ALEXANDER BAIN

The Senses and the Intellect. 1855. 4th ed. 1894.
The Emotions and the Will. 1859. 4th ed. 1899.
On the Study of Character. 1861.

Mental and Moral Science. 1868.
Logic, deductive and inductive. 2 vols. 1870.
Mind and Body. 1873.
Education as a Science. 1878.
Practical Essays. 1884.
Dissertations on leading philosophical topics. 1903.
Autobiography. 1904.
Cp. W. L. Davidson, Bain's Philosophy, in Mind. 1904.

FRANCES POWER COBBE

Essay on Intuitive Morals. 1855. 4th ed. with title The Theory of Intuitive Morals. 1902.
Broken Lights. 1864.
Studies, new and old. 1865.
Darwinism in morals, and other essays. 1872.
The hopes of the human race. 1874.
The Duties of Women. 1881.
The Peak in Darien. 1882.
A Faithless World. 1885.
The Scientific Spirit of the Age. 1888.
The Friend of Man; and his friends—the poets. 1889.
Life. By herself. 1894. With additions. 1904.

RICHARD CONGREVE

The Politics of Aristotle translated. 1855.
The Catechism of Positive Religion translated. 1858. 2nd ed. 1883.
The new religion in its attitude to the old. 1859.
Essays, political, social, and religious. 3 vols. 1874–1900.
Human Catholicism. 1876. No. 2. 1877.
Comte's System of Positive Polity, vol. IV, translated. 1877.
Religion of Humanity. [Addresses.] 1878, 1879, 1881, 1882.

JOHN TULLOCH

Theism. (Burnet prize essay.) 1855.
Rational Theology and Christian Philosophy in England in the Seventeenth Century. 1872.
Pascal. (Blackwood's Foreign Classics.) 1878.
Modern theories in philosophy and religion. 1884.

ALEXANDER CAMPBELL FRASER

Essays in Philosophy. 1856.
Rational Philosophy in history and in system. 1858.
The Works of George Berkeley edited. 4 vols. 1871. New ed. 1901.
Selections from Berkeley. 1874. 6th ed. 1910.
Berkeley. (Blackwood's Philos. Classics.) 1881.
Locke. (Blackwood's Philos. Classics.) 1890.

An Essay concerning Human Understanding by John Locke. Edited. 1894.
The Philosophy of Theism. 1895–6. 2nd ed. 1899.
Thomas Reid. (Famous Scots series.) 1898.
Biographia Philosophica. 1904.
John Locke as a factor in modern thought. Brit. Acad. Proc. 1904.
Berkeley and Spiritual Realism. 1908.

WILLIAM SPALDING

Introduction to Logical Science. 1857.

SIR HENRY JAMES SUMNER MAINE

Ancient Law: its connection with the Early History of Society and its Relations to Modern Ideas. 1861.

THOMAS HENRY HUXLEY

Man's Place in Nature. 1863.
Lay Sermons, Addresses and Reviews. 1870.
Critiques and Addresses. 1873.
Science and Culture and other Essays. 1881.
Essays upon some controverted questions. 1892.
Collected Essays. 9 vols. 1894.
Scientific Memoirs. 4 vols. 1898–1901.
Cp. Life and Letters, by his son, 2 vols. 1900.

GEORGE GROTE

Plato and the other companions of Sōkrates. 1865–70.
Review of the work...entitled Examination of Sir W. Hamilton's Philosophy. 1868.
Aristotle. Ed. A. Bain and G. C. Robertson. 1872.
Minor Works. Ed. A. Bain. 1873.
Fragments on Ethical Subjects. 1876.

JOHN HENRY BRIDGES

Comte's General View of Positivism. 1865.
The Unity of Comte's Life and Doctrine—a reply to J. S. Mill. 1866, 1911.
Comte's System of Positive Polity, vol. I and (in part) vol. III translated. 1875, 1876.
Five Discourses on Positive Religion. 1882.
Roger Bacon's Opus majus edited. 1897.
Essays and Addresses, with introduction by F. Harrison, ed. by L. T. Hobhouse. 1907.
Illustrations of Positivism. 1907. Enlarged ed. 1915.
The Life and Work of Roger Bacon. 1914.

JOHN GROTE

Exploratio Philosophica. Pt I. 1865. Pt II. 1900.
An Examination of the Utilitarian Philosophy. 1870.
A Treatise on the Moral Ideals. 1876.

SHADWORTH HOLLWAY HODGSON

Time and Space. 1865.
The Theory of Practice. 1870.
The Philosophy of Reflection. 1878.
The Metaphysic of Experience. 1898.
Cp. G. D. Hicks, in Proc. of the Brit. Acad. vol. VI.

JAMES HUTCHISON STIRLING

The Secret of Hegel. 1865. New ed. 1898.
Sir W. Hamilton: being the philosophy of perception. 1865.
Schwegler's Handbook of the History of Philosophy. 1867. 9th ed. 1885.
As regards Protoplasm. 1869. New ed. 1872.
Lectures on the philosophy of law. 1873.
Textbook to Kant, with commentary. 1881.
Philosophy and Theology. (Gifford Lectures.) 1890.
Darwinism, workmen and work. 1894.
What *is* Thought? 1900.
The Categories. 1903.
Cp. A. H. Stirling, J. H. Stirling, his life and work. 1912.

SIMON SOMERVILLE LAURIE

On the Philosophy of Ethics. 1866.
Primary Instruction in relation to Education. 1867.
Notes on certain British theories of Morals. 1868.
Life and educational writings of Comenius. 1881.
Metaphysica nova et vetusta, a return to Dualism. 1884. New ed. 1889.
French transl. 1901.
Ethica, or the Ethics of Reason. 1885. 2nd ed. 1891.
Lectures on the rise and early constitution of Universities. 1886.
Institutes of Education. 1892.
Historical Survey of pre-Christian Education. 1895. 2nd ed. 1900.
Synthetica. (Gifford Lectures.) 1906.
Cp. J. B. Baillie, Prof Laurie's Natural Realism, Mind, N.S., vol. XVII, pp. 475–492; vol. XVIII, pp. 184–207.

EIGHTH DUKE OF ARGYLL

The Reign of Law. 1866.
Primeval Man. 1869.
The Unity of Nature. 1884.
The Unseen Foundations of Society. 1893.
Autobiography and Memoir (ed. by his widow). 1906.

JAMES HINTON

The Mystery of Pain. 1866.
Chapters on the Art of Thinking and other Essays. 1879.
Philosophy and Religion. 1881.
The Lawbreaker and the Coming of the Law. 1884.

JOHN VENN

The Logic of Chance. 1866. 2nd ed. 1876.
Symbolic Logic. 1881.
The Principles of Empirical or Inductive Logic. 1889.

THOMAS FOWLER

Elements of Deductive Logic. 1867.
Elements of Inductive Logic. 1870. 6th ed. 1892.
Bacon. Novum Organum. Edited. 1878. 2nd ed. 1889.
Locke. (English Men of Letters.) 1880.
Bacon. (English Philosophers.) 1881.
Shaftesbury and Hutcheson (English Philosophers.) 1882.
Progressive Morality: an essay in ethics. 1884. 2nd ed. 1895.
The Principles of Morals. [With John Matthias Wilson.] 2 pts. 1886. (Reissued, 1894.)

JOHN FREDERICK DENISON MAURICE

The Conscience: Lectures on Casuistry. 1868. New ed. 1872.
Lectures on Social Morality. 1870.
Moral and Metaphysical Philosophy. 2 vols. 1871–2.

WALTER BAGEHOT

Physics and Politics. 1869.

WILLIAM STANLEY JEVONS

The Substitution of Similars. 1869.
Pure Logic, or the science of quality apart from quantity. 1871.
The Theory of Political Economy. 1871.
The Principles of Science. 1874. 2nd ed. 1877.
Studies in Deductive Logic. 1880.
Letters and Journal (edited by his wife). 1886.
Pure Logic and other minor works, ed. R. Adamson and H. A. Jevons. 1890.

JOHN VEITCH

Memoir of Sir W. Hamilton. 1869.
Hamilton. (Blackwood's Philos. Classics.) 1882.
Institutes of Logic. 1885.
Knowing and Being. 1889.
Dualism and Monism. Ed. by R. M. Wenley. 1895.
Cp. Memoir by M. A. L. Bryce. 1896.

ALFRED BARRATT

Physical Ethics or the Science of Action. 1869.
Physical Metempiric. 1883.

WILLIAM GRAHAM

Idealism: an Essay metaphysical and critical. 1872.
The Creed of Science. 1881.
Social Problems. 1886.
Socialism, New and Old. 1890.
English Political Philosophy from Hobbes to Maine. 1899.
Free Trade and the Empire. 1904.

SIR JAMES FITZJAMES STEPHEN

Liberty, Equality, Fraternity. 1873.
Horae Sabbaticae. 1892.
Cp. Sir L. Stephen, Life of Sir James Fitzjames Stephen. 1895.

JAMES ALLANSON PICTON

The Mystery of Matter. 1873.
The Religion of the Universe. 1904.

HENRY SIDGWICK

The Methods of Ethics. 1874. 6th ed. 1901.
Outlines of the History of Ethics. 1879. 4th ed. 1896.
Principles of Political Economy. 1883.
The Scope and Method of Economic Science. 1885.
The Elements of Politics. 1891.
Practical Ethics. 1898.
Philosophy: its scope and relations. 1902.
Lectures on the Ethics of Green, Spencer and Martineau. 1902.
The Development of European Polity. 1903.
Miscellaneous Essays and Addresses. 1904.
The Philosophy of Kant and other lectures and essays. 1905.
Memoir. By A. S. and E. M. S. 1906.
Cp. F. H. Bradley, Mr Sidgwick's Hedonism, 1877; F. H. Hayward, Ethical Philosophy of Sidgwick, 1901; H. Rashdall, Sidgwick's Utilitarianism, in Mind, 1885.

THOMAS HILL GREEN

Introductions to edition of Hume's Treatise by T. H. Green and T. H. Grose. 1874–5.
Prolegomena to Ethics. 1883.
Works. Ed. by R. L. Nettleship (with memoir). 3 vols. 1885–8.
Cp. W. H. Fairbrother, The Philosophy of T. H. Green, 1896; H. Sidgwick, Lectures on The Ethics of Green, etc., 1902.

WILLIAM WALLACE

The Logic of Hegel, translated from the Encyclopaedia. 1874. 2nd ed. 1892.
Epicureanism. 1880.
Kant. (Blackwood's Philos. Classics.) 1882.
Hegel's Philosophy of Mind. 1894.
Lectures and Essays on Natural Theology and Ethics. 1898.

ROBERT FLINT

The Philosophy of History in France and Germany. 1874. New ed. 1893.
Theism. 1877. 10th ed. 1902.
Anti-theistic Theories. 1879.
Vico. (Blackwood's Philos. Classics.) 1884.
Socialism. 1894.
Agnosticism. 1903.
Philosophy as scientia scientiarum. 1904.

WILLIAM BENJAMIN CARPENTER

Principles of Mental Physiology 1874.
Nature and Man: essays scientific and philosophical, ed. by J. Estlin Carpenter. 1888.

JAMES SULLY

Sensation and Intuition. 1874.
Pessimism, a history and a criticism. 1877.
Illusions. 1881.
Outlines of Psychology. 1884. New ed. 1892.
The Human Mind. 2 vols. 1892.
Studies of Childhood. 1895.
An Essay on Laughter. 1902.

ROBERT ADAMSON

Roger Bacon: the philosophy of science in the 13th century. Manchester, 1876.
On the Philosophy of Kant. Edinburgh, 1879. (German transl. 1880.)
Fichte. (Blackwood's Philosophical Classics.) 1881.
The Development of Modern Philosophy, with other lectures and essays. 1903.
The Development of Greek Philosophy. 1908.
A Short History of Logic. 1911.

Cp. G. Dawes Hicks, Adamson's Philosophical Lectures, in Mind (new series), vol. XIII.

FRANCIS HERBERT BRADLEY

Ethical Studies. 1876.
Mr Sidgwick's Hedonism. 1877.

The Principles of Logic. 1883.
Appearance and Reality. 1893.
Essays on Truth and Reality. 1914.

Cp. B. Bosanquet, Knowledge and Reality, 1885; A. S. Pringle Pattison, A New Theory of the Absolute, in his Man's Place in the Cosmos, 2nd ed., 1902; H. Rashdall, The Metaphysic of Mr F. H. Bradley, in Proc. of the Brit. Acad., 1912, G. F. Stout, Mr Bradley's Theory of Judgment, in Proc. Arist. Soc., 1903; H. Sturt, Idola Theatri, 1906; H. Höffding, Modern Philosophers (English trans.), 1915.

SIR LESLIE STEPHEN

History of English Thought in the Eighteenth Century. 2 vols. 1876. 3rd ed. 1902.
The Science of Ethics. 1882.
An Agnostic's Apology. 1893.
Social Rights and Duties. 1896.
The English Utilitarians. 1900.

Cp. F. W. Maitland, Life and Letters of Sir Leslie Stephen. 1906.

EDITH SIMCOX

Natural Law: an Essay in Ethics. 1877.
Primitive Civilizations. 1894.

GRANT ALLEN

Physiological Aesthetics. 1877.
The Colour Sense. 1879.
The Evolutionist at large. 1881.
The Evolution of the Idea of God. 1897.

EDWARD CAIRD

A Critical Account of the Philosophy of Kant. 1877.
Hegel. (Blackwood's Philos. Classics.) 1883.
The Critical Philosophy of Immanuel Kant. 1889.
Essays on Literature and Philosophy. 1892.
The Evolution of Religion. (Gifford Lectures.) 1893.
The Evolution of Theology in the Greek Philosophers. (Gifford Lectures.) 1904.

FREDERICK MAX MULLER

The Origin and Growth of Religion as illustrated by the Religions of India. 1878.
Kant's Critique of the Pure Reason translated. 1881.
Science of Thought. 1887.
Natural Religion. 1889.
Physical Religion. 1890.
Anthropological Religion. 1891.
Theosophy or Psychological Religion. 1892.

GEORGE JOHN ROMANES

A candid examination of Theism, by Physicus. 1878.
Animal Intelligence. 1881.
Mental Evolution in Animals. 1883.
Mental Evolution in Man. 1888.
Darwin and after Darwin. 1892.
Mind and Motion and Monism. 1895.
Thoughts on Religion. 1896.
Essays. 1897.
Cp. Life and Letters, by E. Romanes. 1896.

CARVETH READ

On the Theory of Logic. 1878.
Logic, Deductive and Inductive. 1898.
The Metaphysic of Nature. 1905.
Natural and Social Morals. 1909.

THOMAS MARTIN HERBERT

The realistic assumptions of modern science examined. 1879.

THOMAS EDWARD CLIFFE LESLIE

Essays in political and moral philosophy. 1879.
Essays in political economy. 2nd ed. [of the preceding]. 1888.

EDWARD SPENCER BEESLY

Religion and Progress. 1879.
Comte, the successor of Aristotle and St Paul. 1883.
Comte as a moral type. 1885.

WILLIAM KINGDON CLIFFORD

Seeing and Thinking. 1879.
Lectures and Essays, ed. by Sir L. Stephen and Sir F. Pollock. 1879. 2nd ed. 1886.
The Common Sense of the Exact Sciences, ed. by K. Pearson. 1885.

THOMAS NORTON HARPER

The Metaphysics of the School. 1879-84.

RIGHT HON. ARTHUR JAMES BALFOUR

A Defence of Philosophic Doubt. 1879.
Essays and Addresses. 1893.
The Foundations of Belief. 1895.
Decadence. (Sidgwick Memorial Lecture.) 1908.
Theism and Humanism. 1915.

JOHN CAIRD

An Introduction to the Philosophy of Religion. 1880.
Spinoza. (Blackwood's Philos. Classics.) 1888.

EDMUND GURNEY

The Power of Sound. 1880.
Phantasms of the Living. (With F. W. H. Myers and F. Podmore.) 1886.
Tertium Quid: chapters on various disputed questions. 2 vols. 1887.
Cp. F. W. H. Myers, in Proc. of Soc. for Psychical Res., vol. v, p. 359.

THOMAS DAVIDSON

The Philosophical System of Rosmini-Serbati. 1882.
Aristotle and ancient Educational ideals. 1892.
The Education of the Greek People. 1895.
Rousseau and Education according to Nature. 1898.
A History of Education. 1900.
The Education of the Wage-Earners, ed. C. M. Bakewell. Boston, Mass., 1904.
The Philosophy of Goethe's Faust, ed. C. M. Bakewell. Boston, Mass., 1906.
Cp. W. Knight, Memorials of Thomas Davidson. 1907.

ANDREW SETH PRINGLE PATTISON

From Kant to Hegel. 1882.
Philosophy as Criticism of Categories, in Essays in Phil. Criticism. 1883.
Scottish Philosophy: a comparison of the Scottish and German Answers to Hume. 1885.
Hegelianism and Personality. 1887.
Man's Place in the Cosmos and other essays. 1897. 2nd ed. 1907.
The Philosophical Radicals and other essays. 1907.
The Idea of God in the light of Modern Philosophy. (Gifford Lectures.) 1917.

DAVID GEORGE RITCHIE

The Rationality of History, in Essays in Phil. Criticism. 1883.
Darwinism and Politics. 1889.
Principles of State-Interference. 1891.
Darwin and Hegel, with other philosophical studies. 1894.
Natural Rights. 1895.
Studies in Social and Political Ethics. 1902.
Philosophical Studies. Ed. by R. Latta. 1905.

BERNARD BOSANQUET

Logic as the Science of Knowledge, in Essays in Phil. Criticism. 1883.
Knowledge and Reality. 1885.
Logic, or the Morphology of Knowledge. 1888. 2nd ed. 1911.
History of Aesthetic. 1892.
The Psychology of the Moral Self. 1897.
The Philosophical Theory of the State. 1899. 3rd ed. 1920.
The Principle of Individuality and Value. (Gifford Lectures.) 1912.
The Value and Destiny of the Individual. (Gifford Lectures.) 1913.

The Distinction between Mind and its Objects. (Adamson Lecture.) 1913.
Three Lectures on Aesthetic. 1915.
Social and International Ideals. 1917.
Some Suggestions in Ethics. 1918.
Implication and Linear Inference. 1920.

RICHARD BURDON (VISCOUNT) HALDANE

The Relation of Philosophy to Science (with J. S. Haldane) in Essays in Phil. Criticism. 1883.
The Pathway to Reality. (Gifford Lectures.) 1903, 1904.

WILLIAM GEORGE WARD

Essays on the Philosophy of Theism. Ed. by Wilfrid Ward. 2 vols. 1884.

AUBERON E. W. M. HERBERT

A Politician in trouble about his soul. 1884.
The Right and Wrong of Compulsion by the State. 1885.
The True Line of Deliverance (in A Plea for Liberty, 1891).
The Voluntaryist Creed. 1908.

GEORGE CROOM ROBERTSON

Hobbes. (Blackwood's Philos. Classics.) 1886.
Philosophical Remains. Ed. by A. Bain and T. Whittaker. 1895.
Elements of General Philosophy. Ed. by C. A. F. Rhys Davids. 1896.
Elements of Psychology. Ed. by C. A. F. Rhys Davids. 1896.

JAMES WARD

Psychology, in Encyclopaedia Britannica. 9th ed. 1886. 10th ed. 1903. 11th ed. 1910.
Naturalism and Agnosticism. (Gifford Lectures.) 1899. 4th ed. 1915.
The Realm of Ends, or Pluralism and Theism. (Gifford Lectures.) 1911.
Heredity and Memory. (Sidgwick Lecture.) 1913.
Psychological Principles. 1918.

THOMAS CASE

Physical Realism. 1888.

SAMUEL ALEXANDER

Moral Order and Progress. 1889.
Space, Time, and Deity. (Gifford Lectures.) 1920.

HASTINGS RASHDALL

Doctrine and Development. 1889.
The Theory of Good and Evil. 1907.
Philosophy and Religion. 1909.
Is Conscience an Emotion? 1914.

JOHN STUART MACKENZIE

An Introduction to Social Philosophy. 1890. 2nd ed. 1895.
A Manual of Ethics. 1893. 7th ed. 1910.

Outlines of Metaphysics. 1902. 2nd ed. 1906.
Lectures on Humanism. 1907.
Elements of Constructive Philosophy. 1917.
Outlines of Social Philosophy. 1918.

SIR HENRY JONES

Browning as a philosophical and religious teacher. 1891.
The Philosophy of Lotze. 1895.
Idealism as a practical creed. 1909.
The Principles of Citizenship. 1919.

FERDINAND CANNING SCOTT SCHILLER

Riddles of the Sphinx. 1891. New ed. 1910.
Humanism. 1903. 2nd ed. 1912.
Studies in Humanism. 1907. 2nd ed. 1912.
Plato or Protagoras? 1908.
Formal Logic, a Scientific and Social Problem. 1912.

JOHN HENRY MUIRHEAD

The Elements of Ethics. 1892. 3rd ed. 1910.
Chapters from Aristotle's Ethics. 1900.
Philosophy and Life, and other essays. 1902.
The Service of the State. 1908.
German Philosophy in relation to the War. 1915.
Social Purpose [with H. J. W. Hetherington]. 1918.

JAMES SETH

A Study of Ethical Principles. 1894. 10th ed. 1908.
English Philosophers and Schools of Philosophy. 1902.

LEONARD TRELAWNEY HOBHOUSE

The Theory of Knowledge. 1896.
Mind in Evolution. 1901. 2nd ed. 1915.
Morals in Evolution. 1906. 2nd ed. 1915.
Development and Purpose. 1913.
The Metaphysical Theory of the State. 1918.

GEORGE FREDERICK STOUT

Analytic Psychology. 1896.
A Manual of Psychology. 1898.
The Groundwork of Psychology. 1903.

JOHN MCTAGGART ELLIS MCTAGGART

Studies in the Hegelian Dialectic. 1896.
Studies in Hegelian Cosmology. 1901.
Some Dogmas of Religion. 1906.
A Commentary on Hegel's Logic. 1910.

RICHARD LEWIS NETTLESHIP

Philosophical Lectures and Remains. 1897.

INDEX[1]

Abercrombie, J., 358
Adamson, R., 6 *n.*, 128 *n.*, 296 f., 368
Alcuin of York, 1
Alexander S., 372
Alison, Archibald, 356
Allen, Grant, 369
Ames, W., 44, 332
Annet, Peter, 144, 152, 349
Anselm, 82
Aquinas, St Thomas, 5 f., 42, 100
Argyll, eighth Duke of, 365
Aristotle, 2, 5, 8–11, 26, 32, 48, 97, 102, 243, 253, 261
Ascham, R., 11
Aubrey, John, 47, 49, 58
Augustine, St, 131
Austin, John, 359

Bacon, Anthony, 15, 17
Bacon, Francis, 6, 9, 12 f., 14–34, 35 f., 48 f., 57, 69 f., 102, 110, 211, 269, 298, 324; *Advancement of Learning*, 14 f., 21 f., 25, 32 f.; *Essays*, 17, 32; *De Augmentis Scientiarum*, 17, 21 f., 24, 27, 32 f.; *New Atlantis*, 17, 20, 70 f., 102; *Novum Organum*, 17, 23–31, 34; *Sylva Sylvarum*, 17, 21
Bacon, Sir Nicholas, 15 f.
Bacon, Roger, 1, 5 f.
Bagehot, W., 278, 366
Bailey, Samuel, 357
Bain, A., 238, 261 f., 293 f., 362
Baldwin, W., 14, 323
Balfour, A. J., 370
Balguy, John, 158, 347
Barckley, R., 14, 328
Barratt, Alfred, 367
Baur, F. C., 148
Baxter, Andrew, 348
Baynes, T. S., 243 *n.*, 244, 362
Beattie, James, 203, 352
Beaumont, Joseph, 336
Beccaria, Marchese de, 162 *n.*, 220, 224 *n.*, 229
Beesly, E. S., 370
Bellarmine, R. F. R., 73
Bentham, George, 358
Bentham, Jeremy, 158, 162, 186, 200, 207, 211–231, 236 f., 240, 242, 250–2, 257, 353
Bentham, Samuel, 212
Bentley, R., 149, 155, 340
Berkeley, George, 44, 57 f., 95, 104, 132–143, 161, 176, 195, 197, 204, 211, 242, 284, 287, 293 f., 296, 300, 344; *Alciphron*, 135, 137, 141; *Common-place Book*, 133, 137, 142; *Hylas*, 133, 141; *New Theory of Vision*, 133, 137–9; *Principles of Human Knowledge*, 133, 139–142; *Siris*, 136, 142
Blackstone, Sir W., 216–8
Blair, Hugh, 170
Blount, Charles, 144 f., 337
Boehme, Jacob, 102
Bold, Samuel, 129, 342
Bolingbroke, Lord, 144, 152, 350
Boole, George, 244, 361
Bosanquet, B., 292, 371
Bowring, Sir J., 216
Boyle, Robert, 56, 118 *n.*, 335
Bradley, F. H., 291 f., 368
Bradwardine, Thomas, 1
Bramhall, John, 52, 57, 73 f., 333
Brandenburg, Elector of, 106
Bridges, J. H., 263, 364
Brooke, Lord, 42–4, 99, 332
Broughton, John, 129, 343
Brown, Thomas, 209 f., 242, 244, 247, 357
Browne, Peter, 136 f., 342
Buccleuch, third Duke of, 186
Buckingham, first Duke of, 16, 20, 35

[1] The Index contains the personal names which occur in the text or notes and the names in the bibliography which are printed in capitals.

Burghley, Lord, 9, 12, 15 f., 19
Burke, Edmund, 198, 212
Burnet, Thomas, 129, 338
Burnet, Thomas (of Kemnay), 129
Burthogge, R., 129 f., 337
Burton, J. H., 166 *n.*, 169
Butler, Joseph, 145, 154, 163–5, 280, 347

Caird, Edward, 290–4, 369
Caird, John, 290, 370
Calderwood, H., 362
Campanella, T., 69
Campbell, George, 203, 352
Carlyle, T., 239 f., 250 f., 286, 359
Caroline, Queen, 135
Carpenter, N., 13, 329
Carpenter, W. B., 368
Carroll, W., 344
Case, John, 8 f., 324
Case, Thomas, 372
Chalmers, T., 357
Charles I, 44, 72
Charles II, 51, 54
Charles the Bald, 2
Charles the Great, 1
Chubb, Thomas, 144, 152, 346
Cicero, 76
Clarendon, Earl of, 66, 73
Clarke, John, 346
Clarke, John, junior, 347
Clarke, Joseph, 348
Clarke, Samuel, 132, 135, 145, 149 *n.*, 150–2, 154–9, 198, 280, 342
Cliffe Leslie, T. E., 278, 370
Clifford, W. K., 276, 370
Cobbe, F. P., 363
Cockburn, C., 129, 343
Cockburn, Lord, 170 *n.*
Coleridge, S. T., 229, 240, 242, 251 f., 284, 357
Collier, Arthur, 143, 346
Collins, Anthony, 109, 144 f., 149 f., 344
Combe, George, 357
Comte, A., 253, 260, 263, 273
Condillac, É. B. de, 113, 299
Condorcet, Marquis de, 232
Congreve, R., 263, 363
Cooke, Sir Anthony, 15
Copernicus, 13, 267
Cousin, V., 246
Crakanthorp, R., 329
Cromwell, Oliver, 71
Cudworth, R., 74 f., 88–96, 97, 99, 107, 157 f., 198, 211, 300, 332
Culverwel, N., 75, 78, 99–100, 334
Cumberland, Richard, 102 f., 337
Cunningham, W., 123 *n.*

Darwin, C., 31, 234, 267–9, 273, 277, 299
Davidson, T., 371
Davies, Sir John, 41–43, 328
Democritus, 89 f., 118 *n.*
de Morgan, A., 244, 360
Derham, W., 200, 346
Descartes, R., 36 f., 50, 52, 61, 74, 78–80, 84, 87, 89, 96, 101 f., 105, 111, 118 *n.*, 120, 130 f., 136–9, 143, 156, 168, 204, 242, 298
Devonshire, first Earl of, 48 f.
Devonshire, second Earl of, 48 f.
Devonshire, third Earl of, 49 f., 54
Diderot, Denis, 161
Digby, Everard, 9–12, 43, 323
Digby, Sir Kenelm, 46, 101, 333
Dionysius the Areopagite, 3
Dodwell, Henry, 344
Dodwell, Henry, junior, 144, 152, 350
Douglas, J., 200
Dowell, John, 338
Downham, John, 328
Dumont, É., 214, 228
Duns Scotus, John, 1, 5–7
Dupont de Nemours, P. S., 187 *n.*

Eachard, John, 74, 337
Edwards, John, 340
Edwards, Jonathan, 135
Elizabeth, Queen, 16, 47
Ellis, R. L., 18 *n.*
Epictetus, 159
Erigena, John Scotus, 1, 2–6
Essex, Earl of, 10, 20
Euclid, 50, 54

Ferguson, Adam, 352
Ferrier, J. F., 241, 284–6, 362
Fichte, J. G., 243, 284, 297
Filmer, Sir R., 72 f., 121 f., 333
Fischer, Kuno, 49 *n.*, 300
Flint, Robert, 368
Fludd, R., 13, 329

Fotherby, M., 42, 329
Fowler, E., 75
Fowler, T., 28 *n.*, 366
Foxwell, H. S., 236 *n.*
Fraser, A. C., 293 f., 363

Gale, Theophilus, 102, 336
Galileo, G., 13, 31, 49 f., 61, 118 *n.*, 267
Galt, J., 221
Gassendi, Pierre, 50, 53
Gay, John, 196, 348
Geulincx, Arnold, 130
Gibbon, E., 186, 229
Gilbert, W., 12 f., 26, 328
Gildon, Charles, 144
Glanvill, Joseph, 100–102, 335
Glisson, Francis, 337
Godwin, W., 231 f.
Goldsmith, O., 198
Graham, W., 367
Grant, Sir A., 11 *n.*
Green, T. H., 281, 288–292, 296, 367
Grosseteste, Robert, 1
Grote, George, 231, 250, 261, 364
Grote, John, 264 f., 365
Grotius, H., 36, 45 f., 72
Gurney, Edmund, 371

Hakewill, G., 42, 330
Haldane, Lord, 372
Hales, Alexander of, 1, 5
Halévy, E., 227 *n.*
Hall, Joseph, 44, 328
Hamilton, Sir W., 239–249, 253, 256, 269, 284, 293, 361
Hampton, B., 346
Harper, T. N., 370
Harrington, James, 69–72, 334
Harris, James, 350
Harrison, F., 263
Hartley, David, 195–7, 199, 238, 262, 350
Harvey, W., 13, 31, 34
Heath, D. D., 20 *n.*
Hegel, G. F. W., 239, 243, 246, 252, 284, 286–90, 293, 295, 298 f.
Helvétius, C. A., 219 f., 229, 242, 299
Herbert, A. E. W. M., 372
Herbert, George, 35
Herbert of Cherbury, Lord, 35–43, 48, 144, 300, 329
Herbert, T. M., 370
Herschel, Sir J., 253 f., 358
Hinton, James, 366
Hobbes, T., 34, 46, 47–74, 77, 79 f., 89, 102, 104, 110, 118 *n.*, 122 f., 160, 162 f., 172, 186, 211, 253, 263, 269, 298, 300, 330; *De cive*, 53, 59; *De corpore*, 54, 59; *De corpore politico*, 51; *De homine*, 54; *Elements of Law*, 51, 59, 63; *Human Nature*, 51; *Leviathan*, 53–69; *Of Liberty and Necessity*, 55; *Philosophical Rudiments*, 53, 59; *Questions concerning Liberty*, 55; *Short Tract on First Principles*, 50
Hobhouse, L. T., 373
Hodgson, S. H., 279, 282 f., 365
Höffding, H., 2 *n.*
Hooker, R., 14, 65, 100, 114 *n.*
Hume, David, 34, 44, 57 f., 104, 113 f., 120, 129, 139, 142, 166–186, 188, 195–7, 199, 203–7, 211, 219, 221, 229, 231, 233, 238, 242, 254–6, 284, 288 f., 294, 299 f., 349; *Dialogues concerning Natural Religion*, 170, 181–3; *Enquiry concerning Human Understanding*, 169, 175 f., 180 f.; *Enquiry concerning the Principles of Morals*, 169, 180 f.; *Essays and Treatises*, 169 f.; *Essays Moral and Political*, 168; *Four Dissertations*, 169 f.; *Natural History of Religion*, 154, 168–170, 181 f.; *Of Miracles*, 181 f.; *Political Discourses*, 169, 183 f.; *Treatise of Human Nature*, 139, 167–181, 195
Hunt, J., 151 *n.*
Hutcheson, Francis, 161–3, 188, 219, 224, 346
Huxley, T. H., 275–6, 364

Jackson, John, 348
James I, 10, 16 f., 35
Jevons, W. S., 261, 366
Jones, Sir H., 373
Jonson, Ben, 48

Kames, Lord, 350
Kant, I., 34, 37, 110, 182, 203, 242 f., 246 f., 279, 283 f., 286–8, 290, 295, 299
Keill, John, 341

Kepler, 13, 31
King, W., 129, 196, 343

Lamb, C., 160
Lansdowne, Marquis of, 214
Lardner, N., 200
Lasswitz, K., 13 *n.*
Laud, W., 75
Laurie, S. S., 294 f., 365
Law, Edmund, 196, 348
Law, W., 163, 346
Lawson, G., 336
Leclerc, Jean, 107
Lee, Henry, 129, 343
Legrand, Antoine, 102, 336
Leibniz, G. W. v., 34, 129, 146, 148, 156, 242, 296, 299
Leicester, Earl of, 8
Leslie, Charles, 144 f., 341
Lever, Ralph, 14, 323
Lewes, G. H., 273–5, 360
Limborch, Philip van, 107
Locke, J., 37, 40, 72 f., 104–132, 136–9, 143, 145 f., 149 f., 155 f., 158 *n.*, 159 f., 171 f., 174, 197, 199, 201, 204 f., 211, 221, 242, 253 f., 284, 293, 299–301, 338; *Conduct of the Understanding*, 109, 127; *Epistola de Tolerantia*, 107 f., 124–6; *Essay concerning Human Understanding*, 104, 106–121, 136, 139, 146; *Letters to the Bishop of Worcester*, 108; *Reasonableness of Christianity*, 109, 126 f., 145 f.; *Some Considerations of Interest and Money*, 109, 123 f.; *Some Thoughts concerning Education*, 109, 127; *Two Treatises of Government*, 106, 121–3
Lowde, James, 341
Lowndes, W., 124
Lucy, W., 336
Lully, R., 42

Macaulay, Lord, 18, 237
McCosh, James, 362
Machiavelli, N., 32
Mackenzie, J. S., 372
Mackintosh, Sir J., 208, 237, 356
McTaggart, J. McT. E., 373
Maine, Sir H. J. S., 278, 364
Malebranche, N., 109, 130 f., 136, 143
Mallet, B., 152
Malthus, T. R., 231–5, 356
Mandeville, B., 162, 345
Mansel, H. L., 248 f., 269, 362
Mansfield, Lord, 212
Marcus Aurelius, 159 f.
Martin, J., 12
Martineau, H., 263, 362
Martineau, J., 265–7, 359
Masham, Lady, 107
Masham, Sir Francis, 107
Masson, D., 239 *n.*
Maurice, F. D., 265, 366
Mayne, Zachary, 129, 347
Melville, A., 11
Melville, J., 11 *n.*
Menger, A., 236 *n.*
Mersenne, Marin, 50–52
Merz, J. T., 301 *n.*
Middleton, C., 153
Mill, James, 195, 209, 215 f., 235–8, 240, 249, 262, 358
Mill, J. S., 216, 220, 228, 238–40, 242, 248–64, 277–80, 288, 299 f., 358
Milner, John, 343
Milton, John, 34, 72, 78, 125, 337
Mirabeau, Comte de, 214
Molyneux, William, 109, 119, 137, 340
Monboddo, Lord, 353
Montesquieu, E. L. de S., 183
More, Henry, 74–6, 78–89, 93, 95, 97, 99 f., 130, 211, 300, 332
More, Sir Thomas, 43, 69 f., 323
Morell, J. D., 361
Morgan, Thomas, 144, 152, 347
Moschus, 90
Moses, 67, 90
Muirhead, J. H., 373
Müller, F. Max, 369
Mullinger, J. B., 11 *n.*, 12 *n.*

Napier, John, 31
Napier, M., 237
Nettleship, R. L., 373
Newcastle, Marquis of, 51 f.
Newman, J. H., 265 f., 361
Newton, Sir Isaac, 109, 137, 153, 155 f., 195, 299
Nietzsche, F. W., 300
Nieuwentyt, 201
Norris, John, 109, 129–131, 143, 300, 338

Ockham, William of, 1, 5, 7
Orme, W., 124 *n.*
Oswald, James, 203, 352
Owen, John, 124 f.

Paley, W., 197, 200–2, 213, 224, 231 f., 355
Paracelsus, 13
Parker, Samuel, 102, 336
Patrick, Simon, 75, 335
Pattison, Mark, 134
Paulet, Sir Amyas, 16
Perkins, W., 44, 324
Perronet, V., 129, 348
Picton, J. A., 367
Pierce, Thomas, 335
Piscator of Strasbourg, 11
Pitt, W., 232
Plato, 74–79, 90, 97 f., 131, 136, 159 f., 228, 261
Plotinus, 76, 78, 93, 97 f.
Pope, A., 18, 152
Popple, William, 108
Pordage, 102, 334
Porter, Noah, 129 *n.*
Price, Richard, 198–200, 229, 351
Priestley, Joseph, 162 *n.*, 199 f., 203, 220 f., 229, 262, 352
Pringle Pattison, A. S., 371
Proast, Jonas, 340
Proclus, 97 f.
Pythagoras, 90

Quesnay, François, 187

Rae, J., 186 *n.*
Ramus, Peter, 10 f., 34, 42
Rand, B., 134 *n.*
Rashdall, H., 372
Rawley, W., 16, 23
Ray, John, 200, 340
Read, Carveth, 370
Reid, Thomas, 200, 203–8, 241, 243–5, 279, 297, 300, 350
Reuchlin, J., 10
Reynolds, Sir J., 203
Ricardo, D., 185, 234–6, 259, 357
Ritchie, D. G., 371
Robertson, G. Croom, 56 *n.*, 262 f., 372
Robertson, W., 170, 208
Robynson, Ralph, 69
Romanes, G. J., 370
Romilly, Sir S., 214
Ross, A. 333
Rousseau, J. J., 169, 183, 229, 232
Rust, George, 75, 337

St Paul, 3
Salisbury, Earl of, 16
Salisbury, John of, 1
Sanderson, John, 8 f., 324
Sanderson, R., 44, 329
Schelling, F. W., 243, 246, 252
Schiller, F. C. S., 373
Scott, R. F., 9 *n.*
Selden, John, 45 f., 328
Sergeant, John, 127–9, 342
Seth, James, 373
Shaftesbury, first Earl of, 105 f.
Shaftesbury, third Earl of, 106, 144, 152, 159–161, 163 f., 188, 300, 345
Sherlock, W., 129, 150, 343
Sidgwick, H., 223 *n.*, 279–282, 367
Sidney, Sir Philip, 10
Simcox, Edith, 369
Smith, Adam, 123, 166, 170, 184, 186–194, 204, 208, 235, 259 f., 351; *Moral Sentiments*, 186–9; *Wealth of Nations*, 187–194
Smith, John, 75, 78, 96–99, 335
Smith, W. H., 359
Sophia, Electress of Hanover, 146
Sophia Charlotte, Queen of Prussia, 146
Spalding, W., 364
Spedding, J., 18, 31 *n.*
Spencer, Herbert, 267–272, 274, 277, 281, 288, 299 f., 360
Spinoza, B., 156 f., 296, 298
Stanley, T., 46, 334
Stephen, Sir J. F., 259, 367
Stephen, Sir L., 276–7, 369
Steuart, Sir James, 189 f., 352
Stewart, Dugald, 161, 187 *n.*, 207–9, 253, 356
Stillingfleet, Edward, 108 f., 127, 342
Stirling, J. H., 241, 286–8, 365
Stout, G. F., 373
Strabo, 90
Stubbe, Henry, 335
Sully, James, 368

Taylor, Isaac, 358
Taylor, Jeremy, 44 f., 124, 335

Taylor, Thomas, 343
Taylor, T. (1758–1835), 355
Temple, William, 9–12, 323
Tenison, T., 74, 336
Tennyson, Lord, 251
Thomson, W., 244, 360
Thornton, W. T., 260, 361
Tillotson, J., 145, 150
Tindal, Matthew, 144, 150 f., 153, 163, 341
Toland, John, 108, 136, 145–9, 153, 155, 341
Tönnies, F., 50 *n.*, 56 *n.*
Townsend, J., 238
Tracy, A. Destutt, Comte de, 210, 242
Tucker, A., 196 f., 231, 352
Tulloch, J., 97, 100 *n.*, 363
Turgot, A. R. J., 187
Tyrrell, J., 337

Vane, Sir Walter, 106
Veitch, John, 366
Venn, John, 366
Voltaire, 152

Wallace, A. R., 234, 277
Wallace, R., 233
Wallace, W., 289 f., 368
Wallis, John, 55 f., 99, 333
Walpole, A., 36
Walpole, Sir R., 135
Warburton, W., 154 f., 348
Ward, James, 295 f., 372
Ward, Seth, 55 f., 334
Ward, W. G., 266, 372
Watt, R., 129 *n.*
Whately, R., 253, 358
Whewell, W., 253 f., 360
Whichcote, B., 75–77, 99, 160, 342
Whiston, W., 153, 342
Whitaker, W., 9
White, Thomas, 101, 333
Whitehall, J., 337
Whitgift, J., 9
Wilkins, J., 75, 336
Wilson, Thomas, 14, 323
Wollaston, W., 151, 158, 346
Woolston, Thomas, 144, 344
Wordsworth, W., 251
Worthington, J., 75, 334
Wren, Matthew, 334
Wyclif, John, 7
Wynne, John, 109, 342

CAMBRIDGE: PRINTED BY J. B. PEACE, M.A., AT THE UNIVERSITY PRESS

BY THE SAME AUTHOR

THE ETHICS OF NATURALISM: A CRITICISM.

Second edition, revised. Crown 8vo. 6*s*. (Edinburgh and London : W. Blackwood & Sons.)

"The argument remains essentially the same as in the first edition of the work, which has long since taken its place in the literature of the subject. All that I have attempted to do on the present occasion is to call attention to those additions and restatements by which Mr Sorley has so greatly added, in the present edition, to the value of the original work."

The Philosophical Review

RECENT TENDENCIES IN ETHICS.

Crown 8vo. 2*s*. 6*d*. net. (Edinburgh and London : W. Blackwood & Sons.)

"A very admirable specimen of a most useful kind of literature....The task is performed in a masterly way. The work possesses in a high degree the qualities appropriate to its kind: breadth of treatment, clearness of style, concentration upon main issues, and a truly remarkable ease and simplicity in the manner of presenting them."—*Mind*

THE MORAL LIFE AND MORAL WORTH.

(*Cambridge Manuals*.) Royal 16mo. 2*s*. 6*d*. net. (Cambridge University Press.)

"This essay is not intended only, or even chiefly, for those philosophically educated. It states a fundamental position and examines in turn, with reflections grave and humorous, the greater and the lesser virtues."

The Cambridge Review

MORAL VALUES AND THE IDEA OF GOD.

The Gifford Lectures delivered in the University of Aberdeen in 1914 and 1915. Demy 8vo. 16*s*. net. (Cambridge University Press.)

"In style and method these lectures are a model of what a philosophical discourse ought to be....The philosophical temper of the volume is beyond praise, and the unity and coherence of its argument make it a notable contribution to recent theistic discussion....Nothing better has been written on the vexed question of freedom than the chapter here devoted to the subject; it leaves no vital point untouched, and it is as temperate as it is convincing."—*The Hibbert Journal*

"Professor Sorley has given us an extraordinarily fascinating book. His presentation of the subject is so clear, so graphic, so convincing."

The Saturday Review

"From the point of view of mere intellectual achievement Professor Sorley's new book is quite on a level with the best work of Green, Bradley, or Edward Caird, and it surpasses them in interest and suggestiveness."

Studies

"No outline can depict the clear logic with which each step is worked out, and the lucid exposition that leads the reader from stage to stage.... It is not too much to say that these Gifford Lectures occupy a place entirely their own, and that Dr Sorley has accomplished a masterpiece of literature."

The Aberdeen Journal

"His book is one of the ablest and most valuable that have appeared in connection with the Gifford foundation."—*The Manchester Guardian*

"We know of no recent volume in which so many 'live' problems are so carefully discussed, with so obvious an attempt to face every difficulty. This is a book to read and re-read."—*The Indian Philosophical Review*

The Realm of Ends, or Pluralism and Theism.

By JAMES WARD, Sc.D. Gifford Lectures, 1907–10. 2nd edition. With some replies to criticisms. Demy 8vo. 15*s.* net.

"A singularly sincere and patient piece of thinking, unaffectedly modest in temper and touched by genuine religious feeling."—*The Times*

Psychological Principles.

By the same Author. 2nd edition. Roy. 8vo. 24*s.* net.

"No one who reads this book can fail to appreciate the significant service Dr Ward has rendered to psychology. It is evident alike in the paths he follows and in those which he avoids as side-tracks, or turns away from as false routes....The greatness of this book is not in its negations, but in the clear and masterly way in which it sets forth the principles that govern psychology."—*Nature*

Perception, Physics, and Reality.

By C. D. BROAD, Litt.D. An enquiry into the information that Physical Science can supply about the Real. Demy 8vo. 12*s.* net.

"One would almost wish to term Mr Broad's volume 'palatable philosophy,' it is written in so easy and attractive a style, and shows such excellent common sense. Mr Broad has a higher opinion of the value of common sense to the philosopher than the generality of those who study metaphysical questions."—*The Athenaeum*

Spiritual Pluralism and Recent Philosophy.

By C. A. RICHARDSON, M.A. Demy 8vo. 14*s.* net.

"The whole book amply repays study, dealing as it does with problems of human, though philosophical interest, and criticising or else expanding the most recent tendencies of philosophical thought."—*The Westminster Gazette*

An Enquiry concerning the Principles of Natural Knowledge.

By A. N. WHITEHEAD, Sc.D., F.R.S. Demy 8vo. 12*s.* 6*d.* net.

"We have here a book the value of which it is difficult to overestimate.... In Prof. Whitehead we have the ideal combination of rich and varied knowledge of science, a natural gift for metaphysical investigation, and an abundant store of common sense."—*The Journal of Education*

The Principles of Understanding.

By H. STURT, M.A. An Introduction to Logic, from the standpoint of Personal Idealism. Crown 8vo. 7*s.* net.

"Mr Sturt's interesting and suggestive tractate has an encouraging effect rare enough in works of philosophy in general, and nowhere more rare than in academic systems that expound a science of the forms of thought....Such a work cannot but prove both pleasant and profitable reading to students whom the old-fashioned manuals of formal logic dishearten and repel."—*The Scotsman*

Philosophy: what is it?

By F. B. JEVONS, Litt.D. 2nd impression. Crown 8vo. 4*s.* net.

"Professor Jevons has exactly the gifts essential to the answering of the question with fulness of knowledge and with as few technical terms as possible. *Philosophy: what is it?* may be heartily commended to all who are anxious to have, without the labour of reading ponderous volumes, trustworthy expositions of the great themes with which its five chapters respectively deal."—*The Methodist Recorder*

CAMBRIDGE UNIVERSITY PRESS
C. F. CLAY, MANAGER : FETTER LANE, E.C.4