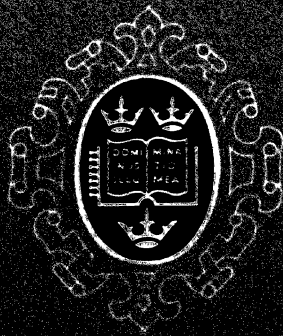


RICHARD I. AARON

JOHN LOCKE



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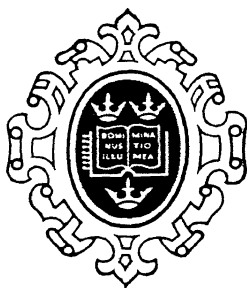
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JOHN LOCKE

BY

RICHARD I. AARON

SECOND EDITION



OXFORD
AT THE CLARENDON PRESS

Oxford University Press, Amen House, London E.C.4

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FIRST EDITION (*in the 'Leaders of Philosophy' Series*) 1937
SECOND EDITION 1955
REPRINTED LITHOGRAPHICALLY IN GREAT BRITAIN
AT THE UNIVERSITY PRESS, OXFORD
BY VIVIAN RIDLER, PRINTER TO THE UNIVERSITY
FROM CORRECTED SHEETS OF THE SECOND EDITION 1965
FIRST ISSUED IN OXFORD PAPERBACKS 1965

TO
WILLIAM AND MARGARET
AARON

PREFACE TO SECOND EDITION

CERTAIN corrections have been made to the text of the first edition and the whole work has been brought up to date. This involved many changes, the most considerable being the new note at the end of Part I giving an account of Draft C of the *Essay*. I studied this manuscript at the Pierpont Morgan Library, New York, and thank the officers of that Library for their help.

R. I. A.

ABERYSTWYTH

June 1954

PREFACE TO FIRST EDITION

MY first aim in this book has been a sound exposition of Locke's writings. But this is not an easy task. Locke's extreme caution, his adoption of the 'historical, plain' method and rejection of the 'high priori' which gives the neat, orderly system, and finally his candour, which leads him often to introduce considerations directly contrary to the run of his argument, all combine to make his teaching difficult to expound. In his case, in particular, the temptation is great to begin with some well defined position in his works and then proceed to show what he ought to have said if he had been consistent, neglecting from that point onwards everything he actually did say. This practice is in no way harmful (so long as it does not pretend to be history of philosophy) and may provide much pleasant intellectual exercise. But it is not exposition of Locke's thought. I hope I have avoided this erroneous kind of exposition which has led so frequently in the past to a falsification of Locke's philosophy.

The book is divided into three parts. Part I is biographical, and I have here been particularly helped by the materials to be found in the collection of Locke's private papers now in the possession of the Earl of Lovelace. Fox Bourne's *Life of John Locke* (1876) is an excellent piece of work of which I have made the fullest use, but unfortunately he was unacquainted with the Lovelace Collection, except with that small part of it which had then been published. We await a new biography of Locke which will do justice to all the materials now to hand. The sketch of Locke's life in the pages which follow, while much too brief to be of final value, will, I hope, prove to be on the right lines. In Part I also I have examined—again briefly, for my space is very limited—the main influences which worked upon Locke, and here, in particular, I have tried to emphasize Gassendi's influence upon him, since this, I believe, has been unduly neglected by historians of philosophy.

Part II is an exposition of Locke's theory of knowledge, that is to say, of the *Essay*. In addition to expounding the text I have

tried to fit the teaching into its proper background so as to acquaint the reader with the issues involved. Part III deals with Locke's teaching on moral philosophy, political theory, education, and religion. In the course of my exposition in Parts II and III I have touched upon many problems which I should have liked to develop more fully. My chief hope is that this book may lead others to examine some of these, and to deal with them in far greater detail than I have been able to do.

I owe much to previous writers on Locke. A bibliography is appended of those books and pamphlets which I have found useful. But I should like to mention two books here to which I am particularly indebted: first, that little jewel amongst Locke studies, Professor Alexander's work in *Philosophies Ancient and Modern*, and, secondly, the authoritative and excellent *Locke's Theory of Knowledge* by Professor James Gibson, a colleague in the University of Wales.

Many of my friends have deepened my obligation to them by further kindnesses in connexion with this book. Mr. Gilbert Ryle, of Christ Church, Oxford, read through Part II and gave me some most useful suggestions. Mr. Michael Foster, also of Christ Church, read the whole book through and sent me some pages of notes which I found invaluable. The book in its present state owes much to his careful criticism. Miss Rhiannon Morgan read the manuscript and the proofs and corrected many errors which I had neglected, and my sister, Mrs. G. J. Hughes, kindly helped with the laborious work of typing. My chief debt, however, is to Mr. J. L. Stocks, the Vice-Chancellor of Liverpool University, who is the editor of the series to which this book belongs. He advised me at the outset, and has since read the book through at every stage of its production. My obligation to him is very great.

I wish to thank the officers of the Aristotelian Society for permission to republish some paragraphs from an article on *Locke's Theory of Universals* which appeared in their *Proceedings*. I should mention also the kindnesses I have received from many libraries, in particular those of the University College at Aberystwyth, the National Library of Wales, the British Museum, and the University Library of Amsterdam. Finally, I am greatly

indebted to the Earl of Lovelace and to his brother-in-law, Mr. Jocelyn Gibb, who has charge of the Lovelace Collection at present, for permission to consult the Collection.

R. I. A.

YNYSTAWE

June 1937

NOTE. All references to the Essay are to the fourth edition (1700) and those to Locke's *Works* are to the fourth edition (1714) unless otherwise stated. Except where otherwise stated italics are Locke's. Words in square brackets included in the quotations are not Locke's.

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PART I

I

EARLY YEARS

1632-67

THE writings of John Locke portray the spirit of his age. In them we find that balanced and tolerant attitude to life which characterized late seventeenth-century England at its best. The prevailing love of cool, disciplined reflection and the careful avoidance of excess are mirrored with fidelity on every page. But Locke had been born into a different world, a mad world of bitter conflict and narrow zeal, of exaggerated and wild expression of opinion, where men's feelings and emotions were given too great rein and reason was forgotten. Or so it seemed to Locke's own generation. Late seventeenth-century England abhorred the emotionalism of the Civil War period. It might tolerate and even welcome a measure of emotional appeal in poetry and literature, meant 'for entertainment' only. But in the serious things of life, religion, politics, and above all in the inquiry into truth in philosophy and science, no appeal to the feelings was to be permitted. The apotheosis of reason in the life of man was at hand. It is significant that one of the few occasions upon which Locke permits himself to interrupt the placid, steady flow of his thoughts in the *Essay* is when he attacks the 'enthusiasm' of the previous age with unwonted violence. To call a man an 'enthusiast' was to condemn him scornfully. It was 'enthusiasm' that led men to strange and absurd conduct and to an attempted justification of it by arrogant claims, 'founded neither on reason nor divine revelation, but rising from the conceits of a warmed or overweening brain'. Locke might well have regarded the passage of his own life as a passage from an age of Enthusiasm to an age of Reason.

I

John Locke was born at Wrington, Somerset, on the 29th August 1632, of good Dorset and Somerset stock. The house in which he was born no longer stands, but the house to which he was shortly removed and where he spent his boyhood, namely, Beluton, near the village of Pensford, about six miles south-east of Bristol, can still be seen, a small but pleasant country residence. Locke's parents, John Locke and Agnes Keene, were married in 1630 and John was their first son. The mother was thirty-five years of age when Locke was born and ten years senior to her husband. We are told that she was a pious woman and Locke speaks of her with affection.¹ But the greater influence seems to have been that of the father.

John Locke, senior, was a man of some ability. A county attorney, he had become Clerk to the Justices of Peace, but in 1642, though the west was mainly Royalist, he sided with the Parliamentarians and seems to have suffered in fortune as a consequence of the Civil War. He educated his two sons—the second was Thomas, who was born in 1637, and died early—with extreme care, and Locke himself in later life approved of his father's attitude towards him in his youth. 'His father', Lady Masham tells us,² 'used a conduct towards him when young that he often spoke of afterwards with great approbation. It was the being severe to him by keeping him in much awe and at a distance when he was a boy, but relaxing still by degrees of that severity as he grew up to be a man, till, he being become capable of it, he lived perfectly with him as a friend.' There can be no doubt of the later friendship between them. There is sufficient testimony to it in letters from Locke to his father written many years later when his father's health was broken. These are full of tenderness and affection. But in his boyhood Locke knew the severe discipline of a Puritan home. He was trained to sobriety, industry, and endeavour; he was made to love simplicity and to hate excessive ornament and display. Early in his life he learnt the meaning of

¹ She was still alive in 1652, for Locke, writing from Westminster, sends her his greetings. Cf. two letters from Westminster to his father in the Lovelace Collection. She probably died between 1652 and 1660.

² Quoted by Fox Bourne, *The Life of John Locke*, 1876, i. 13.

political liberty. He would hear his father expound the doctrine of the rightful sovereignty of the people through its elected Parliament—a doctrine for which the father was prepared to suffer. Locke's later experiences broadened and changed his outlook, but his fundamental attitude to life was determined for him once and for all in that simple home at Beluton.

In 1646 Locke entered Westminster School, then Parliamentary under its headmaster, Dr. Richard Busby. The struggle between King and Parliament still continued and the boy, were he interested, could now view it from a point of vantage. He might even have been present at the execution of Charles I in Whitehall Palace Yard, in close proximity to his school, in 1649. But this is not thought likely. The likelihood is that Locke had little time during these schooldays for reflection upon the turbulent happenings in the world outside. The training he received was thorough, but, to modern ideas at least, somewhat limited in scope. It was confined almost wholly to the study of the Classics. In the upper forms there would be, in addition, Hebrew and Arabic and some elementary geography, but the staple fare of the school was endless Greek and Latin exercises. Locke thus became thoroughly acquainted with the Classics, an acquaintance which stood him in good stead later. But he himself in his *Thoughts Concerning Education* criticized unfavourably the methods adopted at Westminster. Too much time was wasted on languages. A knowledge of Latin was essential in his day, but Greek, he felt, could safely be left to the 'profess'd scholar', not to mention Hebrew and the Oriental tongues. The abiding impression left upon Locke's mind was that of the severity of the discipline at Westminster, as witness his letter to Edward Clarke, in which he describes the life at that 'very severe school', and suggests that a little time spent there might do good to Clarke's own son, making him 'more pliant and willing to learn at home'.¹ Locke must have been a fairly promising pupil, for he was elected King's scholar in 1647 with an annual allowance of '13/4 for livery' and '60/10 for commons'.²

In 1652 Locke was elected to a Studentship at Christ Church,²

¹ *The Correspondence of Locke and Clarke*, Rand, p. 336.

² This is presumably the election about which he keeps his father informed in

and henceforth for over thirty years he made Oxford his home.¹ Here John Owen was just beginning to re-create order out of the chaos which followed the Civil War. Oxford had been Royalist. Its losses had been very heavy and its prestige had sunk considerably. John Owen, who was appointed Dean of Christ Church a year before Locke took up residence and who became shortly afterwards Vice-Chancellor of the University, set himself energetically to the work of restoration. He was an Independent divine, a close follower of Cromwell. Like Cromwell he was tolerant (in spite of one or two intolerant acts), and to his credit it can be said that he never sought to force the University into Independent channels. He retained teachers who were Anglican and Royalist in sympathy. Locke must have welcomed this spirit of toleration, so much in accord with his own deep love of religious liberty.

It is somewhat remarkable, however, that the change from Royalist control to Puritan in the University produced no corresponding change in curriculum. The Puritans persisted in the

the two letters written from Westminster in 1652 (Lovelace Collection). I may here quote the second (with the kind consent of the Earl of Lovelace):

'Most dear and ever-loving father,

'My humble duty remembered unto you, I have to my utmost done what lies in me for the preparation both of my folk and friends for the election. Capt. Smyth I find most ready and willing to lay out himself for the accomplishment thereof. Neither is Mr. Busby any way wanting, he having spoken to the electors on my behalf, and although my Latin oration be not spoken yet he hath promised that my Hebrew one which I made since shall, which I would desire you to be silent of for there hath been something already spoken abroad more than hath been for my good. If I be not elected (but I have good hopes) pray send me word what I shall do, for we hear that those will be very soon chosen. Pray remember my humble duty to my mother and love to the rest of my friends and desiring your prayers.

Sum

Westminster, 11 May
1652

Tuus obedientissimus filius,
John Locke.'

The Students of Christ Church were elected at their school and held the Studentship for life provided they did not marry. They were also required normally to take priests' orders, though this condition was occasionally waived. They took no part in the government of the College, unless specifically appointed to do so, as when Locke was appointed Censor of Moral Philosophy. In the middle of the nineteenth century a distinction was made between Junior (undergraduate) and Senior (graduate) Students, but this distinction was not known in Locke's day. Cf. H. L. Thompson, *Christ Church* (1900), in the series on the history of Oxford Colleges.

¹ Locke was late entering Oxford. Probably the disturbances of the Civil War period account for this fact.

same traditional subjects, Aristotelian in origin but scholastic in exposition. Locke would probably devote a year to rhetoric and grammar, another to logic and moral philosophy, the third and fourth being given to logic, moral philosophy, geometry, and Greek. As might be expected, he found this course both insipid and dreary. He later complained to Leclerc that 'he lost a great deal of time at the commencement of his studies because the only philosophy then known at Oxford was the peripatetic, perplexed with obscure terms and useless questions'. After four years at the University he took his initial degree and two years later the Master's. In the years immediately following initial graduation he would still pursue his college course, continuing with Aristotle's logic and metaphysics, whilst also widening his field of study so as to include history, astronomy, natural philosophy, Hebrew, and Arabic. His studies in these Eastern tongues brought him into contact with Edward Pococke, the teacher who seems to have influenced him most in these early years at Oxford. Writing of him later Locke remarks: 'I do not remember I ever saw in him any one action that I did, or could in my own mind, blame or think amiss in him.' It is significant that Locke should have found a teacher whom he so much admired amongst the Royalist section of the University, for Pococke was staunchly Royalist. The old Puritan ties were already beginning to loosen, and we are not surprised to find Locke welcoming the Restoration when it came.

By this time Locke had already spent eight years within the shelter of the University, and he had still to decide upon a career. There were various alternatives. He might continue the life of the Christ Church don. He already lectured in Greek and rhetoric and was appointed Censor of Moral Philosophy for 1664. But the life of the tutor did not content him, nor was it sufficiently remunerative. His father died in 1661 and the fortune which he bequeathed to his son, small though it was, helped him to make his position more comfortable. His Studentship, however, was uncertain and he seems to have wished for a more lucrative occupation, especially as he appears to have been contemplating marriage at the time.¹

¹ There is ample evidence of this from the letter to his father quoted by Fox Bourne (i. 80-81), and from the drafts of the love-letters to 'Madam' in the

Some of his friends desired to see him in Holy Orders. But Locke hesitated. Writing to one such friend he remarks: 'I cannot now be forward to disgrace you, or any one else, by being lifted into a place which perhaps I cannot fill and from whence there is no descending without tumbling.' The vocation which attracted him most was that of medicine. He was drawn towards the new experimental inquiries in the natural sciences and to the application of these to human disease. But though he trained himself assiduously for this vocation, so much so that the thoroughness of his knowledge was acknowledged in later life even by such an expert as Sydenham, yet he never became a professional physician, preferring to practise in an amateurish and occasional fashion.¹

Still a further alternative presented itself to him, the profession of diplomacy, for which he was well fitted. In November 1665 he accompanied Sir Walter Vane on a diplomatic mission to the Elector of Brandenburg, then at Cleves, returning to London in February of the next year. No sooner was he home than another diplomatic post of greater importance was offered to him, namely, a secretaryship under the new ambassador to Spain, the Earl of Sandwich. This offer he finally rejected, though after much hesitation. He returned to Oxford to continue his studies there. Dimly Locke had already realized his true vocation. It was not the Church, nor medicine, nor again diplomacy, but philosophy. And yet it was not speculation as such that appealed to him. He was always a man of affairs, practical to his fingertips. But he also believed that one great need of his generation was a philosophical understanding of the fundamental issues which faced it, and he found his true vocation in a diligent quest for such an understanding.

Already in these early years (that is to say up to 1667, when an event occurred which opened a new period in his life) Locke had collected much material and reflected considerably on the problems of his day, as his private papers show. It was about this

Lovelace Collection which belong to this period, 1658-61. They are full of the tender passion 'robbing me', as he says himself in one of them, 'of the use of my reason'. There are also lovers' quarrels and 'Madam' has made him understand 'that I am not to procure my satisfaction at the expense of your time or patience' (4 June 1659).

¹ It was not till 1674 that he took the Oxford M.B. degree.

period, as he himself informs us in his *New Method of a Commonplace Book*, that he began to prepare those commonplace books which, together with the journals, make so substantial and important a part of the Lovelace Collection,¹ and which are really small encyclopaedias (before the days of printed encyclopaedias) composed by Locke himself for his own instruction and for purposes of reference. In the Lovelace Collection also and again amongst the Shaftesbury Papers for these years there are many writings on constitutional, political, religious, and moral problems. He discusses the Roman constitution, the new Restoration settlement, the place of the civil magistrate in ecclesiastical affairs, and the problem of toleration. But never in these early papers, it is interesting to note, is he concerned with metaphysical matters; nor do those problems of epistemology to which he was later driven here disturb him.² It is the practical affairs of state and society which were uppermost in his mind at the time.

II

Locke's main concern, then, up to 1667 was with the practical and social. None the less, he was already familiarizing himself with the views of leading thinkers both of the past and of his own day. The chief influences upon him in this early period must now be traced.

It might at first appear that Locke was little influenced by other writers. His references to others were few. Occasionally, to confirm his general position, he would quote an authority, such as Hooker; but this happened rarely. The naïve method of impressing the reader by piling quotation upon quotation, a method very common in the seventeenth century, he wisely rejected. Instead he attempted to demonstrate each point rationally, and to consider each argument on its own merits in complete independence of what had been said in the past. But he was not ignorant of the past and he was not uninfluenced by other writers. His commonplace books and journals show how widely he had read, and those

¹ One of them bears the date 1661 on its fly-leaf.

² Unless some of the essays on the Law of Nature (Bodl. MS. Locke, f. 31) are held to be epistemological.

who are familiar with the background will perceive at once how greatly he was indebted to other writers.

I do not propose in this book to give any exhaustive account of the influences that worked upon him. There is indeed no end to the tracing of influences, especially in the case of one whose interests were so wide and catholic. It would doubtless be possible to find sources in Greek thought for much that he says, although there is little evidence in his works of any close and detailed study of a Greek author. It is clear that he had studied Cicero with much care. Cicero was an important influence on his thought, particularly as the critic of a materialist philosophy of life. But his immediate debt to the Middle Ages, as one might expect, is greater than any to Greece and Rome. The first philosophy which he had learnt was the scholastic; and it was only gradually, with infinite pains that he found it possible to free himself even partially from its leading-strings. His terms and his central conceptions were derived from scholasticism. He took over bodily its logical framework, its substance and accidents, its modes, its essences, its genus and species, its universals and particulars. His metaphysic also is scholastic in origin, his conception of God and of His relations to the rest of the universe, his conception of man, and of the place which is his in the hierarchy of being. It would be wrong, of course, to say that there was no advance—or, at least, modification—in Locke. He broke away from scholasticism. But it is equally wrong to suppose that he was uninfluenced by his early training. Locke did not start wholly afresh. He built on the traditional foundation bequeathed to him by the schools.

But the problem of Locke's indebtedness to scholasticism is one for the medievalist, and much work remains to be done in this field.¹ In the present section, however, I propose to consider the influence upon him of two contemporary writers, whom Locke himself would have regarded as of far greater importance than

¹ Küppers in *John Locke und die Scholastik*, Berne, 1894, and Krakowski, *Les Sources médiévales de la philosophie de Locke*, Paris, 1915, are far from satisfactory. Tellkamp, *Das Verhältnis John Locke's zur Scholastik*, Münster, 1927, is sounder work, but still leaves much unexplained. What, for instance, is Locke's relation to Aquinas, to Nicholas of Cusa, and, most interesting of all, to William of Occam?

any scholastic writers, namely, Descartes and Sir Robert Boyle. Of the two the greater influence was Sir Robert Boyle, and indeed Descartes's role was primarily that of liberator rather than teacher. Locke was not a Cartesian. I hope to show in this book that if he is to be grouped with any European group we must follow Leibniz in grouping him with the Gassendists. It is as a good Gassendist that Locke criticized Descartes. Most often his criticisms, it is not too much to say, re-echoed those already made by Gassendi and his followers. But though he was not a disciple of Descartes, he himself was very ready to admit his great debt to the French thinker. When, as the result of his Oxford training, he had lost faith in philosophy, his reading of Descartes restored it.

He probably began to study Descartes soon after graduation, and it did not take him long to realize that the new philosophy was far more important and more real than the arid hair-splitting of his Oxford logical exercises. In his first *Letter* to Stillingfleet he acknowledges 'to that justly admired gentleman (Descartes) the great obligation of my first deliverance from the unintelligible way of talking' of the schools.¹ And Lady Masham informs us: 'The first books, as Mr. Locke himself has told me, which gave him a relish of philosophical things were those of Descartes. He was rejoiced in reading these, because, though he very often differed in opinion from this writer, he yet found that what he said was very intelligible.'² Thus, it was Descartes who first taught Locke how to develop a philosophical inquiry intelligibly. His Oxford education had left him with a sense of despair as to the possibility of advance by way of reason. Descartes was his deliverer from this despair and pessimism.

But Locke does not follow his deliverer blindly. He criticized him, primarily on empirical grounds. And the sequel in the history of philosophy is interesting for, when the long and fruitful reign of Cartesianism came to an end in intellectual Europe, writers (for instance, Voltaire and the Encyclopaedists) acknowledged Locke as its critic, though the truth is that he was only one of many critics. They hailed him as the founder of the empirical

¹ *Works* (references to fourth edition), i. 381 (1801 ed. iv. 48).

² Quoted by Fox Bourne, i. 61-62.

school. Confining their attention largely to the first two books of the *Essay* and neglecting shamefully the third and fourth, they created there and then the erroneous view that the two schools had nothing in common. This view prevailed until the middle of the nineteenth century, when people like Tagart and T. E. Webb in England, Hartenstein, Geil, and von Hertling in Germany discovered once again the rationalist elements in Locke's thought, in a word, rediscovered the third and fourth books of the *Essay*. In our own day the pendulum is in danger of swinging too far in the other direction, for Locke is talked of as if he were a mere rationalist, owing everything to Descartes. This view is equally untrue and needs to be corrected. Locke accepted much that Descartes taught. Nevertheless, he was his constant critic, criticizing him in the light of empiricism, that of Bacon and of Boyle on the one hand, and of the Gassendists on the other.

Apart from the general inspiration which he derived from Descartes Locke was chiefly indebted to him for the details of his account of knowing. If iv. ii of the *Essay* be compared with the opening sections of Descartes's *Regulae* the measure of his indebtedness will be appreciated. And yet the *Regulae* was not published until 1701, eleven years after the publication of the *Essay*. Many manuscript copies of it were in circulation, however, and it is not at all improbable that Locke had seen the work. One is tempted to the view that he actually had the *Regulae* (or a note of it) beside him in writing iv. ii, the likeness between the two is so close. Following Descartes he shows how knowledge is essentially intuitive, but demonstration involves memory, and this makes it not quite so certain as intuitive knowledge.

Yet while Locke was clearly in Descartes's debt for this important theory, it is well to remember that his mind would have been prepared for the views set forward in the *Regulae* by other influences. The doctrine of the *intuitus* was not original to Descartes. It was sound medieval doctrine, and can be traced back no doubt to the *νοῦς ποιητικός* of Aristotle's *De Anima*, and to Plato's *Theaetetus*. Moreover, it was as much part of the English as of the European tradition. Roger Bacon expounded it in thirteenth-century Oxford and ascribed to it a divine origin, so also did the

Cambridge Platonists three centuries later. It was by appealing to it that Cudworth overcame materialism. Locke talked of it frequently in the metaphor beloved of the Cambridge Platonists, as a 'candle'. Thus, while he had Descartes chiefly in mind in writing *rv. ii*, the theory he put forward was in no way alien to his own English traditions.

Further points in which Locke was indebted to Descartes might have been considered. Locke accepted Descartes's account of clear and distinct ideas, he used his argument of the *cogito ergo sum*, and joined with him in emphasizing the importance of mathematics. More important still, the language of Locke's 'new way of ideas' is borrowed directly from Descartes. But these and other matters are details which it is best to examine as we expound Locke's own teachings. What we must now do is to emphasize another point, namely, that in spite of this debt Locke felt himself in open opposition to Descartes. He always regarded the Cartesians with a certain amount of suspicion. Such doctrines as those of innate ideas, that animals are automata, that the essence of body is extension and of mind thinking, and that there is no vacuum, were most distasteful to Locke. Moreover, in a general sense, Locke disliked the whole tone of Cartesianism. It was too speculative, its method was the 'high priori' one which he was resolved not to adopt. In his *Some Thoughts Concerning Education* he held that a young man might like to read the speculations of Descartes on natural science, 'as that which is most in fashion', since he could thus 'fit himself for conversation', but he should not expect to find truth in them. The 'high priori' method gives 'hypotheses' only. If the young man wants something more substantial he must turn to 'such writers as have employed themselves [rather] in making rational experiments and observations than in starting barely speculative systems'.¹ He instanced the works of Boyle and Newton. Again, in his second reply to Stillingfleet, the Bishop of Worcester, who had argued 'that Descartes, a mathematical man, had been guilty of mistakes in his system', Locke remarked: 'When mathematical men will build systems upon fancy and not upon demonstration, they are liable to mistakes as others.' This

¹ § 193 and cf. also § 94.

was the real ground of Locke's dissatisfaction with Descartes. He 'built systems upon fancy', instead of contenting himself with what could be proved demonstratively or at least made probable by 'rational experiments and observations'.¹

Locke's reference here, clearly, is to the practice and method of the English scientists of his own age, and we now turn to consider their influence upon him in these early years. The greatest name is that of Isaac Newton, but he could hardly be described as an early influence on Locke. Locke admired him immensely. In the *Education*² he praised him for showing 'how far mathematics, applied to some parts of nature, may, upon principles that matter of fact justifies, carry us in knowledge of some, as I may so call them, particular provinces of the incomprehensible universe'. And in this he contrasted him to Descartes. But his acquaintance with Newton and with Newton's work came late. Newton was Locke's junior by ten years, and it is not probable that they met each other before 1680 or so. Nor again does Bacon of Verulam appear to have been a deep influence. Locke no doubt read his works. And when Bacon remarked that of the natural world man knows 'as much as his observations on the order of nature, either with regard to things or the mind, permit him, and neither knows nor is capable of more',³ he was expressing a doctrine which became central in Locke's philosophy. (At the same time Bacon was inclined to hold that man was capable of greater knowledge of the natural order than Locke found it possible to admit.) But there is no evidence to show that Bacon was an influence on Locke's philosophical development.

The really important influence on Locke from the empiricist side was the group that gathered around Sir Robert Boyle, and which ultimately founded the Royal Society. Indeed, the most important influence of all was Boyle himself. Boyle, the son of an Irish earl, was Locke's senior by five years. He was a member of the 'Invisible College' which held its meetings at Gresham College, London, and which devoted itself to the 'new philosophy',

¹ *Works*, i. 572 (1801 ed. iv. 427). Cf. further 'The Influence of Descartes on John Locke: A Bibliographical Study' by Charlotte S. Ware (Mrs. Arthur Johnston), *Rev. Int. de Phil.* (April 1950).

² § 194.

³ *Novum Organum*, Aphorisms, Book i. 1.

meaning in particular the new natural philosophy that stressed observation and the application of mathematics to the study of natural phenomena. This 'College' had a branch at Oxford, and when Boyle went to reside there in 1654 he soon became one of its most prominent members. In 1663 the 'Invisible College' became the Royal Society and Boyle, who moved back to London in 1668, had much to do with its growth in its earliest years. He died in 1691.

From 1654 to 1668, then, Boyle was at Oxford and Locke must have known him for most of this period. When Locke visited Cleves in 1665 he sent letters to Boyle as to a close and much respected friend. At Oxford Locke helped Boyle in his experiments,¹ when away from him he sent him scientific information; writing from Lord Shaftesbury's residence his one regret is that he has no time for laboratory work, 'though I find my fingers still itch to be at it'.² Lastly, Boyle submitted his *General History of the Air* to Locke's judgement before publishing it.

This will be enough to show that the connexion between the two was an intimate one. It certainly left its mark on the younger man.³ The physics of the *Essay* is the corpuscular physics of Boyle, and if the reader has any doubts in his mind as to what Locke means he may turn to Boyle's works for a fuller exposition of the same views. Of course, some of these doctrines might themselves have been suggested to Boyle by Locke, but Boyle seems to have been the leader. He is the master who taught Locke how to approach nature empirically and yet scientifically. We shall refer later to the particular points in which Boyle's influence is most clearly seen, for instance, the distinction between primary and secondary qualities. Suffice it now to point out the general agreement between them. In his preface to *The Origins of Forms and Qualities, according to Corpuscular Philosophy*, published in 1666, when the co-operation between the two men was at its closest, Boyle truly summed up the central thesis of the *Essay* itself with

¹ Cf. Boyle's *Works* (1744), v. 136-63, where there is a register of the weather at Oxford kept for Boyle by Locke.

² *Ibid.* v. 568 b.

³ It has even been suggested (L. J. More, 'Boyle as Alchemist', in *Journal of the History of Ideas*, vol. ii, no. 1) that Locke accepted Boyle's alchemy, so great was his faith in him.

regard to the natural sciences when he remarked: 'For the knowledge we have of the bodies without us being for the most part fetched from the informations the mind receives by the senses, we scarce know anything else in bodies, upon whose account they can work upon our senses, save their qualities: for as to the substantial forms, which some imagine to be in all natural bodies, it is not so evident that there are such as it is that the wisest of those that do admit them confess that they do not well know them.' Locke's views about human knowledge and its extent were also foreshadowed in Boyle.¹ For Boyle taught that the extent of our certain knowledge is not great. Without revelation the human intellect could discover very little indeed. None the less, our faculties are sufficient for our needs.⁴

¹ Cf. *ibid.* ii. 190 *b*, and iv. 42 ff.

II

YEARS OF GROWTH (1667-89)

I

IN 1666 Locke first met Lord Ashley, afterwards Earl Shaftesbury. It was a chance meeting at Oxford, but for both men, and for Locke in particular, the event was fraught with important consequences. Ashley was already one of the most influential men in the country; his talents were many, and his practical ability admitted by all. How far Dryden's bitter satire upon him is justified it is difficult to say. But Locke admired him, whilst Ashley, on his side, recognized the learning and wisdom of the young man. From the middle of 1667 onwards Locke became one of his advisers and went to live with him in London. He first served him in the capacity of physician, and in 1668 he carried out an operation on his patient which saved his life. But it was not medical advice alone that Ashley sought from Locke. 'Mr. Locke', the third Earl Shaftesbury remarks,¹ 'grew so much in esteem with my grandfather that, as great a man as he experienced him in physic, he looked upon this as but his least part. He encouraged him to turn his thoughts another way; nor would he suffer him to practise physic except in his own family, and as a kindness to some particular friend. He put him upon the study of the religious and civil affairs of the nation, with whatsoever related to the business of a minister of state, in which he was so successful, that my grandfather soon began to use him as a friend, and consult with him on all occasions of that kind.'

Thus Locke found himself at the very centre of affairs and was obliged to make himself acquainted with all the major occurrences of the day in order to advise Ashley. In Oxford he had spent his time in the company of men of learning and of scientists. Now he dwelt daily with business men, politicians, and courtiers. It was a

¹ Quoted by Fox Bourne, i. 198.

completely new world for him, but he possessed wit, grace, and learning enough to hold his own in it. One of his first tasks was to help with the framing of a constitution for the new colony of Carolina, of which Ashley was one of the founders and lord-proprietors. (The whole constitution is attributed to Locke, since a copy of it in his hand was found amongst his papers, but it is very unlikely that he is the author of it.) Another task, of a very different order, which fell to his lot at the time, was to find a wife for Ashley's son, a sickly and none too intelligent boy of seventeen or eighteen. This he carried out most efficiently, negotiating successfully with the Earl of Rutland for the hand of his daughter, Lady Dorothy Manners. 'Sir', Ashley wrote to him on learning of the arrangements for the wedding, 'you have in the great concerns of my life been so successively and prudently kind to me, that it renders me eternally your most affectionate friend and servant.'¹ He did not entirely neglect scientific work. He busied himself with medicine, co-operating with Sydenham, whose acquaintance he had lately made. He was also drawn into the Royal Society, now well established, and was elected a Fellow in November 1668, though he never seems to have played a very prominent part in its work. In 1671 he first bethought himself of the problems of the *Essay*, and wrote two important drafts to which we shall refer later. His many activities, however, began to tell on his frail constitution, and for the first time we hear of his being forced to leave London for reasons of health. He spent some time in the provinces, and then towards the end of 1672 crossed to France for a very short visit lasting a few weeks only.

He returned to weightier tasks of administration, for already in April 1672 Ashley had been raised to the peerage as Earl Shaftesbury and was now appointed President of the Council of Trade and Plantations. Still greater honours were to come, however, for in November, just after Locke's return, he was made Lord High Chancellor. Advancement for Shaftesbury meant greater work for Locke; and he was appointed Secretary for the Presentation of Benefices with a salary of £300 and the care of all ecclesiastical business which came under the Chancellor's control.

¹ *Shaftesbury Papers*, ii. 176; Fox Bourne, *Life*, i. 205.

Shaftesbury, however, was soon dismissed from the office of Chancellor and Locke lost the secretaryship. But in October 1673 he was appointed Secretary to the Council of Trade and Plantations (of which Shaftesbury was still President) at a salary of £500 a year.¹ He retained this post until the Council was dissolved by royal mandate in March 1675. He thus gained much information which he put to good use later after the Revolution of 1688. His own financial position was secured by an annuity of £100 from Shaftesbury, though Locke himself seems to have contributed towards this annuity.² He continued to hold his Studentship at Christ Church.

In 1675 Locke's health deteriorated so rapidly under the pressure of work upon him that he decided to try a prolonged stay in France. We are fortunate in having, in the Lovelace Collection, journals giving a very full account of his journeys there.³ He crossed to Calais and travelled leisurely through Abbeville to Paris, thence to Lyons, Avignon, and Montpellier, at that time a famous health resort. He reached it on Christmas Day, 1675, having spent almost six weeks on the way. He remained for over a year at Montpellier, finding many new friends, amongst them being Thomas Herbert, later Earl of Pembroke, to whom the *Essay* is dedicated. In March 1677 he returned to Paris and stayed there from May 1677 to June 1678. He made a point of meeting as many scholars and learned men as he could, and he also interested himself in the philosophical speculation of Paris at the time. His journals contain many references to French thinkers. In the one for 1678 there is a long note entitled *Méthode pour bien étudier la doctrine de M^r des Cartes*, discussing the best books to read in order to gain a satisfactory view of Cartesianism. There are references to Bernier, the leader of the Gassendists, of whom we must shortly say more, to Cordemoy and others. He also made the acquaintance of many celebrated physicians, and that with Guenellon, the Dutch physician, was to prove useful later in his life. Others whom he met were Nicholas Thoynard (who later, in

¹ Probably Locke was never paid for this work, cf. Fox Bourne, i. 293-4.

² Cf. *Locke and Clarke Correspondence*, 11 March 1692.

³ Cf. *Locke's Travels in France*, 1675-9, ed. by John Lough, Cambridge, 1953.

his correspondence,¹ kept Locke well informed of happenings in France), Römer, Cassini, Thevenot, and Justel.

In June 1678 Locke left again for Montpellier, travelling thither through Orleans, Bordeaux, and Toulouse. He describes vividly the unhappy state of the French peasantry in the Loire basin. In October he is back in Montpellier whence he hoped to journey on to Rome, but 'old Father Winter, armed with all his snow and icicles, keeps guard on Mont Cenis and will not let me pass'. After a week's stay at Montpellier he returned to Paris, arriving there in November. Here he spent the winter, seeing the shows the city and court had to offer, and spending as much time as he could, we may be sure, in the company of philosophic and scientific savants. In April 1679 Locke left Paris for London with many regrets for the friends and entertainments he was leaving behind him.

His regrets can be understood, for the England to which he returned was one troubled by acute political unrest. The Stuarts, surely the most lacking in political sense of all reigning families, had managed once more to unite the majority of the nation against them. Charles, his brother James, and the Court, were solidly Catholic, whilst the nation was no less solidly Protestant. Shaftesbury, now the leader of the people and of the opposition, had been imprisoned in the Tower. But with the summoning of Parliament in 1678 the King gave way before the opposition. Shaftesbury was freed and restored to power as Lord President of the Privy Council. Locke was recalled into Shaftesbury's service. During the summer of 1679 Parliament tried unsuccessfully to pass the Disabling Bill 'to disable the Duke of York to inherit the Crown of England'. The King, however, dissolved Parliament and in October Shaftesbury was again dismissed from office. Shaftesbury now joined the Duke of Monmouth's party and Locke no doubt was engaged in making various secret inquiries on his behalf. But ill health soon drove Locke out of London for the rest of the winter and he was not able to return until the spring of 1680.

Another Parliament was called in 1680 which proved equally

¹ In the Lovelace Collection there is a big bundle of letters to Locke from Thoynard.

stubborn in its opposition to James's accession to the throne, and was again dissolved. A new Parliament was summoned at Oxford. On this occasion Shaftesbury stayed at the house of John Wallis, the mathematician who had taught Locke in his undergraduate days; whilst Locke himself returned to his Christ Church quarters. But the Oxford Parliament was shorter lived than any, being dissolved within a week of its opening, and Shaftesbury returned to London.

Locke, however, except for occasional visits to London, stayed on at Oxford throughout the next two years, and the journals become fuller and more philosophical. He was probably in London in July 1681 when Shaftesbury was arrested, to be tried and acquitted in November. For the most part, however, he lived the quiet life of the scholar, researching in medicine and in philosophy. Meanwhile, watch was being kept on him by the King's party, and this was increased when Shaftesbury was compelled to flee the country and find safety in Holland. In January 1683, broken-hearted no doubt by his failure to prevent the succession of the Duke of York to the throne, Shaftesbury died in Amsterdam in the presence of a few friends. Locke who had served him so well was far away in Oxford, but he was not wholly forgotten, if we are to believe a certain Thomas Cherry, admittedly an enemy, who wrote in a letter: 'I'll give an unhappy instance, which I had from the very person in whose arms the late Earl of Shaftesbury expired. He said, when he attended him at his last hours in Holland, he recommended to him the confession of his faith and the examination of his conscience. The earl answered him and talked all over Arianism and Socinianism, which notions he confessed he imbibed from Mr. Locke and his tenth chapter of "Human Understanding".'¹

The information we have concerning Locke's activities during the years 1682 and 1683 is rather scant. The best sources are the journals. There are also letters to Thomas Cudworth, the son of Ralph Cudworth, the philosopher, and to Edward Clarke, but

¹ Quoted by Fox Bourne, i. 469. As the *Essay* did not appear for another seven years, either this story is false, or, what is not improbable, Shaftesbury must have seen iv. x in manuscript.

they give only slight information. It is clear that he was of set purpose secretive in his movements during these years, fearing persecution, a fear which he could well entertain. His intimate friendship with Shaftesbury and his political sympathies were known. As his fears increased, Locke decided that it would be wise for him to follow his master's example and flee the country. He was still in England in August 1683, for he wrote a letter to Clarke from London on the twenty-sixth of that month. But soon after that date he took ship to Holland, and by the 7th September, as we see from his journal, he was in Rotterdam, an exile from a land in which the forces he had always opposed were for the time being triumphant.

Locke spent his first Dutch winter in Amsterdam. In a letter to Clarke he says that he proposes to 'apply himself close to the study of physic by the fireside this winter'. He no doubt made a point of visiting Guenellon, now back in Amsterdam, and in January he was introduced to the theologian Limborch, who quickly became a very firm friend.

Philip van Limborch is a most interesting figure. He was the grand-nephew of Episcopius, a follower of Arminius, the famous professor of theology at Leyden. Episcopius had set himself up against the prevailing Calvinism of the Dutch people. He stood for full liberty of belief, and for a church broad enough to include within it men of all opinions. By 1610 Episcopius had founded a new sect, which presented a remonstrance to the States-General, the sect from this time onwards being known as the Remonstrants. In 1630 they opened their first church in Amsterdam.¹ Episcopius died in 1643. In 1668 Limborch was appointed pastor of this advanced community. When Locke arrived at Amsterdam fifteen years later Limborch had become one of the most important theologians in Holland. His name was known throughout western Europe. He was acquainted with the movements of English thought and counted some of the Cambridge Platonists amongst his friends. The portrait of him which still hangs in the

¹ The church and the various committee-rooms attached to it may still be seen on the Keizersgracht, not far from the house in which Descartes resided for some time. The council-chamber contains fine portraits of both Episcopius and Limborch.

Remonstrant council-chamber at Amsterdam presents him as a strong, heavily-built man, energetic, combining strength of character with that of body, but jovial also and alert. The longer Locke was in his company the deeper grew the friendship between them, and it was kept alive by frequent correspondence until Locke himself died. Of all the good things that Holland gave him the best was the companionship of Limborch.

Locke spent the summer and autumn months of 1684 touring the northern provinces and visiting the more interesting towns of Holland. These he describes in his journals. He writes many letters to Clarke, but these contain disappointingly little information about himself. From some references in them it would seem that Locke hoped to be back in England speedily, but the position at home was not improving. Indeed, the news from England could hardly have been worse. In November 1684 the King expressly asked Dean Fell of Christ Church to deprive Locke of his Studentship. The Dean tried to temporize, but the King would brook no delay. On the 16th November Fell wrote to say that 'his majesty's command for the expulsion of Mr. Locke from the college was fully executed'. It was an unpleasant blow, but Locke could do nothing. He spent the winter quietly at Utrecht, in the house of a painter, van Gulick.

But persecution was to assume a more severe form. In the spring of 1685 Charles II died, James came to the throne, and Monmouth attempted his inglorious rebellion. His defeat led to an inquiry and Lord Grey of Walk named Locke as one of Monmouth's helpers. From the evidence at our disposal it appears most unlikely that Locke supported Monmouth in any way. But when Skelton came out to The Hague to demand of the Dutch government the surrender of eighty-five Englishmen who had plotted against their King, John Locke's name was set down on the list of traitors. The Dutch authorities made no great effort to find the culprits, for they had scant sympathy with the Catholic English court. Thus the actual danger to Locke was probably never very great. But he was very much disturbed by the news, and went into hiding in the house of Dr. Venn, Guenellon's father-in-law. He took the most extreme precautions and even assumed a false name, Dr. van der

Linden. A later list of English suspects issued by the States-General in May 1686 no longer contained Locke's name, and all danger was past. Pembroke wrote to him from London to say that the King was even prepared to pardon him if he chose to return. But Locke stayed in Holland and continued to be most cautious in his activities.

If he suffered in this way, he enjoyed one great consolation. The air of Holland suited him admirably, and his health improved every year. In December 1687 he was able to write to Clarke, 'As to my health, which I know you are in earnest concerned for, I make haste to tell you that I am perfectly, God be thanked, recovered and am as well I think I may say as ever I was in my life'.¹ This improved health, and the enforced leisure which was his, Locke put to good use. In his letters to Clarke he outlined his thoughts on education, and it was these thoughts which were later gathered together and published. Again, in the winter of 1685-6 he was introduced to Jean Leclerc, a native of Geneva, a man of considerable ability, who had travelled widely before accepting a chair in the Remonstrants' College in Amsterdam in 1684. When Locke became acquainted with him, Leclerc was preparing the first issues of his *Bibliothèque Universelle*, one of the first literary journals. In the July 1686 number appeared (in French) an article by Locke, entitled *Méthode Nouvelle de dresser des Recueils*, an account of how he set out materials in his commonplace books. To this journal he also contributed reviews. Here we have Locke's first publications (if we exclude certain immature poems published by him in his early Oxford days).² In the winter of 1685-6 also Locke composed a letter to Limborch in Latin on the subject of toleration which was published in 1689 under the title *Epistola de Tolerantia*. (In the same year it was translated by Popple and published anonymously as the *First Letter Concerning Toleration*.) Toleration was a question hotly debated at the time in Holland. Leclerc complains in the May 1687 issue of his *Bibliothèque* that one hears of nothing in Holland except of toleration, and this enthusiastic discussion of a subject, upon which he had pondered from a very

¹ *The Correspondence of Locke and Clarke*, p. 230.

² Cf. Fox Bourne, i. 50-52, and the bibliography below.

early period, no doubt helped Locke greatly when he finally decided to set down his own thoughts on paper.

In January 1687 Locke moved from Amsterdam to Rotterdam, living there nearly two years in the home of a Quaker merchant, Benjamin Furly. Writing to Limborch, he remarks: 'I grieve much that I am parted from you and all my other dear friends in Amsterdam. To politics I there gave but little thought; here I cannot pay much attention to literary affairs.' The politics which took up so much of his time were obviously English politics, and he no doubt moved to Rotterdam in order to be near enough to The Hague to take part in the plotting against James II which was now coming to a head. After some hesitation William of Orange had thrown in his lot with the English Whigs, and it seems fairly clear that Locke was one of his advisers, either directly or indirectly through Lord Mordaunt.

But he was not wholly engrossed in affairs of this nature. He was, as we shall later see, well advanced with his greatest work, the *Essay*; at the same time he had been reflecting on questions of political theory. He kept up a very full correspondence with various people, particularly Clarke. He visited his friends at Amsterdam, and was a member of a jovial, mum-drinking club at Rotterdam, the Lantern, which met at Furly's house. Also, in January 1688 an abstract of his *Essay* was given to the world in the *Bibliothèque Universelle*, and Locke had to busy himself with the printing of it.

In the summer of 1688 he was visited by Edward Clarke, and his wife and daughter Elizabeth. Clarke, no doubt, took this opportunity of meeting William of Orange. The revolutionary plans matured in the autumn of 1688 and in November William left for England. His princess remained in Holland till January, when William was able to report that the revolution had been carried out peacefully and that James had fled. Locke had been left to bring over Lady Mordaunt, and they crossed in company with the Princess of Orange, now to be Queen Mary of England, on the 11th February, landing at Greenwich the next day. Thus Locke's exile of over five years in Holland was brought to an end. He returned home stronger in body and more mature in mind,

anxious now to submit to the judgement of the world the conclusions to which a lifetime's reflections had led him. He had greatly enjoyed his stay in Holland and had grown to admire the Dutch people. 'In going away', he writes to Limborch, a few days before he left Holland, 'I almost feel as though I were leaving my own country and my own kinsfolk; for everything that belongs to kinship, goodwill, love, kindness—everything that binds men together with ties stronger than the ties of blood—I have found among you in abundance. I leave behind me friends whom I can never forget and I shall never cease to wish for an opportunity of coming back to enjoy once more the genuine fellowship of men who have been such friends that, while far away from all my own connections, while suffering in every other way, I have never felt sick at heart. As for you, best, dearest and most worthy of men, when I think of your learning, your wisdom, your kindness and candour and gentleness, I seem to have found in your friendship alone enough to make me always rejoice that I was forced to pass so many years amongst you.'¹

II

What now were the chief philosophical influences that moulded Locke's thought during this middle period? Here again the search for all the minor influences even amongst his own contemporaries would be endless. Locke learnt much in conversation, and he was a voracious reader. It is probable that no book of any worth published in England during his adult years passed unnoticed by him. Even in France and in Holland he kept himself well informed of English publications, and he also knew of the more important books published in those countries. An exhaustive comparison of Locke's works with those others which he read during these years is, therefore, out of the question. Moreover, even if all the likenesses which exist between Locke's thoughts and those of others were traced, we could still not be sure which works had really influenced him. In writers belonging to the same age, and growing

¹ The beautiful letter of friendship from which I here quote is to be found (in its original Latin) in the Limborch correspondence in the University Library of Amsterdam.

up in the same 'climate of opinion'—to use a phrase of one of Locke's contemporaries, Joseph Glanvill¹—parallelisms of thought are inevitable. For instance, how much, if at all, is the author of the *Essay* indebted to Richard Cumberland's *De Legibus Naturae*, published in 1672? The thought in both, particularly in connexion with questions of moral philosophy, converges frequently. Yet the likeness between the two might well be explained by the fact that both men had the same cultural background, used the same methods, started from the same data, and faced the same problems. It is thus very dangerous to argue that since there are parallel passages in two writers belonging to the same epoch the one must have influenced the other directly.

Indeed, it is safer to talk of broad movements than of individual authors in dealing with this question of influences, and I propose to take here two contemporary movements which certainly did influence Locke greatly: first, the liberal-minded movement in theology typified by Cambridge Platonism and Latitudinarianism in England and by Arminianism in Holland; secondly, the Gassendist criticism of the prevailing Cartesianism in France. It is not difficult to show that these movements were the most important influences on Locke during this period.

The Cambridge Platonists were a school of erudite theologians flourishing in Cambridge in the middle of the seventeenth century. Their chief members were Benjamin Whichcote, Henry More, John Smith, and Ralph Cudworth. In their general standpoint they were opposed to more than one group. They criticized Hobbes's materialism; but they were equally severe on the dogmatism of the Calvinists and on the 'enthusiasm' of the sects. They were rationalist in outlook. For whilst they admitted that revelation was necessary to complete our knowledge, reason was to be trusted wholly within its own, admittedly confined, sphere of operation. There could be no conflict between reason and revelation; the one completed the other. Nor was there any authority to which appeal might be made beyond reason on matters within reason's own compass. Consequently, they were resolutely opposed

¹ To whom, incidentally, we might refer in illustration of our point here, since he has very much in common with Locke.

to any body of doctrine, such as Calvinism, which involved a revolt against reason, or an appeal from reason to inspiration or non-rational religious intuition. They held that reason was infallible; it was something divine in man, 'the candle of the Lord'; it enabled man to distinguish explicitly between truth and falsehood. On the other hand, just because they so clearly realized the high dignity, the finality, and the absoluteness of reason, they could not accept the Hobbesian interpretation of the world. They were progressive, and recognized willingly the splendid achievements of the 'new philosophy' in empirical inquiry. But they could not admit that the new science in any way justified the thorough-going atomistic and mechanical materialism implicit in Hobbes's system. In their very confidence in human reason they found justification for a religious view of the world. This confidence also made them broad-minded and tolerant. Each individual was a free agent, possessing sufficient reason to guide his life aright if he made proper use of it, and so each individual should be free to order his own life in accordance with his own reason.

Locke was naturally disposed to doctrines such as these, and no doubt he would know something of them before leaving Oxford. But on coming to London in 1667 he met Mapletoft, Tillotson, and Patrick, all three of whom were disciples of Whichcote. The latter himself came to London in 1668 as rector of St. Lawrence Jewry and remained there until 1681. Locke might very well have been among his congregation.¹ He had closer contacts, however, with another Cambridge Platonist, Ralph Cudworth, though we have no evidence that the two ever met. They were both Somerset men, born within twenty miles of each other, Cudworth being Locke's senior by fifteen years. The Clarke correspondence shows us that Locke knew the family well before he left for Holland, and there are letters between Locke and Thomas Cudworth, the son. In his old age, also, as we shall see, Locke found a pleasant refuge in the house of Lady Masham, the daughter of Cudworth, at Oates, and for some years Mrs. Cudworth, the widow of the philosopher, lived in the same house. So that even if Locke had not

¹ Lady Masham tells us that he approved of 'sermons he had heard from Mr Whichcote'. King, ii. 56.

discussed his philosophy with Cudworth himself, he had every opportunity of discussing it with those who best knew his philosophical position and temper.¹

There are clear traces of the influence of this school upon Locke's work.² Much of the fourth book of the *Essay* might have been written by one of the Cambridge school. The argument in iv. x. 10 and what follows, where it is shown that God must be other than material, breathes the spirit of a Cudworth.³ His chapters dealing with reason and revelation, and that on enthusiasm, are very much in line with Cambridge thought. Outside the *Essay* also, in his letters on toleration, and in his *Reasonableness of Christianity*, the influence of Cambridge Platonism is even more evident. He recommends the reading of Cudworth to the student in his *Thoughts Concerning Education*⁴ and appeals to his authority on more than one occasion in the correspondence with Stillingfleet.⁵ Locke, we shall find, shared the view of the Cambridge Platonists on the nature and significance of reason in human life, on the relations between reason and faith, on the paramount importance of practical conduct in true religion, on toleration, and on enthusiasm.

In all these matters Locke helped to carry forward the liberal tradition which the Cambridge Platonists had themselves inherited from still earlier English sources. Yet while it is correct to hold that Locke was influenced by Cambridge thought, it would be a great mistake to regard him as a member of this school. There are important differences between his final standpoint and theirs, and it is these differences which made Locke's works so very fruitful, whilst the works of the Cambridge Platonists were soon forgotten. I may mention, first, two of the more incidental differences. Most of the Cambridge Platonists believed in innate ideas, but Locke rejected them. Again, the Cambridge Platonists had room for a world of real intelligible objects, wholly other than the world

¹ On the relations between Locke and Cudworth cf. further J. A. Passmore, *Ralph Cudworth*, Cambridge, 1951, ch. viii.

² A detailed account of the matter is given in chapter iii of Freiherr von Hertling's *John Locke und die Schule von Cambridge*.

³ That Locke in this passage was directly influenced by Cudworth is clear from a note in the *Journal* of 1682. Cf. Aaron and Gibb, p. 118.

⁴ § 193.

⁵ Cf. *Works*, i. 498, 597.

of sensible things. Now Locke sometimes talks of an 'intellectual world' and always holds that reason has a type of object which is permanent and eternal. But for Locke these intellectual objects, i.e. universal ideas, were merely the creations of our own mind. The Cambridge school, however, attributed to them a reality as 'essences' or 'Ideas' in the Platonic sense which Locke could not attribute to them. In this important respect their theory of universals is different.

But the fundamental difference between them is one of purpose and method. The Cambridge men were speculative theorists. Their aim was to show that a religious metaphysic and a theism were still possible, and, indeed, necessary, in spite of the changes in men's opinions since the Renaissance. They were apologist and on the defensive. Locke, on the other hand, was critical. He had no system to defend. Indeed, his task, as he explained, was to clear the 'under-rubbish' that had first to be removed if an adequate system was to be built. Thus Locke's attitude and purpose in philosophizing, particularly in the *Essay*, were fundamentally different from theirs, however much he may have shared their theological and religious outlook. It is when one studies works other than the *Essay*, the letters on toleration and the *Reasonableness of Christianity*, that one best realizes the measure of Locke's debt to them.

Cambridge Platonism, however, is only one manifestation of the liberal-minded trend in English religious and political thought and Locke was influenced by other manifestations of it. It is significant that 'the judicious Hooker', who himself belongs to the same tradition, is the author to whom Locke most frequently makes appeal (particularly so in the *Treatises on Civil Government*).¹ Again, in Locke's own youth a movement more influential than Cambridge Platonism had come into being, Latitudinarianism. At first the most important figures were Hales and Chillingworth. The latter's *Religion of Protestants*, 1637, left a deep

¹ Hooker, though Royalist, interpreted government largely in the terms in which it was interpreted by Locke himself. In theology he defended reason as having equal authority within its own sphere with scripture. He also advocated toleration. Great respect was paid to his name in Locke's day, and this, no doubt, accounts in some measure for the frequency with which Locke refers to him.

impression upon the more thoughtful members of his own generation and the next. After the Restoration in particular liberal theologians and ecclesiastics in the Church of England were anxious to see the foundation of the Church laid on so broad a basis that all sincere believers in Christ, however they interpreted the Scriptures, might be included within it. The Christian creed consisted of a few essentials (they might even be reduced to one, that Christ is Saviour), and of very many non-essentials. The Latitudinarians argued that disagreement about the latter ought not to keep men apart. Conformity on non-essentials should not be demanded. 'Require of Christians only to believe Christ.' In Locke's own day the leaders of the movement were Tillotson and Patrick, to whom we have already referred, and Locke was on most intimate terms with both.¹ He was only too ready to accept views such as theirs, and in theological matters became Latitudinarian, as may well be gathered from his *Reasonableness of Christianity*. Still another influence upon him of an advanced liberal kind in theology was that of Episcopius, Limborch, and the Arminian Remonstrants of Amsterdam. The Latitudinarians themselves were Arminian in theology, so were the Cambridge Platonists, but in Holland Locke touched Arminianism at its fountainhead. Thus throughout this middle period Locke was in constant contact with the liberal Arminian school of theology, with men who desired to see established a broad and tolerant Church that would put no fetters upon human reason and would demand only such articles of faith as were deemed essential.

Before we turn to consider the influence of the Gassendist criticism of Cartesianism on Locke, a word should perhaps be said about the relations between him and Hobbes. When John Edwards charged Locke with putting forward views in his *Reasonableness of Christianity* very much akin to those of Hobbes the accusation went home. Locke does not try to hide his chagrin. He

¹ Tillotson in particular was a very great friend, as witness a letter to Limborch (11 December 1694) written on the occasion of Tillotson's death. Locke describes him as 'that able and candid investigator of truth' and adds: 'I have now scarcely any one whom I can freely consult on dubious points of divinity—I have, indeed, been deprived to my great injury and regret, of a friend, sincere and candid, and endeared to me by the intercourse of many years.'

pleads ignorance of the details of Hobbes's works, though it is very difficult to believe that he was wholly ignorant of them.¹ In connexion with one doctrine said by Edwards to have come direct from the *Leviathan* he remarks: 'I borrowed it from the writers of the four Gospels and the Acts and did not know that these words he quoted out of the *Leviathan* were there or anything like them. Nor do I know yet, any further than as I believe them to be there from his quotation.'² He links Hobbes with Spinoza as 'justly decried names' and declares that he is not 'well read' in either.³ Finally, he condemns the ethical standpoint of the 'Hobbiſts'.⁴ From all this it is clear that Locke was anxious not to be regarded as a follower of Hobbes. For in spite of Hobbes's show of orthodoxy, the real meaning of his philosophy was not hidden from his contemporaries. And Locke was convinced—as convinced as the Cambridge Platonists—that Hobbes's materialism was inadequate as a philosophy of life. 'That which is not body', Hobbes had said, 'is no part of the universe.'⁵ On this fundamental issue Locke and Hobbes were in opposing camps, and that of itself is sufficient to explain Locke's animosity. On political questions also, as we shall see later, they were fundamentally opposed; and though Hobbes is not mentioned in the second *Treatise on Civil Government*, that book is obviously directed against his political views.

Hobbes's influence on Locke is thus primarily of a negative sort. He is aware of him and sometimes is obviously seeking to answer him. But in a positive sense the influence is slight. True, their method is identical, namely, the compositional. (For Hobbes

¹ Locke possessed a copy of the *Leviathan* in his library. It is listed amongst the books bequeathed to Francis Masham. Unfortunately the nine hundred books so bequeathed were dispersed in a sale a century or so later. In a notebook (now in the Lovelace Collection) in which he gathered together the opinions of various critics about the thinkers in whom he was interested there are three or four references to Hobbes, which shows that he was amongst the thinkers Locke regarded as important.

² *Works*, ii. 722 (1801 ed. vii. 420).

³ *Second Reply to Stillingfleet*, i. 598; cf. *Remarks upon Norris*, § 16. (Locke had also various works of Spinoza in his library. He bequeathed some to Peter King and some to Masham.)

⁴ Cf. King, i. 191: 'An Hobbist with his principle of self-preservation, whereof himself is to be judge, will not easily admit a great many plain duties of morality.'

⁵ *Leviathan*, iv. xlvi. (middle of section).

reasoning itself was a computation of words, propositions, and syllogisms.¹) But the compositional method was common to the age and not peculiar to Hobbes. Again Hobbes forestalled Locke in asserting that truth pertained to propositions rather than to terms or things,² and Locke may be indebted to him for suggesting this. I cannot, however, agree that Locke followed Hobbes in his nominalism, as is frequently argued, since Locke's philosophy, it seems to me, is never nominalist. Nor again should it be said that Locke borrowed Hobbes's account of the association of ideas and made it his own, for Locke's theory is very different from that of Hobbes. Professor Laird has recently pointed to certain parallelisms between the two writers;³ but they are not such as to overthrow the view generally held, namely, that Locke's direct debt to Hobbes was very slight.

The second movement to be considered here is the Gassendist. The influence of Gassendi upon Locke, and indeed, upon English thought in general at this period, has been strangely neglected. Yet in his own day Locke was regarded by no less a critic than Leibniz as a member of the Gassendist party, and a similar view was put forward by Henry Lee in commenting on Book II of the *Essay*.⁴ What Leibniz says is very important. The relevant passage will be found at the opening of his *Nouveaux Essais*, where Philalethes (who is Locke's spokesman) rejoices in the fact that new support has come to the Gassendists from England. 'You were for Descartes', he says, 'and for the opinions of the celebrated author of *La Recherche de la Vérité*, and I found the opinions of Gassendi, clarified by Bernier, easier and more natural. Now I feel myself greatly strengthened by the excellent work which an illustrious Englishman . . . has since published. . . . He writes obviously in the spirit of Gassendi, which is at bottom that of Democritus. He is for the vacuum and for atoms; he believes that matter might

¹ Cf. *Elements of Philosophy*, I. i. 2: 'By ratiocination I mean computation.'

² Cf. *ibid.* I. iii. 7, I. v. 2.

³ *Hobbes*, p. 267.

⁴ *Anti-Scepticism or Notes upon each chapter of Mr. Locke's Essay*, p. 41: ' . . . he might as well have said, in Gassendus's words, *Nihil est in intellectu quod non prius fuerit in sensu*; for it comes all to that, even according to his own principles.' The attribution of this aphorism to Gassendi is itself interesting and instructive. He stood for a certain point of view which Locke also accepted.

think; that there are no innate ideas, that our mind is a *tabula rasa*, and that we do not always think, and he appears disposed to approve of most of the objections which Gassendi has made to Descartes. He has enriched and strengthened this system by a thousand beautiful reflections; and I do not at all doubt that now our party will triumph boldly over its adversaries, the Peripatetics and the Cartesians.¹ Thus Leibniz, who was surely in a position to know, makes Locke a party man. For him Locke is a protagonist in the intellectual warfare then being waged between Cartesians and Gassendists, and belongs to the Gassendist party.

If Leibniz is correct, the supreme formative influence upon Locke's thought was 'Gassendi, clarified by Bernier'. How far is this view sound? In the first place it is well to remember that Leibniz wrote for European rather than English readers, and that he perhaps underestimated the strength of English influences. Cambridge Platonism and English Empiricism left their mark upon Locke's mind. And yet Gassendi is certainly as great an influence as any of these. The *Essay* becomes, in my opinion, much more intelligible if read alongside Gassendi's works; while Locke's steady opposition to Descartes and to the Cartesians both in the *Essay* and elsewhere, as, for example, in his *Examination of Malebranche*, is more easily explained if his relation to the Gassendist party is borne in mind.

Locke, no doubt, came into closest contact with the Gassendists while on his visits to France. But he must have been familiar with their point of view earlier.² For the first drafts of the *Essay* were written in 1671, and they already show the influence of Gassendi. The four years which followed 1671, as we saw, were crowded with political business, but in the leisure which his second visit to France gave him Locke was able to return to his philosophical reflections, so that the influences at work upon him on this visit must be reckoned as of very great importance. The reigning philosophy was then Cartesian, and Locke had an opportunity of studying it at first-hand. He was dissatisfied with much of it. He already

¹ *Nouveaux Essais*, I. i. (Erdmann, i. 204).

² He may have studied Gassendi with Boyle, who was also deeply influenced by his thought.

favoured the Gassendists, and it is not unlikely that he would soon seek out the acknowledged leader of the Gassendists since Gassendi's own death, namely, François Bernier. Bernier is mentioned by Locke in his journals on more than one occasion, although usually in reference to non-philosophical matters. These references also make it plain that Locke knew him personally. It is not at all improbable that he spent a great deal of time in his company, for Bernier was a man after Locke's heart. He was no mere philosopher. Like Locke he had been trained as a physician, but had never settled down to the life of a practising doctor. Instead he had wandered over North Africa and Asia, Syria, the Nile, Suez, and India. He wrote books on his travels which became famous in their day.¹ He was a gay companion, famed as a singer of 'bacchic' songs, and 'sought after by the most illustrious and distinguished persons of the time'.² Such merits would certainly count with Locke, who was always attracted by high spirits and joviality wherever they were to be found, and who loved to hear of travels in distant lands and of the curious and novel sights to be seen there. But Bernier was something more than an adventurer and wit. He was a philosopher of no small merit. And, in particular, he was the greatest enthusiast for Gassendi's philosophy then alive in Europe. In the very years in which Locke met him he was publishing an abridged (and occasionally modified) edition of the works of Gassendi which attracted a great deal of attention. It is unthinkable that Locke could have been long in his company without discussing Gassendi with him, and his interest in that philosopher must have been considerably heightened as the result of his acquaintance with Bernier.

Gassendi himself had died two decades earlier in 1655. He was born in 1592 in Provence. For some years he taught philosophy at Aix, but he also studied the new astronomy and natural science, particularly anatomy. He was a keen defender of the new learning and attacked the scholastic philosophy of the universities. He was best known as the critic of Descartes and the Cartesians. An estrangement ensued between the two philosophers, though they

¹ One was translated into English and published in 1671.

² Cf. *Nouvelle Biographie Générale*, vol. v.

were partially reconciled in 1648. His most important criticisms of Descartes may be found in the fifth set of objections to the *Méditations*. A complete edition of Gassendi's works was issued three years after his death.

Gassendi was much influenced by the Greek atomists and by Epicurus. In his philosophy he attempted to set forward an Epicureanism which could, as could no other system in his opinion, adequately explain the new world revealed by the sciences of his day. At the same time the Epicureanism proposed by him was to be purified of all its pagan elements, so that it could also express what was valuable in Christian thought. Accordingly, Epicurean atheism and the Epicurean doctrine of the soul were both rejected by him. But he reintroduced the physics, the psychology, and the ethics of the Greek school. He also restored the Epicurean doctrine that knowledge begins with sensation. 'Nihil est in intellectu quod non prius fuerit in sensu.' Nevertheless, he was no mere sensationist, for he believed that intellect, an eternal and immaterial faculty, also plays its part in the gaining of truth. His moral philosophy was a hedonism for which the end of life was harmony between soul and body. He stressed the importance of liberty and was, in this respect, a worthy forerunner of the Encyclopaedists. He agreed with much of Descartes's philosophy, but criticized his view of matter, of space, of innate ideas, and of animal life. Like Locke, he found Descartes over-speculative. For Gassendi theory should rest upon sound empirical evidence. The collection of the latter alone, the *ars bene colligendi*, as he termed it, was insufficient. Speculation was also necessary, but it should always rest on observation and be constantly tested by it.

This brief account of Gassendi's thought is sufficient to show the close relation between him and Locke. But the reader should turn, for instance, to the first part of Gassendi's *Syntagma Philosophicum*, and to the section called *Institutio Logica*, so as to compare it with the *Essay*. The measure of Locke's debt to Gassendi will probably surprise him. Gassendi divides the *Institutio* into four parts, of imagination, of the proposition, of the syllogism, and of method. I have here space to quote from the first part only, and shall take the second of its eighteen canons to illustrate my point.

The canon runs: 'Every idea which exists in the mind originates in the senses.' Gassendi adds the following explanation: 'For whoever is born blind has no idea of colour, since he lacks the sense of vision whereby that idea is attained; whoever is born deaf has no idea of sound, since he lacks the sense of hearing whereby that is attained. And if any one were wholly deprived of senses (which, however, is impossible since all creatures have touch) he could not have the idea of anything nor could he imagine anything. Hence the celebrated saying "There is nothing in the intellect that was not previously in the senses", or again the intellect or the mind is *tabula rasa* on which nothing has been imprinted or depicted. Hence also the difficulties they find in proving their assertions who assert that ideas are impressed naturally and innately on the mind (*ideas a natura impressas*) and are not acquired by the senses.' Here surely is the foundation upon which Locke erects the first two books of the *Essay*.¹

¹ If it were necessary, there is further evidence of Locke's having studied Gassendi's works in the fact that he quotes Gassendi's opinion of various other thinkers from time to time in the notebook in the Lovelace Collection, in which Locke gathered together such opinions. There is also a complete set of Bernier's eight-volumed abridgement of Gassendi's works amongst the books bequeathed to Peter King and now in the Lovelace Collection.

III

MATURITY (1689-1704)

I

LOCKE was fifty-six when he returned from Holland. He was already known in person to a large circle of friends and by repute to many others. But now he was to become a national figure, the prophet of the Whig party which had put William on the throne. His first publication was the *Letter Concerning Toleration* which appeared anonymously soon after his return.¹ (The measure of toleration granted later by the new government in 1690 was niggardly and ungenerous, and the opportunity for uniting all the sects into one broad comprehensive Church, as Locke and the Latitudinarians desired, was lost.) In 1690 appeared another anonymous publication upon which Locke had been working for some years, the *Two Treatises on Civil Government*. The first treatise is an attack on Filmer's *Patriarcha* (published posthumously in 1680), the second presents Locke's own positive contribution to political theory. The purpose of the book as a whole is made explicit in the preface:² 'to establish the throne of our great restorer, our present King William; to make good his title, in the consent of the people . . . and to justify to the world the people of England, whose love of their just and natural rights, with their resolution to preserve them, saved the nation when it was on the very brink of slavery and ruin.' In 1690 also Locke's greatest work, the *Essay Concerning Human Understanding*, appeared. (I

¹ Jonas Proast criticized this work in his *The Argument of the 'Letter concerning Toleration' briefly considered and answered*, published in April 1690. Locke replied with his *Second Letter Concerning Toleration*, 1690. Proast replied in February of the next year, and Locke wrote his *Third Letter*, 1692. Twelve years later Proast returned to the attack and Locke began, but never finished, a *Fourth Letter*.

² It is regrettable that the splendid preface which Locke wrote for this book is so frequently omitted from modern editions. On the 1690, 1694, 1698, 1714, and 1764 editions of this work cf. J. W. Gough's edition of *The Second Treatise of Civil Government*, p. xxxix, Blackwell, Oxford, 1946. Cf. further Peter Laslett's edition of this work, Cambridge, 1960.

append a special note showing how the *Essay* was written.¹) For the copyright of the *Essay* Locke received the sum of £30.²

During the years 1689–90 Locke resided in Westminster, London. He had been offered ambassadorial appointments by the King, but he politely refused them. Instead he accepted a post as Commissioner of Appeals that brought with it a salary of £200 per annum. When the London air affected his weak lungs he would retire to Lord Peterborough's house on the fringes of the town. But frequently he found it necessary to go farther afield to Oates in Essex, where he was sure of a welcome from Sir Francis and Lady Masham. From the Clarke correspondence we can see that he visited Oates very shortly after his return from Holland. He spent many weeks there in the summer of 1690, and again in October and at Christmas.

Lady Masham or Damaris Cudworth was now a young woman of thirty-two, and Locke had known her for at least ten years. She fully recognized Locke's worth and welcomed him warmly to her house, while he found in her steady friendship a comfort and support which proved invaluable to him in his declining years. Oates became his refuge and in 1691 he made it his permanent residence. 'His company', Lady Masham explains to Leclerc, 'could not but be very desirable to us, and he had all the assurances we could give him of being always welcome here; but to make him easy in living with us it was necessary he should do so on his own terms, which Sir Francis at last consenting to, Mr. Locke then believed himself at home with us, and resolved, if it pleased God, here to end his days, as he did.'

At this pleasant retreat, in addition to Sir Francis and his wife, lived Mrs. Cudworth, Esther, Lady Masham's step-daughter, and Francis, her six-year-old son. Other friends came to visit Locke. Already, in 1691, we read of visits from the Clarkes with their children, Edward and Elizabeth, and one also from Isaac Newton. Locke, no doubt, would be particularly happy to talk with Newton of his scientific work, although scientific subjects were not the only

¹ Cf. p. 50 below.

² The agreements between him and his publishers in connexion with this and subsequent editions are to be found in the Lovelace Collection.

ones discussed, for Newton by this time was even more interested in Biblical criticism than in scientific inquiry. The years sped by at Oates pleasantly and quietly, being only interrupted by occasional visits to London. In 1693 appeared his *Some Thoughts Concerning Education*, a book based largely upon the letters sent to Clarke from Holland, in which Locke had outlined his ideal of a sound education. During these years he was also busy on the second edition of the *Essay*, which was already in demand, the first edition having been exhausted by September 1692. The correspondence with Molyneux, which had now begun, throws light on the task he had to face in connexion with the preparation of this second edition, while that with Clarke gives the gossip of Oates for these years and much information about Locke's interests and properties in Somerset. The second edition of the *Essay* duly appeared in 1694. Already the work was attracting attention. It had been in use in Trinity College, Dublin, since 1692 and was not unknown to the other universities. The public at large had given it a good welcome, and although John Norris had criticized it adversely in 1690, his was as yet the only dissentient voice. By this time the Whigs were in full power and Locke could number amongst his friends the leaders of the party. Edward Clarke was a great force in Parliament. Somers, who became Lord Chancellor, and Montague, afterwards the Earl of Halifax, were close friends of Locke and were guided by his advice. Locke was one of the original subscribers to the Bank of England (subscribing £500). In Locke's correspondence for these years there is also frequent reference to a small club, called the 'College', of which he was a member, which interested itself in public affairs and worked for reforms. In particular it concerned itself with the Coinage Act. The coin of the realm was being constantly clipped and much counterfeit coinage was in circulation. Already in 1692 Locke had made certain suggestions in a paper added to his *Some Considerations of the Consequences of the Lowering of Interest and the Raising of the Value of Money*¹ and entitled *Of Raising our Coin*. And he co-operated

¹ William Lowndes attacked this work and Locke replied in 1695 with his *Further Considerations Concerning Raising the Value of Money*. He had already made the main points set forward in this work in an earlier work published also

with his friends in the intervening years to work out an effective plan of action. In April 1696 it was finally decided to call in all debased coinage and to recoin it according to standard weight, the cost to fall upon the Exchequer. This reform was very much to Locke's liking, and the correspondence of the time makes it abundantly clear that he and the 'College' played an important part in bringing it about.

Another undertaking of these years was the anonymous publication of the *Reasonableness of Christianity* in the summer of 1695. In it Locke sought to define the one essential of true Christianity, namely, the recognition of Christ as the Messiah. This theme might not appear very provocative, but it produced some very bitter controversy. The last decade of the seventeenth century witnessed the sudden rise of Unitarianism, and when the *Reasonableness* appeared Locke was at once suspected of belonging to that sect. He was known to be friendly with Thomas Firmin, the leader of the anti-Trinitarians, and his demand for a simpler Christianity was interpreted as Unitarianism. John Edwards attacked Locke vigorously in his *Some Thoughts Concerning the*

in 1695: *Short Observations on a Printed Paper, entituled, For Encouraging the Coinage of Silver Money in England, and after for Keeping it Here.*

The detailed consideration of Locke's economic theories is not within the scope of this present work. Locke was a Mercantilist, and Heckscher, perhaps the leading authority on this school, thinks highly of his contribution. 'What places Locke in so unique a position is the fact that his philosophic training enabled him at times to attain a clarity of argument unparalleled among other mercantilist writers. At the same time, since his general outlook was mercantilist in every respect, one may obtain from him a clearer picture of this outlook than from any other writer, at least in those matters with which he deals.' Heckscher, *Mercantilism* (London, 1935), p. 203. The whole of Part IV, 'Mercantilism as a Monetary System', is very relevant. Locke's main concern was with the quantity theory of money, exchange relationships between countries and theory of international prices, the use and control of the precious metals, and usury. In addition to Heckscher, the following books may also be consulted: Angell, J. W., *The Theory of International Prices*, Harvard, 1926 (particularly ch. ii, 'English Thought before the Nineteenth Century', where a good deal of attention is given to Locke); Monroe, A. E., *Monetary Theory before Adam Smith*, Harvard, 1923; Keynes, J. M., *The General Theory of Employment, Interest and Money*, London, 1936 (particularly ch. xxiii, where Keynes argues that Locke's theories are still of great importance); Cossa, L., *An Introduction to the Study of Political Economy*, London, 1893, pp. 241-5; Stark, W., *The Ideal Foundations of Economic Thought*, London, 1943. Also articles on Locke by D.G.R. and J.B. in Palgrave's *Dictionary of Political Economy*, vol. ii. I thank Professor R. B. Forrester of Aberystwyth for information on this matter.

Several Causes and Occasions of Atheism, especially in the Present Age. Locke replied with a *Vindication*, in which he emphatically denied that he was of the anti-Trinitarian party. In 1697 a second *Vindication* appeared, in answer to Edwards's *Socinianism Unmasked*.

Throughout these years Locke continued to act as a Commissioner of Appeals, although there were frequent occasions when ill health prevented him from attending to his business in London. In May 1696 he was appointed a commissioner to the new Board of Trade and Plantations set up by Sir John Somers, at a salary of £1,000 a year. The secretary to the Board was William Popple, who had translated Locke's *Letter on Toleration*. Locke set to work with characteristic zeal and industry. He was clearly the guiding spirit of the Board during its first years. And if one recalls that this body was the forerunner of both the present Board of Trade and the Colonial Office, it will be understood that the work to which Locke now gave himself was of real administrative importance. From June 1696 onwards the Board sat daily, and through the summer months Locke was in constant attendance.¹ In 1697 he found the duties so heavy in his broken state of health that he tried to resign, but those in authority would not hear of his retirement, and he continued in the office, attending to it diligently whenever his health permitted, until 1700. After 1700 he avoided all public employment.

When attendance upon his health kept him at Oates he would turn to his literary work. It was during these last years of the century that Locke engaged himself in a prolonged debate with Stillingfleet, Bishop of Worcester. In his *Discourse in Vindication of the Doctrine of the Trinity* Stillingfleet sought for the philosophy behind the anti-Trinitarian movement and professed to find it in Locke's 'new way of ideas' as expounded in the *Essay*. In January of 1697 Locke replied in *A Letter to the Bishop of Worcester concerning some passages, relating to Mr. Locke's Essay*. Stillingfleet was ready for the fight and replied in April, to which

¹ In the Lovelace Collection is a big batch of private papers dealing with the various problems that had to be faced by the Commissioners. These should be of great value to the social and economic historian.

Locke published his second reply in June. At the beginning of 1698 Stillingfleet published a further pamphlet 'wherein his [Locke's] Notion of Ideas is proved to be inconsistent with itself and with the Articles of the Christian Faith'. Locke replied in May 1698 (though the pamphlet was not published until 1699). We shall have occasion later to note some of the points at issue between the disputants. Many of the criticisms made by the Bishop were pertinent in the extreme, and Locke's efforts to answer them throw much light on his position in general. Other opponents, Thomas Burnet and Sergeant, wrote against the *Essay*, but Locke did not consider himself called upon to answer any of these attacks.¹

In the winter of 1697-8 Locke was seriously ill. 'My time', he complains to Clarke, 'is all divided between my bed and the chimney corner, for not being able to walk for want of breath upon the least stirring, I am a prisoner not only to the house but to my chair, so that never did anybody so truly lead a sedentary life as I do'.² But under the constant care of Lady Masham and Esther, and through the ministrations of Elizabeth Clarke, now growing into womanhood, he strengthened sufficiently to return to his duties in London in 1698. This summer was made memorable by a visit from William Molyneux of Dublin, who spent some time with Locke. Molyneux had published a work on optics in 1692 in which he had praised Locke's work highly. A correspondence ensued between them which continued for many years; the tone, at first respectful, soon became affectionate. In 1698 the two were able to meet for the first time. Locke found very great pleasure in the visit, and Molyneux, to judge from the letter he forwarded to Locke on his return to Dublin, found true happiness in Locke's company. But this great joy was to be turned to sudden

¹ Burnet was answered by Mrs. Cockburn. Locke himself may have thought of writing a reply to Burnet, for his own copy of one of Burnet's pamphlets is filled with marginalia. (Cf. Dr. Noah Porter's 'Marginalia Locke-ana' in the *New Englander and Yale Review*, July 1887.) His copy of John Sergeant's *Solid Philosophy Asserted*, now at St. John's College, Cambridge, has also many marginal notes. Cf. Dr. J. W. Yolton's 'Locke's Marginal Replies to John Sergeant' in the *Journal of the History of Ideas* (October 1951). Apart from Stillingfleet the only critic of the *Essay* he replied to publicly was James Lowde, cf. the Epistle to the second edition of the *Essay*, 1694. Lowde's *Discourses concerning the Nature of Man* had just appeared. ² Locke to Clarke, 25 February 1698.

sorrow, for on the 11th October of the same year, a few weeks after his return from London, Molyneux died, and Locke was left to grieve the loss of a very worthy friend.

In his last years Locke's interests turned more and more to theology, as the letters to Limborch reveal. He had been busy for some time with the fourth edition of the *Essay*, but when this was published in 1700 he turned to the epistles of Saint Paul and wrote a paraphrase of Galatians, Corinthians, Romans, and Ephesians, together with full comments. He also prepared a preface in which he exhorts the reader to read each epistle through at one reading, and to try to understand the background and the particular circumstances in which each was written. These commentaries were prepared for the press by Locke himself, but not published until 1705-7. Together they cover almost as many pages as the *Essay* itself, and Locke's industry and vigour of mind in these last years are amazing.

In the intervals between his literary activities other matters required attention. His own needs were now few enough, 'a man out of the world', as he described himself, 'who lies abed and dreams'. But he busied himself with his friends' concerns, particularly with those of their children. Limborch's son came to England on a visit and Locke gladly made the necessary arrangements. Clarke's children went abroad and Locke knew of friends they should meet. Benjamin Furly's son sought a post in England. The third Earl of Shaftesbury, whose tuition Locke had once undertaken, had become a politician of note and Locke gave him good advice. Finally, his own nephew, Peter King, required greater and greater attention. King was already a member of parliament. He had profited from a sound legal training and was showing very great promise. Locke wrote to him frequently and his letters are full of wise advice and anxious care. In their turn all these people came to visit him at Oates, and their visits were like balm to his weary heart. He found a new friend too in the young Anthony Collins. Their correspondence only begins in May 1703, but in the last year of his life Locke found much pleasure in the company of this gifted young man, and when Collins was away from him wrote the most affectionate letters to him.

When the spring of 1704 came round Locke knew that his end was near: 'in the race of human life where breath is wanting for the least motion, one cannot be far from one's journey's end'. On the 4th August he wrote his last letter to Limborch.¹ There was still time, however, for one celebration on which he had set his heart. Peter King had found a bride for himself in Glamorgan, and Locke wished to welcome her to Oates. Part of the letter which he wrote to King telling him what he was to order in London for the feast may here be quoted: 'Four neats's tongues. Twelve partridges. . . . Four pheasants. . . . Four turkey pullets, ready larded if they be not out of season. Four fresh rabbits, if they are to be got. Plovers, or woodcocks, or snipes, or whatever else is good to be got at the poulterer's, except ordinary tame fowls. Twelve Chichester male lobsters, if they can be got alive; if not, six dead ones that are sweet. Two large crabs that are fresh. Crawfish and prawns. . . . A double barrel of the best Colchester oysters. . . . I desire you also to lay out between twenty and thirty shillings in dried sweetmeats of several kinds . . . do not be sparing in the cost, but rather exceed thirty shillings. . . . If there be anything that you can find your wife loves, be sure that provision be made of that, and plentifully, whether I have mentioned it or no.' The feast was duly held at the end of September, presided over by Locke himself aided by Lady Masham. How completely happy he must have been amongst this merry crowd!

And, then, when the banquet was over, there was little left to do. He was cheerful, but every day took its toll in increasing weakness. As the month of October came to its end Locke's strength also ebbed away. On the 27th, a Friday, he was very weak indeed; the next morning he was a little better, and in the afternoon he rose and dressed, and then sitting down while Lady Masham read the Psalms to him, he presently closed his eyes and passed quietly away. 'His death was like his life,' wrote Lady Masham, 'truly pious, yet natural, easy and unaffected.'

He had had sufficient time to arrange for the disposal of his

¹ The letter is now at the Amsterdam Library, and it is good to see that the hand that wrote it was firm and steady as the spirit inspiring it was serene. (There is an entry into a book of accounts as late as the 24th October, four days before his death.)

estate. He left behind him between four and five thousand pounds in all, most of which he bequeathed to Francis Cudworth Masham. He gave all his manuscripts and half his books to Peter King. (These are now the Lovelace Collection.) He forgot none of his friends, nor the servants who had waited on him, nor again the poor of Pensford and of Oates. He was buried simply, as he had desired, in the parish church of High Laver.

II

A modest epitaph of his own composition is inscribed on Locke's tombstone, and in it he advises the reader to turn to his written works if he would know what sort of man he was. The works reveal the philosopher, and undoubtedly their most characteristic virtue is what is sometimes called 'common sense' but is really prudence. The phrase 'a common-sense philosophy' is ambiguous. If it means a ready acceptance of the customary opinions of one's age, Locke's philosophy was no more 'common-sense' than, let us say, Descartes's, Kant's, or Bradley's. Of course, his own age influenced him, and admittedly Locke is not eminently original. But his debt was not one to the ordinary Englishman of the seventeenth century. It is well to remind ourselves of the fact that even to a highly educated man like Stillingfleet Locke's philosophy appeared new, revolutionary, and dangerous. That we today find it frequently obvious and almost commonplace is the measure of its influence upon us. If, again, a common-sense philosophy is one which accepts positions accepted everywhere and in every age by the ordinary, unreflective man, such as that the material world exists independently of the mind knowing it, that the spiritual is real, and the like, it is still to be doubted whether Locke's philosophy is a common-sense philosophy. For would this unreflective man agree with all the doctrines to be found in Locke's works, for instance, the distinction between primary and secondary qualities? Surely what is meant by us when we talk of Locke's 'common sense' is simply that he never allowed his argument to carry him forward to any extreme position. In other words, we refer to that wise caution, that prudence which the Encyclopaedists had in mind when they talked of *le sage Locke*.

Prudence is a virtue one finds on every page of Locke's work. It must have been obvious to him, for instance, that his view of material substance was most inadequate and that much of his teaching pointed inevitably to an idealism of some sort or other. But he never propounded such a doctrine. If Locke had lived to read Berkeley he would have regarded him, no doubt, as a brilliant thinker but lacking caution.¹ Again, he was as puzzled as any other philosopher by the mind-body relation and the occurrence of sensation. The physical and physiological concomitants of the sensation of white seem to be so little connected with it that Locke had to admit that the Occasionalist hypothesis was not wholly absurd. And yet he did not accept Occasionalism. It was too easy a solution of a grave difficulty, just as idealism was too easy an escape from the difficulties which our imperfect knowledge of things brought into being. On yet other occasions when the argument had shown him that there were some elements of truth in the position of the materialists, he would not accept materialism; or when, again, he saw the usefulness for science of Descartes's view that we might deal with matter entirely in terms of extension, he recalled to himself a factor neglected by Descartes, our experience of solidity, and rejected the Cartesian view. Being prudent Locke avoided premature syntheses; and this in part explains why he offered us no finished, rounded system of philosophy.

Locke, it is clear, was prudent by nature. Moreover, the spirit of the age and his own wide experience in the world of thought had deepened his caution. He was genuinely afraid of wild speculation. The same restraint that kept him from publishing his thoughts until late in life kept him free also from extravagances of any kind in those thoughts. He particularly despised the showman in philosophy, who takes pleasure in erecting the most unlikely systems so as to draw attention to himself. He put truth first, even if it meant being humdrum. 'That which makes my writings tolerable, if

¹ Locke did comment upon and reject idealism, but the idealism of Norris and Malebranche. We have (a) his *Examination of Malebranche*, and (b) his *Remarks on Norris*, together with (c) the MS. in the Lovelace Collection 'J.L. to Mr. Norris'. Mrs. A. Johnston in a work as yet unpublished has argued successfully in my opinion that all three MSS. are criticisms first of Norris, and that the *Examination* was never meant to be a full consideration of Malebranche's philosophy.

anything', he says to Molyneux,¹ 'is only this, that I never write for anything but truth and never publish anything to others which I am not fully persuaded of myself.' 'If I have anything to boast of', he says later to Collins,² 'it is that I sincerely love and seek truth with indifferency whom it pleases or displeases.' That is a proud boast to make, but in his case not a foolish one, for his works justify it. It is so also with his style. He never sets out to impress, he uses homely, unaffected language and avoids technical jargon so far as he possibly can. He is quiet, even prosaic; very rarely does he allow himself to become eloquent. He is sometimes verbose, a fault for which he apologizes on more than one occasion, but he was in no great haste and wrote for leisured readers. The private papers he left behind him testify to his great learning. He must have been one of the most learned men of his age. But he makes no show of erudition. His works also reveal the extent of his interests. Logic and epistemology, ethics and economics, politics, both civil and ecclesiastical, theology and Biblical criticism (not to mention medicine and physics), all come within his scope, and he treats them one and all as an expert. At the same time he was most modest in the claims he made for himself, and ever ready to admit himself in error. Such is the picture which the works reveal to us, a modest, simple, unaffected man, sincerely seeking for truth, catholic in his interests, and more than usually prudent.

Locke's correspondence, his private papers, and such memoirs as we have of him, written by those who knew him, confirm and complete this picture. Here we see the full man; all the characteristics already noted are present, but the emotional side of him, which is kept in check in his works, is freed. It is not surprising to read that in private life he was neat in his dress and orderly in his activities. (He seems to have kept strict account of every penny he ever spent, to judge from the notebooks left behind in the Lovelace Collection.) He disliked unnecessary display. He was modest. 'No man', said Lady Masham, 'was less magisterial or dogmatic than he, or less offended with any man's dissenting from him in opinion.' In eating and drinking he was temperate and, for reasons of health, even abstemious. His friends trusted his wisdom and his

¹ 30 March 1696.

² 17 November 1703.

good sense, and admired his intimate knowledge of men and affairs. Thus far the picture we have of him accords with the personality revealed in his writings. But the impression left upon one after a cursory reading of the *Essay* is of the cold, immobile philosopher. It is in this connexion, more than any other, that Locke's correspondence and private papers can help to correct our first impression. The absence of warmth and feeling in the works is intentional. There is ample evidence to show that the emotional side of Locke's nature was strong. Pierre Coste, who knew him well, tells us that he was naturally a hot-tempered man, but had learnt to control his feelings. Essentially, his nature was warm and generous. We may illustrate this side of his character by referring to his relations, first, with children, and secondly, with his adult friends.

Children attracted Locke greatly. He made himself the guardian and protector of all his friends' children. Esther and Francis Masham were, of course, especial favourites. He took much trouble with the Shaftesbury and Peterborough children. We know most, however, about his friendship with Elizabeth and Edward Clarke. And it is remarkable to what trouble he was prepared to go for their sakes. Edward used to stay with him for weeks at a time so that Locke might guide him in his lessons. Elizabeth seems to have been the greatest friend of all; he always writes of her as his 'wife' or 'mistress'. He is for ever scheming ways in which the education of the children might be improved. He was so fond of them that he found it difficult to find fault in them, and he was always ready to excuse their failings. Mrs. Clarke, in an amusing letter to Locke, finds it necessary to acquaint him with the true state of affairs. Of Edward she says: 'I fear you think him forwarder than he is. He is a sort of downright honest block-headed boy and what he has in him is pretty hard to find out.' Even Elizabeth needs correction. She 'seems to look mightily concerned when you tell her of a fault and like a little saint, but the next time it is forgotten'. Locke himself, after spending some weeks in coaching young Edward, has to admit that he is somewhat lacking in application, attributing the fault (and partly excusing it at the same time) to a certain 'saunteringness that is in his temper'. No

domestic matters were too small to be reported to Locke, and the children must have regarded him as a third parent. In April 1696 he wrote to Clarke: 'I have been so long accustomed to take care of your son that it is now habitual to me.' The children on their side, it is good to think, were not wholly unappreciative of Locke's many kindnesses towards them, if we may judge by the beautiful letters, full of gratitude and tender solicitude, which Elizabeth penned to him in the last years of his life.

His amiability and tenderness become clear also in his relations with friends. Friendship was a necessity to him. 'To live', he wrote once to Esther Masham, 'is to be where and with whom one likes.' The company of others inspired him. The *Essay* was begun in a talk with friends. His letter on toleration was addressed to Limborch and was the outcome of talks with him. The *Thoughts Concerning Education* were originally letters to Clarke. There are some suggestions that his Biblical criticism at Oates was the fruit of conversations with Lady Masham. All through his life he sought the company of men of taste, of wit and humour. He liked his companions to be gay and jolly. He possessed an infectious gaiety of his own and sought for it in others. But he needed more than gaiety. His letters to his more intimate acquaintances, frequently intense, even poignant, are more than mere expressions of friendship. Fox Bourne truly remarked: 'He showed a lover's temperament.' The correspondence between Locke and Molyneux proves this. The respect of one true man for another grows into friendship and friendship into love. Their desire to meet each other increases with the passage of the years until it becomes almost a necessity. And then the quick and tragic sequel to their meeting and Locke's grief-laden letter to Molyneux's brother. Molyneux was certainly more to him than friend. So was Clarke. 'I love my country and I love you.' The letters to Limborch are equally warm and to the last are charged with affection. 'Vale vir colendissime et me, ut facis, ama.' One might quote from his letters to Thoynard and to Newton and others. But strongest of all are the letters to the youthful Collins in the very last year of his life. He was old now and nearing the end of his journey, and he had friends enough. But the passionate ardour of the man was

uncooled and his need for human friendship still as great as ever. His love found for itself a new object. He almost flung himself at Collins. 'Pray pardon the forwardness wherewith I throw my arms about your neck.'

Locke, it is clear, possessed an inordinate strength of affection. True, the age demanded of the letter-writer courtesy and politeness even to the point of flattery. But there is more than politeness here. A powerful, emotional nature expresses itself in them. I stress this point because it has been neglected and because the purpose of the writings becomes clearer if it be kept in mind. Beneath their calm, unruffled surface there is a turbulent, fiery spirit, burning all the more fiercely because of the self-imposed restraint. Just as passionately as he loved Limborch and Collins and the rest, so he loved toleration, true religion, piety, justice, goodwill amongst men, and, most of all, truth. This Locke was not the cold, disinterested thinker we sometimes imagine him to have been. He was warm and passionate with life. But he knew how to keep the emotional side of his nature in check lest truth should suffer, and how to assume the impartial, objective air of the judge and the critic.

There are other facets of Locke's character upon which we might have touched, his homely humour—sometimes, particularly in his youth, a trifle forced and heavy—his unflinching courtesy, his patriotism, for he was a true Englishman. We might also have illustrated his deep religious piety. (As we have seen, he disliked too fierce an exhibition of religious fervour, as he also disliked intolerance and excessive dogma. But there is no denying the reality of his religious life and emotion. The humility and piety which shine through the *Reasonableness of Christianity* are the fruit of a truly religious spirit.) But it is time now to turn to an exposition of his doctrine which, in spite of its occasional verbosity, its incompleteness, and its apparent contradictions, has established Locke's name as the greatest in English philosophy.

Note 1

HOW THE *ESSAY* WAS WRITTEN

UNTIL recently very little was known of how John Locke wrote the *Essay Concerning Human Understanding*, but considerable new information has been obtained with the discovery of three drafts of the *Essay*, two written in 1671,¹ nineteen years before the *Essay* itself appeared, and the third in 1685. I have named these drafts A, B, and C respectively.² In addition to these three another draft has been recently discovered³ in the Shaftesbury Papers at the Public Record Office (London). This, however, is a copy of Draft A with some slight though interesting variations.

Drafts A and B were discovered amongst Locke's private papers in the Lovelace Collection. This well-preserved collection contains all Locke's private papers at the time of his death.⁴ They were bequeathed by him to his nephew, Peter King, the founder of the Lovelace family, and are now in the possession of the present Earl of Lovelace.⁵ They consist, firstly, of hundreds of letters to Locke with occasional drafts of Locke's replies; secondly, of numerous notebooks, some recording his domestic arrangements and payments, others noting points of medical information, others again containing the titles of, and quotations from, the books he had read; thirdly, of two catalogues containing the complete list of books in his library at his death, a very valuable item; fourthly, of miscellaneous papers, including his agreements with his publishers and his will; fifthly, of journals kept of the years 1676-88,⁶ which are full of information, biographical, medical, and philosophical; sixthly, of some forty manuscripts, being unpublished papers on various topics, early drafts and corrections of his published writings, together with the manuscripts of certain of his works. This rich collection of Locke's papers still remains for the most part unpublished. In the *Life of Locke* written by Lord King (1829) some of the more interesting manuscripts are printed together with

¹ *An Early Draft of Locke's Essay*, ed. Aaron and Gibb, Oxford, 1936; *An Essay Concerning the Understanding*, ed. Rand, Harvard, 1931.

² For Draft C, cf. Note 2 following.

³ By Mr. Peter Laslett, cf. *Mind*, January 1952, pp. 89-92.

⁴ For a list of the philosophical manuscripts in this collection, cf. the Appendix below, pp. 309-12.

⁵ Since 1937 these papers, with the exception of a few MSS. including the book containing Draft A, have come into the possession of the Bodleian Library, Oxford.

⁶ Excepting only that for the year 1679, which is in the British Museum.

many excerpts from the journals; but by the opening of the present century only a small fraction of the Collection had thus been published.

With the aid of the drafts, the journals, and Locke's correspondence, it is now possible to give a fairly consecutive story of how Locke's *Essay* was written. At the opening of that work Locke takes his reader into his confidence. The *Essay*, he remarks, arose out of a meeting of five or six friends gathered together to discuss a point in philosophy. They found some difficulty in proceeding with their discussion and Locke suggested a prior inquiry: the extent and limitations of the human understanding. He was asked to prepare a paper on this topic. 'Some hasty and undigested thoughts, on a subject I had never before considered, which I set down against our next meeting, gave the first entrance into this discourse, which, having been thus begun by chance, was continued by entreaty; written by incoherent parcels; and after long intervals of neglect, resumed again, as my humour or occasions permitted; and at last, in a retirement, where an attendance on my health gave me leisure, it was brought into that order thou now seest it.'¹

This meeting of friends must have taken place early in 1671. The paper which Locke wrote for the next meeting is not amongst those which he bequeathed to King, unless it be Draft A. This, however, is unlikely in view of the length of the draft (although it may be possible that the opening sections of the draft were the actual paper read to the society). One may guess at the contents of this paper. It argued, no doubt, that our knowledge is derived from our senses; and that whatever lies wholly outside the bounds of human experience is not knowable by us. After the meeting, in consequence, perhaps, of the criticisms of his friends, he found it necessary to strengthen his argument in various ways. Meanwhile, the conviction grew upon him that he had before him a problem of the greatest importance. And so he devoted a good part of the summer of 1671 to its solution, and wrote out Draft A. But he had no sooner finished it than he decided to begin again from the beginning. This is clear from the final page of the draft, which goes back to a matter considered at the outset, and reveals Locke's dissatisfaction with the opening pages. In the autumn of 1671 he tried again, this time writing his thoughts out in a neat and orderly manner and in a manuscript very obviously meant for the press. But Draft B also is unfinished, and it is unfinished in respect to the very problem which Locke set out to solve, namely, that of the extent and

¹ *Epistle to the Reader.*

limitations of knowledge. Its incomplete state may be due to the fact that Locke had no time to proceed with it; but it is more likely that he did not then know how to finish it.

A comparison between Draft A and Draft B, and again, between both and the *Essay*, gives interesting results. Draft A contains Locke's first rough thoughts. He comes to the main problem, that of the extent of human knowledge, very early in the draft, but, as he proceeds, realizes that there are more and more prior problems to be solved. In Draft B he is concerned almost entirely with these prior problems and the main problem remains practically untouched. Thus Draft A, unlike Draft B, reveals some of Locke's thinking on the main problems of Book IV. On the other hand, it hardly touches the subject matter of Book I and only deals crudely with that of Book II.¹ Draft B, however, covers much of the ground covered by Locke in Book II and does it so well that Locke was able to take much of it over bodily into the *Essay*. None the less, there are some important differences.

If we compare Draft B with the *Essay* as published we may see wherein the former is lacking as compared with the latter, and what problems faced Locke during the nineteen years which elapsed before the *Essay* was fit for publication. Very little of Book I of the *Essay* is not already contained in Draft B. It is true that there are differences in order. In Draft B he first deals with innate practical principles, and the discussion of innate speculative principles is not so full. But no book of the *Essay* is so fully represented in the draft as Book I. When we turn to Book II we see that its scheme and a very great number of the details are already contained in the draft. That the fountains of knowledge are sensation and reflection, that ideas are divisible into simple and complex, are points common to draft and *Essay*. The former contains a great deal of the actual classification and also substantial accounts of space, duration, number, infinity, and relations, including moral relations. Yet there are some noteworthy omissions. Psychological considerations are few. In the draft he does not consider perception, neglects abstraction, has little to say about the mind's operations and the modes of thinking. Nor have the *Essay*'s chapters on pleasure and pain, and on power, any counterpart in Draft B. Similarly, the discussion as to whether the mind always thinks and the detailed examination of solidity are absent from it. Primary and secondary qualities are distinguished in the draft, though I cannot trace the use of the word 'secondary'. Finally, the five chapters which

¹ On Draft A cf. also the introduction to Aaron and Gibb, *An Early Draft of Locke's Essay*.

bring Book II to an end were not part of the original scheme as embodied in Draft B.

It is when we turn to Books III and IV, however, that we see the biggest omissions in the draft. In the latter the discussion on words is a digression apparently not at first intended. In the *Essay* Locke finds it necessary to devote a whole book to it, the third. The paragraphs taken over into the published *Essay* from Draft B become now considerably fewer. The whole problem of words, their imperfection and abuse, had to be reconsidered and re-examined in far greater detail. This is also true of the problem of universals and abstraction hardly touched upon in the draft. Book IV of the *Essay* again has very little corresponding to it in the draft. It is not too much to say that Draft B fails entirely to inquire into the limits and extent of human knowledge, though this was the main problem which the author had set before himself in 1671, as is clear from Draft A. Nor has Draft B any satisfactory theory of knowledge. With the exception of a few minor points, the all-important opening chapters of Book IV are absent in the draft. Locke was in search of a satisfactory theory of knowledge and of its object, but in 1671 he had not found it.

When writing these first drafts Locke was in the service of Ashley, and his leisure hours were few enough. This may explain why the *Essay* was not finished outright. Moreover, the years that followed were, if anything, busier, until, as we saw, in 1675 Locke was compelled for reasons of health to take a holiday in France. Now that he was freed from onerous political duties as adviser to Shaftesbury he returned to the problems of the *Essay*. Our sources of information from this point forward are the journals and correspondence. They throw a great deal of light on the growth of the *Essay* in Locke's mind. Already in 1676 we find him dealing with will, power, pleasure and pain, the passions, matters partially neglected in Draft B, with simple ideas of reflection, extension, faith and reason, and the idea of a Deity. Then in 1677 we find an essay on knowledge, its extent and measure, which is clearly in preparation for Book IV, also considerations of distance and space, of study, of error, of understanding, and a division of the branches of knowledge. In the 1678 journal the philosophical problems discussed are those of relation, space, memory, madness, together with many references to books he was then reading in French philosophy. Locke left Paris in 1679 to return to his post under Shaftesbury. In a letter to Thoynard written at this period he remarks: 'I think too well of my book which is completed to let it go out of my hands.'¹ From this we

¹ 6 June 1679; cf. Fox Bourne, ii. 97.

may gather that he had spent much of his time in France preparing the actual book, but he was still not sufficiently satisfied with it to publish it. The next two years were again so full of work of a political sort that he had no time for philosophy. In the journal for 1680 there is little reference to philosophical problems, but in 1681, it will be remembered, he returned to Oxford and once more found time for philosophy. In the journal for the year are notes on knowledge and on truth. In 1682 he is working on proofs of God's existence and on the relation (or absence of relation) between matter and thought. Already, also, he is preparing his attack on enthusiasm. 1683 was another restless year, and, as we should expect, his journal contains little philosophical matter.

From the Clarke correspondence we see that Locke spent the winter of 1684-5 working on 'my inquiry concerning Humane Understanding, a subject which I had for a good while backwards thought on by catches and set down without method several thoughts upon as they had at distinct times and several occasions come in my way; and which I was now willing in this retreat to turn into a less confused and coherent discourse'.¹ In the months that follow we find that parts of the *Essay* are ready to be sent to the Earl of Pembroke for his perusal.² By October 1686 the third book is ready and by December the fourth. Thus the whole *Essay* was finished by the end of 1686, though he again worked over it in the next two years so as to bring a little more order into it. 'For there are so many repetitions in it, and so many things still misplaced, that though I venture it confused as it is to your friendship, yet I cannot think these papers in a condition to be showed anyone else, till by another review I have reduced them into yet better order.'³ A little farther in the same letter he adds an interesting remark: 'For being resolved to examine Humane Understanding, and the ways of our knowledge, not by others' opinions, but by what I could from my own observations collect myself, I have purposely avoided the reading of all books that treated any way of the subject, that so I might have nothing to bias me any way.'⁴ This does not mean, however, that the teachings of the *Essay* were uninfluenced by other

¹ 1 January 1685.

² This no doubt was Draft C. Cf. Note 2.

³ In this letter Locke mentions again the 'accidental discourse' which was the occasion of the *Essay* 'which is now five or six years' (so Rand, p. 177). But this seems an obvious slip: fifteen or sixteen is meant. If it is not a slip then there must have been another discussion in 1680 or 1681 which reawakened Locke's interest in this problem. I think this, however, unlikely.

⁴ Cf. also James Tyrrell's letter to Locke in the Lovelace Collection, 18 March 1689/90 (Bodl. MS. Locke, c. 22).

writers. We have already shown how deeply indebted he was to others. In 1687 and 1688 he continued, at intervals, to work on his *Essay*; thus we find him writing to Furly, on 19 January 1688: 'I am resolved to busy my thoughts about finishing my *Essay* "De Intellectu".' And he had already prepared the abridgement of the *Essay* meant for Leclerc. When Locke returned to England after his enforced sojourn in Holland he had the *Essay* more or less ready for the press, and soon found publishers. Even in 1689, however, he still worked upon it; there is the reference to 'this present year, 1689' in II. xiv. 30 to prove this. In May 1689 he wrote his dedication to the Earl of Pembroke and in December he is able to report to Limborch that the printing of it is almost over. 'The die is cast and I am now launched on the wide ocean.'¹ Before the year was over the *Essay* was already on sale in the bookshops of London and Oxford, though the edition bore the date of 1690. There were two issues of this first (1690) edition, the one 'printed by Eliz. Holt, for Thomas Basset, at the George in Fleet Street, near St. Dunstan's Church' and the other 'printed for Tho. Basset, and sold by Edw. Mory at the sign of the Three Bibles in St. Paul's Church-Yard'.²

Note 2

DRAFT C OF LOCKE'S *ESSAY*

AFTER writing the drafts of 1671 other matters engaged Locke's attention, but he was able to make periodic revisions of his *Essay* and fortunately one such revision, dated 1685, survives and is now in the Pierpont Morgan Library, New York. This draft, Draft C, is not likely to prove as valuable as Drafts A and B. For, first, it is a draft of Books I and II of the *Essay* only; secondly, it contains comparatively little not already published, either in Draft B or in the 1690 text. Nevertheless, it shows the position at an interesting moment in the writing of the *Essay*. We see from the Clarke correspondence that by the spring of 1685 parts of a new revision of the *Essay* were ready to be sent to the Earl of Pembroke for his perusal. It is likely that more than one copy of the draft was made and that one was prepared for Edward Clarke. This would be Draft C, consisting of Books I and II. Book III was not ready till October 1686 and Book IV not till December of that year. Even then Locke was still dissatisfied with the *Essay* and spoke of the need for 'another review'. The chief value of Draft C is that it

¹ 3 December 1689.

² I am grateful to Mrs. A. Johnston for this information.

shows us the state of Books I and II of the *Essay* in 1685 and, by comparison with the 1690 text, the nature of the changes which Locke still found it necessary to make in the final revision of the whole work. It is only regrettable that we have not the 1686 drafts of Books III and IV, for these would be likely to show larger advances from Draft B to C and from C to the 1690 text.

A word should be said about the history of Draft C. It was known to Locke scholars that such a document was in being a century ago, since it was referred to by Thomas Forster in 1830 as being then in his possession, but later its whereabouts had become unknown. In February 1952 Mr. G. K. Boyce of the Pierpont Morgan Library listed the document in the *Publications of the Modern Language Association of America* and this led to its identification (by Mrs. Arthur Johnston and Mr. Peter Laslett) with the missing draft.¹ In the Pierpont Morgan Library is a letter from Forster to H. B. H. Beaufoy of South Lambeth to whom he gave Draft C on 27 August 1849. In this letter Forster says:

'After I got home last week I recollected your having asked me to give you the history of the MSS. of John Locke and how they came into my father's hands, which I have since found. The copy of the *Essay*, which you have, seems to have been Locke's earliest thoughts on the subject and is for this reason very curious: he consigned it to the three persons named in the flyleaf, to the survivor of which, Mr. John Furly of Rotterdam,² it naturally came and he gave it or left it (I am not sure which) to my grandfather, as his nearest akin, together with a parcel of letters from Algernon Sydney, Locke and Lord Shaftesbury. All these became the property of my father on the death of his and were made mine by a clause in his will which gave me all his manuscripts.'

Draft C seems to have remained in the possession of the Beaufoy family until it was sold to the Morgan Library by the Rosenbach company in 1924.³

¹ *The Times Lit. Suppl.*, 25 July 1952, p. 492.

² Presumably Benjamin Furly. Furly's name is not found on the fly-leaf of Draft C.

³ Draft C is about two hundred leaves long, with writing on rectos and versos. It has four blank leaves at the beginning, six at the end, and some blank leaves in the body of the work. The whole is bound in vellum, $6\frac{1}{2} \times 4\frac{1}{4}$ inches, with the figures '1.2' in ink on the spine of the volume. On the first leaf is written 'For Edward Clarke of Chipley Esq., James Tyrrell of Oakley Esq., or Dr. David Thomas of Salisbury' and on the second 'An *Essay* concerning humane understanding in fower books'. This is followed by the date '1685', apparently added later, in the same ink as some of the corrections made to the text. Following the date is a quotation from Cicero.

The document is in a hand very much like Locke's and yet possibly is a

According to the inscription on the first page the draft was intended for Clarke, Tyrrell, or David Thomas. Yet it turned up amongst the papers left by Benjamin Furly, a Quaker merchant who lived in Rotterdam, and in whose house Locke spent the greater part of his last two years in Holland. It seems probable that Locke brought the draft along with him to this house and left it there when he returned to England and that it never reached any one of the gentlemen mentioned in the inscription. If we accept the date 1685 on the manuscript—and we have no reason to doubt its authenticity—Draft C was written, probably in Amsterdam, almost two years before Locke moved to Rotterdam.

In what follows I give an account of Draft C, comparing it with B and particularly with the first edition of 1690. Draft C is not perhaps important enough to justify either a complete edition of it or a line to line collation with the 1690 *Essay*, but I have sought in this note to give some idea of its contents, and have chosen the points that are likely to be of most general interest to philosophic readers. As the interest is philosophical rather than bibliographical I have everywhere modernized the spelling and punctuation in quoting from the manuscript.

Book I. Little need be said about the correlation of texts in the case of Book I since here Drafts B, C, and the published text of 1690 agree so closely. Speaking generally, the ideas adumbrated in Draft B are more carefully stated in Draft C and given final form in 1690 although, it should not be forgotten, this process of making more precise and of elaborating went on for the rest of Locke's life as the second and fourth editions of the *Essay* show. Book I in the 1690 text is divided into an introduction and three chapters on innate ideas. The material of the introductory chapter is much the same in B, C, and 1690. Here and there will be found changes of wording, and some sentences and phrases are omitted. Thus at the end of the very first sentence in the chapter Draft B has: 'and which perhaps has been less seriously considered upon than the worth of the thing, and the nearness it has, copyist's. Mr. Peter Laslett and myself who have together examined it would not care to be dogmatic about this point, for there are difficulties. Draft C is clearly a copy of another manuscript, and it is corrected. These corrections are almost certainly in Locke's hand. But occasionally the correction is such that it creates a doubt whether Locke also wrote what was being corrected. For instance, at one point the copyist apparently failed to understand a word and left a space; the word was added later and proved to be 'sensation'. Now it is difficult to understand how Locke in copying, if he was the copyist, could have failed to know that the word before him was 'sensation'. The context itself would at once suggest it. At the same time the hand is so very like Locke's that we hesitate to attribute it to an amanuensis.

seems to require'. But this is omitted in C and in 1690. Most often the material in B is elaborated. B 1-3, for instance, is elaborated into a chapter and the point thrown out in B 3 about the use of the word 'idea' becomes a complete section in C and in 1690. But 1690 too improves upon Draft C. Thus the last two sentences of 1. i. 6 in 1690 are not to be found in C, and all that C has to correspond to 1. i. 7 is the following: 'To this purpose have I ventured upon this bold Essay, to find out those measures whereby a rational creature, put in that state which man is in this world, may and ought to govern his opinions and actions depending thereon.' Very rarely, one finds in 1690 what is in B but not in C. Thus in 1. i. 3 (1690) Locke remarks 'First I shall enquire into the original of those ideas, notions, or whatever else you please to call them'. Draft C omits 'notions' though Draft B includes it. But this is a rare occurrence and may in this instance be merely a slip.

The three chapters which deal with *innate ideas*, 1. ii-iv, show remarkably little change in material in B, C, and 1690. On this point it is clear Locke's thought was the same in 1690 as in 1671. He thinks it wise to reverse the order of the 1671 argument, for whereas in B he begins with practical principles and proceeds to theoretical, he changes this order in C and in 1690. There are many minor changes and in 1. ii 1685 is closer to 1671 than to 1690, though this is not so in 1. iii and iv. But it is in 1. iv only that we find any real differences in content between B and 1690, and here C agrees with 1690. For instance, the important section about substance, 1. iv. 18, is not to be found in B but is present in C. But even in 1. iv these differences are few. As to 1. ii and iii, Locke had made up his mind about innate ideas in 1671 and from that point onward gave very little further thought to the problem.

Thus it is interesting, in view of subsequent discussions about the target of the polemic, that what Locke describes in 1. iii. 15 refers to 1671 and not to 1690. He says that he had worked out his argument against innate ideas before having his attention drawn to Lord Herbert's *De Veritate*. But the 'When I had writ this' of this passage should not be taken to refer to 1690 or the years immediately preceding: they refer to 1671.¹ After 1671 he did not bother to find out whether anyone else had written on this matter. He merely restated the 1671 argument and left it at that.

But though the main argument remains the same the revision of

¹ The words in B 5 (Rand, p. 31) are: 'Since the writing of this, being informed that my Lord Herbert had in his book *De Veritate* spoken something of these innate principles, I presently betook myself to him.'

phrases and sentences is constant throughout the years. I may take one instance of this from the section in which Locke blames those who take things on trust (i. iv. 22 in 1690, 23 of the fourth and subsequent editions) and who:

Draft B: 'misemploy the power they have to assent to things which they ought to examine and blindly take them upon trust.'

Draft C (a first draft then corrected): 'misemploy the power they have to assent to things which they ought to examine and which they should not blindly with an implicit faith swallow.'

Draft C (corrected draft): 'misemploy their power of assent by lazily enslaving their minds to an implicit faith in doctrines, which it is their duty carefully to examine.'

1690: 'misemploy their power of assent, by lazily enslaving their minds, to the dictates and dominion of others, in doctrines which it is their duty carefully to examine, and not blindly, with an implicit faith, to swallow.'

This elaboration, incidentally, whilst it causes the thought to be more precise and sometimes advances it, makes too for diffuseness, as the present instance shows.

The differences between the various drafts are far greater in the case of *Book II*. Locke, from the beginning of it, is at once in deep waters and the variations in the drafts reveal the extent of his difficulties. Changes in the first four sections of ii. i have to do with the nature of sense-perception, of 'reflection', and of substance.

In Draft A Locke spoke naïvely of 'particular objects which give us the simple ideas or images of things' but already in Draft B he has learnt to speak more guardedly. 'Our senses conversant about particular sensible objects, do convey into the mind several distinct ideas or images of things.' Yet what are 'ideas or images of things'? In C we find 'several distinct ideas or representations of things', which is changed in 1690 to 'several distinct perceptions of things'. Nor is this all, for in the second edition, 1694, Locke added the following clause to the sentence, 'which when I say the senses convey into the mind, I mean, they from external objects convey into the mind what produces there those perceptions'. These changes show that Locke is struggling with many theories of perception and is not certain which to adopt. He rejects a crude causal theory; it is not true that things, and particularly the qualities of things cause us to see them as they are; but yet he does not wish to accept a mere phenomenalism, and least of all an idealism.

Nor is he free from trouble in explaining the genesis of our knowledge

of our own mental operations, the 'other fountain of knowledge'.¹ At first in B he speaks as if the operations of the mind themselves were the fountain, but in C and 1690 for 'operations' he substitutes 'the perception of operations'. In this section, however, C is on the whole closer to B than to 1690. He tries in C to explain what he means by the term 'reflection', '. . . these ideas being got by the mind reflecting on itself and its own actings'. But in 1690 he drops the word 'actings' and prefers the broader term 'operations', for as he explains, 'the term *operations* here I use in a large sense, as comprehending not barely the actions of the mind about its ideas, but some sort of passions arising sometimes from them, such as is the satisfaction or uneasiness arising from any thought'. The drafts and 1690 show that throughout Book II he is bothered by the relationship between (1) the object, which is the idea, (2) the same idea on its subjective side, and (3) the reflexive.

Most noteworthy, however, is the sudden introduction of the problem of substance. Locke's first point in Book II is that all knowledge is derived from sensation and reflection, but this is followed immediately in Drafts B and C by a second point, the weightiest consequence of the first. If all knowledge is derived from these two sources solely, then we can have no knowledge of whatever in an individual thing is imperceptible in sensation or reflection, and the substance of a thing, Locke supposes, is imperceptible. The passage in Draft C is worth quoting—much the same words will be found in Draft B:

'The understanding seems to me not to have the least glimmering of any idea which it doth not receive from one of these two, and as external objects cannot furnish the understanding with any ideas but of sensible qualities, because they operate on the senses no other way, and so we can have no other notion of them, nor the mind furnish the understanding with any ideas but of its own operations and the several sorts and modes thereof; hence it comes to pass that we have no ideas, no notion of the *substance* of body or any other thing, but it lies wholly in the dark, because when we talk of or think on those things which we call natural substances, as man, horse, stone, the idea we have of either of them is but the complication or collection of those particular simple ideas of sensible qualities which we use to find united in the thing called *Horse* or *Stone* (as I shall hereafter show more at large) and which are the immediate objects of our senses; which, because we cannot apprehend how they should subsist alone or one in another, we suppose they subsist and

¹ II. i. 4.

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natural bodies are able to produce in one another'. The reader may like to compare II. XXI. 1 of 1690 with the passage in C in the chapter entitled 'Of Ideas both of sensation and reflection' which corresponds with II. VII of 1690. The latter runs as follows:

"The Idea of power I conceive we come by thus. The alterations which we every moment observe in ourselves or other things makes us take notice of the beginning and ceasing to exist of several substances and of several qualities in those substances and several ideas in our minds, which changes since we cannot observe to be produced by nothing nor can conceive possible to be brought to pass without the operation of some cause that is able to produce such a change, the consideration of any thing as able to make any substance, quality, or idea to exist or cease to exist is the idea of its power. The way or efficacy whereby it is done we call action, as the alteration in the subject wherein it is made we call passion. Power then is looked upon and considered in reference to some alteration, and action is the efficacy of that power producing it.'

Following this paragraph will be found five further paragraphs dealing with power, impulse in body, and thinking, the material of these paragraphs being not unlike parts of II. XXI. Further, in § 15 of Draft C the important suggestion is made: 'And therefore I desire it may be considered whether the primary and inseparable property of spirit be not power, active power (for passive power everything has but God alone), as that of matter is extension'.

II. VIII is celebrated for its paragraphs on *primary and secondary qualities*. As is clear from the published *Essay* Locke has difficulty in speaking consistently of idea and quality in this connexion, and confesses in II. VIII. § to occasional confusion. This confusion is obvious too in the Drafts. Apart from this the two most interesting differences lie, first, in the explanation in C of why figure is included amongst the primary qualities, and, second, in the less guarded way in which he speaks in C of the action of body on mind. On these points I may quote two passages. The first introduces primary qualities in C:

'Concerning these qualities we may, I think, observe those original ones in bodies that produce simple ideas in us, viz., solidity and extension, motion or rest, and number. And the extension of bodies being finite every body must needs have extremities; the relation of which extremities on all sides one to another being that which we call *figure*, figure also we may reckon amongst the original qualities of bodies, though the idea it produces in our minds be not altogether

so simple as the other we shall see when we come to consider simple modes.'

The second passage introduces secondary qualities:

'What I have said concerning colours and smells may be understood also of tastes and sounds and all other ideas of bodies produced in us by the texture and motion of particles whose single bulks are not sensible. And since bodies do produce in us ideas that contain in them no perception of bulk, figure, motion, or number of parts (as ideas of warmth, slowness, or sweetness) which yet 'tis plain they cannot do but by the various combinations of those primary qualities however we perceive them not, I call the powers in bodies to produce these ideas in us secondary qualities.'

Turning now to the psychological chapters in the middle of Book II, the celebrated Molyneux problem is absent of course from Draft C and from 1690, appearing first in 1694. At the end of what corresponds in C to II. ix. 7, while making no attempt to set out 'the order wherein the several ideas come into the mind' Locke does suggest that those things most deeply impress the mind and are most readily retained 'which do either most frequently affect the senses or else do bring with them pleasure or pain (the main business of the senses being to give notice of those things which either hurt or delight the body)'. The account of contemplation is fuller in C than in 1690, and fuller than in B.¹ Contemplating is a form of retention and we retain, he says, in two ways:

'1. either by keeping the idea which is brought into it actually in view, which the mind hath a power to do (though it seldom happens that the same idea is for any considerable time held alone in the mind, either from the nature of the mind itself, wherein if they be left to themselves—as in one who gets himself not to think of anything—the ideas are in continual flux, or from the nature of consideration, which consists not in one but variety of coherent thoughts, i.e. variety of ideas, or else through the importunity of other objects or ideas drawing the looking another way, or sleep, which at once in most men draws a curtain over all the ideas of the understanding). This way therefore of retaining of ideas in the understanding by continued view of any one may be called *Contemplation*.'

The other kind of retaining is memory, another difficult idea to

¹ Cf. Draft B, Rand, p. 72 (§ 23).

account for. Locke's description of the 'storehouse' of memory in Draft C is as follows:

'... the storehouse of our ideas, by the assistance whereof we may be said to have all those simple ideas in our understandings which though we do not actually contemplate yet we can bring in sight or make appear again and be the objects of our thoughts without the assistance of those sensible qualities which first imprinted them there'.

II. xi, 'Of Discerning and other Operations' of 1690 is broken up in C into four chapters, entitled *Of Discerning*, *Of Comparing*, *Of Composition*, and *Of Denomination and Abstraction* respectively. The first three are close enough in material to II. xi. 1-7 and need no comment, but the fourth on *Denomination and Abstraction* is much more detailed than II. xi. 8-11. Section 7 of Draft C is close to II. xi. 10 and 8 to II. xi. 11, but it would be as well to quote in full the first sections of this chapter for they light up the details of Locke's thought on naming and abstraction at this period. After 1685 he seems to have felt that this matter too needed far greater elaboration than he had given it, and so he cuts down the discussion on naming and abstracting at this point in order to give greater attention to it later in the *Essay*, particularly in Book III. Draft C is as follows:

'1. When the mind by the frequent occurring of the same sensible qualities has got a familiar acquaintance with those simple ideas they suggest which now by custom and frequent repetition begin to be well fixed in the memory, the next thing is to learn the signs or sounds which stand for them or else give them names, if there be nobody who knows and can communicate the names they have already. Words thus applied to ideas are the instruments whereby men communicate their conceptions and express to one another those imaginations they have within their own breasts; and there comes by constant use to be such a connexion between certain sounds and the ideas they stand for, that the names heard almost as readily excite those ideas as if the objects themselves which first produced them did really affect the senses.

'2. And because by familiar use we come to learn words very perfectly and have them in our memories more readily than some simple ideas and more certain and distinct than the greatest part of complex ideas, hence it comes to pass that men even when they would apply themselves to an attentive consideration do more usually think of names than things.

'3. This learning of names and affixing them to certain ideas

begins to be done in children as soon as their acquaintance with and memory of several sounds¹ is sufficient to apply their organs of speech to the imitation of those sounds, and also to observe that such sounds are constantly annexed to and made use of to stand for such ideas.

'4. 'Tis true many words are learnt before the ideas are known for which they stand and therefore some, not only children but men, speak several words no otherwise than parrots do, only because they have learnt and have been accustomed to those sounds; but so far as words are of use and significancy, so far they consist in the connexion between the sound and the idea and the knowledge that the one stands for the other, and in the constant application of them.

'5. But names being only marks laid up in our memories to be ready there upon every occasion to signify our ideas to others or record them for our own use, and the ideas we have there being only taken from particular things, if every particular idea we take in should have a distinct name the names must be endless and more than we have need of. The mind therefore hath another faculty whereby it is able to make the particular ideas it received from particular things by a general representation of all of that sort become universal.

'6. For having received from paper, lilies, snow, chalk, and several other substances, the selfsame sort of ideas which perfectly agree with that which it formerly received from milk, it makes use but of one idea to contemplate all existing of that kind; whereby that one idea becomes as it were a representative of all particulars that agree with it and so is a general idea and the name that is given to it a general name. This is called abstraction, which is nothing else but the considering any idea barely and precisely in itself stripped of all external existence and circumstances. By this way of considering them ideas taken from particular things become universal, being reflected on as nakedly such appearances in the mind without considering how or whence or with what others they came there, but lodged there (with names commonly annexed to them) as standards to rank real existences into sorts as they agree with those patterns and to denominate them accordingly.

'7. By this means the mind, considering any of its ideas as representing more than one particular thing which do or may exist *in rerum natura*, makes universal ideas and gives an occasion for general or universal words.'

¹ At first he had written '. . . memory of the ideas of several sounds'. But 'of the ideas' is deleted.

Locke then proceeds to doubt whether beasts abstract, as he does in II. xi. 10, and from this section onwards to the end of II. xi the text of 1690 follows the draft closely.

In the next chapter on complex ideas Locke is as explicit in C as in 1690 that modifications of simple ideas are 'found in things existing' as well as are 'made within' the mind itself. Not all complex ideas are 'made'. An interesting point, however, is that at this stage Locke is not quite sure whether simple modes should be classed with complex ideas, but ultimately decides to group them with the complex. His account of complex ideas is as follows:

'The complex ideas that we have I think may be divided into these following sorts:

'1. *Simple Modes* for they are a sort of complex ideas consisting of the repetition and combination of simple ones of the same kind.

'2. *Mixed Modes* which include in them several simple ideas without taking in that of substance into the combination, as law, modesty, a lie.

'3. Ideas of *Substances* as water, lead, horse, man.

'4. Ideas of *Collective Substances* as army, crowd, herd of cattle.

'5. *Relation* as bigger, older, whiter, father, brother.'

The revolutionary changes in II. xii. 1 which cleared up the muddle of the complex idea are not to be found here, neither are they to be found in the 1690 text, they only appear in the fourth edition, 1700. But Locke's difficulty in classifying ideas into simple and complex is obvious enough in Draft C. II. xiii and xiv follow pretty closely the draft chapters on space and duration, though II. xiv. 18-24, on the measurement of duration, is much extended in C.¹ Minor changes in II. xv, xvi, xvii, and xviii need no comment. II. xix in 1690 is entitled *Of the Modes of Thinking*, but Draft C speaks *Of the Simple Modes of Thinking*, and it is significant that Locke should have dropped the adjective 'simple'. It was his original intention no doubt to bring the psychological into line with the physical in his classification and speak of simple and mixed modes. But the distinction of simple and complex modes in the psychological sphere is confusing rather than helpful. Can remembering, for instance, be spoken of as a repetition of one and the same simple idea? If it could, would not our real concern be with the simple idea? Yet in Draft C, more than in 1690, he tried to conform to the distinction. The chapter in C opens thus:

'We have in the foregoing chapters considered several of the simple ideas and their modes which from without excite the act of

¹ On ch. xiv cf. also B, §§ 103-23.

perception or thinking in the mind, which action of the mind when reflected on we shall also find to have its different and various modifications. I have had occasion to mention some of them in the former part of this book and therefore shall be the shorter here.'

The one 'action of the mind' has several modes and so the mode is, in Locke's terminology, a simple mode. Already in 1690 these words have disappeared and no effort is made to distinguish between simple and mixed modes of thought, unless such a passage as II. xxii. 10 be held to echo Draft C. For the most part the term 'modes' is used of the operations of the mind in 1690 in a very loose sense and is almost equivalent to 'kinds'.

The long chapter on Power, II. xxi, was considerably altered in the second edition, 1694, but 1690 too differs a good deal from Draft C. The first paragraph is much the same in both, and the second is an afterthought in Draft C which is included marginally. The ethical doctrine which follows varies considerably in Draft C, 1690, and 1694, and any student of Locke's ethics will want to see the variants. I have no space to consider them here, but turn instead to a consideration of the chapter on Substance, II. xxiii. I shall compare Draft C with 1690, but the reader should also look at Draft B 60, 61, 63, 94, and 97. The numbering of the paragraphs in what follows is that of Draft C.

1. This agrees with II. xxiii. 1 of 1690.

2. And this with II. xxiii. 2 except that (a) in the last sentence C has 'supposed but unknown cause of the subsistence of those qualities' whereas 1690 has 'supposed but unknown support of those qualities', and (b) C has 'that imagined support' for the 1690 'that support, *substantia*' in the same sentence.

3. C runs: 'An obscure and relative idea of substance in general being thus made we come to have the ideas of particular substances by collecting such combinations of simple ideas as [having received by our senses]¹ we observe to exist together and suppose to flow from the particular internal constitution or unknown essence of that substance. Thus we come to have the complex ideas of substances as a man, a horse, sun, water, iron, upon the hearing of which words everyone who understands the language frames in his mind the several simple ideas which are the immediate objects of his senses, which he supposes to rest in and be as it were adherent to that unknown common subject which is called substance; though in the meantime it is manifest and everyone upon enquiry into his own thoughts will find that he has no other idea of that substance, for

¹ Added later.

example, let it be of *gold, horse, man, iron, vitriol, bread*, but what he has barely of these sensible qualities which he supposes to be inherent in it with a supposition of such a substratum as gives as it were a support to these other qualities or simple ideas which he has observed to exist united together. Thus the idea of the sun is but an aggregate of these several simple ideas, bright, hot, roundish, having a constant regular motion at a certain distance from us, and perhaps some other, as he who thinks and discourses of the sun hath been more or less accurate in observing those sensible qualities, ideas, or properties, which are in that thing which he calls the sun.'

4. 'For he hath the perfectest idea of any particular substance who hath gathered and put together most of those simple ideas or qualities which are causes of those simple ideas which do exist in it, among which are to be reckoned its active powers and passive capacities, i.e. not only those qualities which do actually exist in it, but such as are apt to be altered in it or that thing is apt to alter in any other subject upon a due application of them together. Thus the power of drawing iron. . . .' For the continuation of this passage see II. xxiii. 7. Note how in this paragraph both in C and 1690 Locke finds it difficult to decide whether power is a simple or a complex idea. 'For all these powers that we take cognizance of terminating only in the alteration of some sensible qualities in those subjects on which they operate, and for making them exhibit to us new sensible ideas, therefore it is that those powers, though in themselves properly relations, are reckoned amongst those simple ideas which make the complex idea of any of those things we call substances; and in this sense I would crave leave to call these potentialities simple ideas when I speak of the simple ideas which we recollect in our minds when we think of substances which are necessary to be considered if we will have true notions of and distinguish these substances well one from another. And such powers as these we are fain to make use of as the marks whereby we distinguish substances one from another; because the figure, number, bulk, and motion of these minute parts being in corporeal substances that which really distinguishes them, we have no faculty to discern the difference of those minute parts and so cannot distinguish them that way. Therefore being excluded from a discovery of their different constitutions by the several modifications of their original qualities we are fain to content ourselves with the notice we have of their secondary qualities, which are indeed nothing else but the powers they have differently to affect our senses or other bodies by reason of the different bulk, figure, texture, motion, and number of those minute parts whereof they consist.'

5. 'For the power of being melted but not wasted by the fire, of being dissolved in aqua regia, are simple ideas as necessary to make up our complex idea of gold as its colour or weight; for to speak truly the simple ideas themselves we think we observe in substances, bating those primary qualities, are not really in them. They are but powers in them to make those alterations in us and produce such ideas in our minds; for yellowness is not actually in gold but is a power in gold to produce that idea in us by the sight when placed in a due light. And the heat which we feel its beams to cause in us is no more really in the sun than the white it introduces in wax. These are powers in the sun to make us feel warmth and the wax appear white, i.e. differently to change these simple ideas in man as so to alter the parts of wax as that they have the power to cause in us the idea of white.'

6. 'And this in short is the idea we have of particular substances, viz., a collection of several simple ideas which are united together in a supposed but unknown cause of their subsistence and union; so that by substance or the subject wherein we think they inhere we mean nothing else but the unknown cause of their union and coexistence.'

7. 'When I speak of simple ideas as existing in things, e.g. heat in the fire and red in a cherry, I would be understood to mean such a constitution of that thing as has power by our senses to produce that idea in our minds, so that by idea when it is spoken of as being in our understandings I mean the very thought and perception we have there: when it is spoken of as existing without us I mean the cause of that perception, and is vulgarly supposed to be resembled by it, and this cause, as I have said, I call also *quality*, whereby I mean anything which produces or causes any simple idea in us whether it be the operation of our own minds within, which being perceived by us causes in us the ideas of those operations, or else anything existing without us which, affecting our senses, causes in us any sensible simple ideas. These all, I say, I call qualities.'

8. 'Farther, because all the powers and capacities which we can conceive in things are conversant only about simple ideas and are considered as belonging to and making up part of the complex idea of that thing they are in, I call those also qualities and distinguish qualities into *actual* and *potential*. By *actual qualities* I mean all those simple ideas, or to speak righter, the causes of them that are in anything, e.g. the taste, colour, smell, and tangible qualities of all the component parts of a cherry. By *potential qualities* I mean the fitness it hath to change the simple ideas of any other thing or to have its own simple ideas changed by any other thing, e.g. it is

a *potential quality* of lead to be melted by fire and of fire to melt lead, i.e. change its solidity into fluidity, which potential qualities may again, if anyone please, be distinguished into *active* and *passive*. All that I desire is to be understood what I mean by the word *quality* when I use it, and if it be used by me something differently from the common acceptation I hope I shall be pardoned, being led to it by the considerations of the thing, this being the nearest word in its common use to those notions I have applied to it. By the word *quality* then I would here and elsewhere be understood to mean a power in anything to produce in us any simple idea and the power of altering any of the qualities of any other body. Thus the power in fire to cause in us the idea of heat I call *quality*, and the power likewise in fire to make wax or lead fluid I call *quality*.'

9. 'But having spoken at length of this (ch. 5) I shall only add that in *secondary qualities*, which probably consist in a certain number, figure, bulk, and motion of minute parts, if we had senses acute enough to discover and observe these they would then affect us after another manner, and the texture of the parts of gold and the motion of light from it would not then produce the idea of yellow in us but the perception of the bulk, figure, and motion of the constituent minute parts of gold and light.'

10. 'That this is so the increase of the acuteness of our sight by optical glasses (wherein the bulk of visible bodies seems to be augmented as 100 or 1,000 to one, i.e. our faculty of seeing is made 100 or 1,000 more acute than it was) seems to evince, for pounded glass or ordinary sand looked on by the naked eye produces in us the idea of white, but the same looked on in a good microscope loses the white appearance and the parts appear pellucid. So a hair that to the naked eye is of a flaxen or an auburn colour through a microscope (wherein the smaller parts of it become visible) loses that colour and is in a great measure pellucid with a mixture of some bright sparkling colours such as appear from the refraction of diamonds and other pellucid bodies. Blood to the naked eye appears all red; but by a good microscope wherein its lesser parts appear, shows (as is said) only some few globules of red swimming in a pellucid liquor, and how these red globules would appear, if glasses could be found that yet could magnify them 1,000 or 10,000 times more, is uncertain.'

11. This is as 12 of 1690, except that 1690 has one or two minor additions.

12. 'When then I say want of *faculties* and *organs* able to discover the figure and motion, etc., of the minute parts, and thereby the formal constitution of bodies and their qualities, is the cause why we have

not clear, perspect and adequate ideas of them, I do not say it would be better for us that we had faculties and organs fitted for such discoveries. God hath no doubt made us so as is best for the ends of our creation and our being here; and, though we have no perfect knowledge of things, yet we have enough to glorify him and discover the way to our own happiness, if we made a right use of that light he hath bestowed on us.'

13-20. As 1690 (§§ 14-21) but with some rearrangements and some minor changes.

21. A section in C is omitted from 1690. 'The ideas then we have peculiar to body are solid parts and a power of communicating motion by impulse. The idea of solid parts includes the idea of that extension which belongs to body, which is the idea of the distance between the extremes of solid and separable parts. For the extension that belongs to pure space is of inseparable parts without solidity whereof I think everyone has as clear an idea as of the extension of body, the idea of the distance between the parts of concave superficies being equally as clear without as with the idea of any solid parts between. So that extension in the largest signification as standing for the idea of distance of continued parts is not an idea belonging only to body.'

22. 'Let us then compare the primary simple ideas we have of *spirit* with those we have of *body* and see whether they are not as clear as those of *body*. For as to the substance of *spirit* I think everyone will allow we have as clear an idea of it as of the substance of body. Our primary idea of body is to me, as I have said, the union or cohesion of solid parts from which, as I suppose, all the other ideas belonging to *body* do derive themselves and are but modifications of. The primary idea we have of *spirit* is that of thinking, which if examined, I suppose is as clear and evident, nay possibly clearer than, that of the cohesion of solid parts.' The rest of this paragraph is 23 of 1690. Marginally in C, he adds a qualification, which appears as 24 of 1690, except that the last two sentences are not marginal in C and are different in minor but significant ways from 1690. They are as follows: 'So that perhaps how clear an idea soever we think we have of the extension of body, which is nothing but the cohesion of solid parts, he that shall well consider it in his mind may have reason to conclude that it is as easy for him to have a clear idea how [a substance he knows nothing more of or perhaps in]¹ an extended substance may think as how the parts of a solid substance do cohere, so far is our idea of extension of body, which is nothing but the cohesion of solid parts, from being clearer or more distinct than the idea of thinking.'

¹ Added later.

23-28. The same as 28-32 of 1690 with some minor changes.

29. 'I say then by these steps we come to have such an idea of God and spirits as we are capable of, viz., finding in ourselves knowledge of some few things, and also a power to move and alter some things, and also existence and several other simple ideas or faculties which it is better to have than to want; having also the faculties in our minds whereby we can enlarge some of these ideas and extend them without bounds, e.g. if I find that I know some few things and some of them or all perhaps imperfectly, I can frame an idea of knowing twice as many things, which I can double again as often as I can add to number the same, also I can do of knowing them more perfectly, i.e. all these qualities, powers, causes, and relations, etc., till all be perfectly known, that is, in theory, or can any way relate to them, and thus frame the idea of infinite or boundless *knowledge*. The same may also be done of *power* till we come to that we call infinite and also of *duration*, existence from eternity, infinite and eternal being and so, in respect of place, *immensity*, by which way alone we are able to conceive ubiquity, the degrees or extent wherein we ascribe existence, power, wisdom, and all other perfections which we can frame any ideas of that sovereign being which we call God, being all boundless and infinite, and so frame the best idea of him our minds are capable of, all which is done by enlarging of those simple ideas (we have taken from ourselves by reflection, or by our senses from exterior things) to that vastness to which we can imagine any addition of numbers can come, which is the idea we have of *infinite* and *eternal*.'

30-31. These are similar to 35 and 36 of 1690.

32. 'Before I conclude this chapter it may not be amiss here to reflect how all our ideas of other things are restrained to those we receive from sensation and reflection. Since though in our ideas of spirits we can attain by repeating our own even to that of infinite, yet we cannot have any idea of their communicating their thoughts one to another, though we cannot but necessarily conclude that spirits which are beings that have perfecter knowledge and greater happiness than we must needs have a perfecter way of communicating their thoughts one to another. But our way of doing of it being only by corporeal signs, and the best and quickest of all other, by sounds, we have no idea how spirits which use not words can with quickness, nor much less how spirits that have no bodies, can be master of their own thoughts and communicate or conceal them at pleasure, though we cannot but necessarily suppose they have such a power.'

33. The same for the most part as 37 of 1690 but this section is added marginally in C.

As for the remaining chapters of Book II little need be said. II. xxiv copies Draft C but adds the last paragraph (3). II. xxv on *Relation* shows some differences of minor importance. It is interesting to compare in C and 1690 the opening sentences of II. xxvi *Of Cause and Effect, and other Relations*. C reads thus:

'In the notice that our senses take of their proper objects in external things we find that certain simple ideas do in several subjects begin to exist which before were not there and also that several particular substances do begin to exist, observing also that those simple ideas or substances are thus produced by the due application of some other simple ideas or subjects, which therefore being considered by us as conducing to the existence of that simple idea or substance, we frame the notion or idea of cause and effect, calling that which does operate toward the existence of any simple idea or substance cause and that which is thus produced the effect.'

It will be seen that the language of 1690 in opening this chapter is more guarded. Nothing of II. xxvii *Of Identity and Diversity* is to be found in C. There are differences between the account of moral relations in C and in 1690 of interest to students of Locke's ethical teaching, and six sections are added in C to II. xxviii. 20, which are not in the 1690 edition; but for the rest of this chapter 1690 follows C closely.

At the end of II. xxviii Locke in C adds his signature, apparently meaning to end Book II at this point. But he then adds two further chapters. The first corresponds closely to II. xxix and is entitled *Of Clear and Distinct, Obscure and Confused Ideas*. The second entitled *Of Real and Phantastical, Adequate and Inadequate Ideas*, corresponds to II. xxx and II. xxxi, though there are big differences. C has nothing corresponding to xxxiii *Of the Association of Ideas*, except that II. xxxiii. 19 is found little changed in the 1685 draft. To this section is appended Locke's signature 'Sic cogitavit John Locke'.

PART II

I

THE AIM AND PURPOSE OF LOCKE'S WORK

PHILOSOPHY, Locke tells the reader in the epistle with which he opens the *Essay*, is 'nothing but true knowledge of things'. It is whatsoever a man knows when he knows truly—the whole body of knowledge, which Locke himself in the final chapter of the *Essay* divides into three parts, *physica* or natural philosophy,¹ *practica* or moral philosophy, and logic, the 'doctrine of signs'.² The aim of the philosopher is to erect as complete and adequate a system as he possibly can under these three heads. Locke and his contemporaries were ignorant of our present distinction between philosopher and scientist. Locke's researches into social and moral problems would, of course, be philosophical, but so also would his work in medicine. Newton, Boyle, and Sydenham were all philosophers to him, and, indeed, he would have regarded them as more deserving of that title than he was himself.

In his own eyes his chief work, the *Essay*, was not so much a part of philosophy as a preliminary to it. It is an examination of the instrument (the 'understanding', as he termed it) whereby we erect the philosophical structure. That it is preliminary work and no more is a point that needs to be borne in mind. Locke would have thought it strange had anyone identified the aim of the philosopher as such with his aim in the *Essay*. In the *Essay* he thinks his task is to prepare the ground for the builder rather than to erect the building. 'The commonwealth of learning is not at this

¹ Such 'natural philosophy' he tells us in iv. xxi. 2 includes the study of 'things as they are'. Amongst these 'things' are included the non-physical. 'God himself, angels, spirits, bodies, or any of their affections as number and figure, etc.' In modern terms it includes the natural sciences, but also mathematics, psychology, and even metaphysics.

² He calls it *σημειωτική*. On this word, see further, p. 209, n. 1, below.

time without master-builders, whose mighty designs in advancing the sciences will leave lasting monuments to the admiration of posterity; but everyone must not hope to be a Boyle or a Sydenham, and in an age that produces such masters as the great Huygenius and the incomparable Mr. Newton, with some other of that strain, 'tis ambition enough to be employed as an under-labourer in clearing ground a little and removing some of the rubbish that lies in the way to knowledge.¹ As it turned out, the *Essay* did provide some positive knowledge of its own, for instance, in psychology and again in logic. But to provide such knowledge was not its primary purpose. The primary purpose was solely to prepare the ground. To blame Locke for not producing a finished system in the *Essay* is like blaming the under-labourer who clears the ground for not erecting the building. Philosophy as such, he would think, should not be confused with this preliminary, critical work.

Accordingly, while the purpose of philosophy in Locke's opinion is the discovery of a systematized and adequate body of knowledge, and while its method is synthetical, the aim of his own work, the *Essay*, was the 'removing some of the rubbish that lies in the way to knowledge', and its method analytical. It involved an analysis of the human understanding, in the full consciousness that this was far from being the only concern of philosophy, was indeed only a preliminary concern. He makes his aims perfectly clear in the *Epistle to the Reader* and later in the *Essay*. In the first place, knowledge is hindered by 'vague and insignificant forms of speech' and by 'misapplied words, with little or no meaning' which are 'mistaken for deep learning and height of speculation'. Locke has primarily in mind, it is clear from the context, the type of person who, wishing to make a display of learning, uses a jargon of technical terms which he does not understand, and so instead of increasing knowledge manages only to increase confusion and ignorance. For such Locke rightly has nothing but contempt. However, it is not pedants such as these, unfortunately, who alone make use of vague words and express themselves in sentences whose meaning is not clear. Locke came to see that the commonest

¹ *The Epistle to the Reader.*

words and the most frequently used sentences are permeated with vagueness, which cause us to be misled only too easily. At first, Locke had not realized how big this problem of language was. But in the finished *Essay* he devotes a whole book to it, and though the analysis of Book III is no doubt crude and superficial, its author deserves all honour for drawing attention to the matter with which it deals and for emphasizing its importance.

From the first, then, Locke realized that vague and confused language was one great hindrance to knowledge, and that it was part of his duty to point this out. Another hindrance, he realized, was bondage to false methods. The search for the proper method of procedure was one whose importance all the thinkers of the seventeenth century agreed in emphasizing. They believed, as Descartes explained, that man possessed the power of knowing, but that frequently he failed to gain knowledge because his method of procedure was false. Locke, in particular, mentions two tendencies of his own day which led men to adopt false methods. There was first the tendency to believe that knowledge must originate in certain fundamental principles or 'maxims', which are innate, known prior to all experience. We gain as much true knowledge as we manage to deduce from these maxims. Locke rejected this view completely. He denied both that there is innate knowledge, and that all the knowledge we gain is the result of deducing truths from 'maxims'. The second tendency of his day which Locke deprecated was the tendency to regard the syllogism as the true and sole method of knowledge. The blind insistence of the schools upon the reduction of all argument to syllogism had done great harm to science in Locke's opinion, and on this point he attacked them vigorously. Man had power to know. But this power, Locke thought, was frequently limited and even made ineffective by theorists who insisted that knowledge should always proceed syllogistically and who refused to admit the validity of other methods, even though men of science in those very days were advancing rapidly by methods of a very different order. Locke conceived it to be his task to liberate reason and to point out the folly of those who would fetter it in this way.

But there is still a further hindrance to knowledge, Locke

realized, more deep-seated and more difficult to remove than either of the foregoing. Man's own unquenchable and boundless curiosity can itself become a hindrance. For man would know the unknowable, and when he fails, as fail he must, he becomes disheartened and sceptical and refuses to use his talents even in spheres where rightly used they might well succeed. 'Thus men, extending their inquiries beyond their capacities and letting their thoughts wander into those depths where they can find no sure footing, 'tis no wonder that they raise questions and multiply disputes, which never coming to any clear resolution, are proper only to continue and increase their doubts and to confirm them at last in perfect scepticism.'¹

To help mankind to rid itself of this unfortunate failing, Locke set himself to determine the limits of human knowledge. Having once determined these, he hoped, men would not then rush forward to problems whose nature is such that they cannot be solved by human intelligence. 'If we can find out how far the understanding can extend its view, how far it has faculties to attain certainty, and in what cases it can only judge and guess, we may learn to content ourselves with what is attainable by us in this state.'² Man has been blessed with capacities and talents sufficient to enable him to live a useful and profitable life. Many conquests yet remain to him if he uses these talents intelligently. 'He may increase his knowledge of the natural world, deepen his understanding of social and moral relations, and enjoy a fuller communion with God than he does at present. 'Men may find matter sufficient to busy their heads and employ their hands with variety, delight and satisfaction, if they will not boldly quarrel with their own constitution and throw away the blessings their hands are filled with, because they are not big enough to grasp everything.'³ Accordingly, Locke's chief purpose in the *Essay* is severely practical and utilitarian. In it he seeks to discover the limits of human knowledge so that we may order our lives and our inquiries wisely as best fits the nature of the capacities granted us, and not waste our time searching for knowledge of things lying for ever beyond our ken.

This threefold aim of the *Essay* is crystallized by Locke into

¹ l. i. 7.

² l. i. 4.

³ l. i. 5.

one phrase: 'to inquire into the original, certainty and extent of human knowledge, together with the grounds and degrees of belief, opinion and assent.'¹ For if, first, we discover the 'original' of knowledge we shall be able to test the view that a mysterious innate knowledge exists, the source of 'maxims' and principles. Secondly, if we understand the true nature of certain knowledge we ought to be in a position to decide whether the syllogistic method is the sole method for gaining certainty. Moreover, we should not then be led astray by words and phrases whose meaning is not clear to us. Thirdly, if we know the extent of human knowledge we can know what problems it would be wise to leave untouched as lying beyond our capacities.

To complete our task, Locke points out, we need also to inquire into 'the grounds and degrees of belief, opinion and assent', that is, into probable knowledge. Not all knowledge is certain. Indeed, the conclusion to which Locke is driven is that very little knowledge is certain. All the more reason why an examination of probable knowledge should be included within the scope of the *Essay*.

The preliminary work that needed to be done, therefore, as Locke conceived it, was an examination of knowledge, both certain and probable. He undertook this task in the hope that thereby he might remove certain hindrances to knowledge that had obstructed it too long, vagueness and imperfections in language, false methods, and meddling with problems that the human understanding could not possibly solve. The method he proposed to adopt in his inquiry was the 'historical, plain method'. ('Historical' is here a synonym for experimental or observational.) And the field he was to examine was primarily that of his own experiences as a cognitive being. As we shall see, the actual procedure is both psychological and logical, and this because, in studying knowing, Locke found it necessary to study the objects known, namely, as he thought, ideas, together with the symbols standing for such ideas, particularly words. His examination of ideas is a curious mixture of psychology and logic, together with the introduction of some metaphysics, though ontological and metaphysical considerations are more apparent in the fourth book, when, for in-

¹ I. i. 2.

stance, an attempt is made to discuss the reality of knowledge. Thus, while Locke's goal is an account of human knowledge and of its extent, he finds it necessary to traverse many unexpected by-paths in order to reach it. It is this fact which makes the *Essay* so cumbersome, although it also adds considerably to its worth, since the various excursions he thus makes are never profitless.

Before we proceed to follow him in his quest we might add a word of criticism. No objection can be made to his desire to free men's minds from ambiguities and vagueness of language, or again from allegiance to false methods. But it may be questioned whether his third and chief resolve was a wise one—to determine the extent of human knowledge. How far is this possible? It is only fair to Locke to stress one fact which is sometimes forgotten by his critics, namely, that he has no doubts about the existence of knowledge. It is sometimes argued that Locke's whole procedure is vitiated since he assumes what he sets out to prove. He sets out to prove the fact of human knowledge and assumes it in so far as he uses knowledge in attempting to prove its existence. In examining the instrument, so it is argued, he is compelled to make use of that instrument itself. But all such criticisms, surely, miss an important point. Locke does not set out to prove the fact of human knowledge. He never doubts its possibility. He takes it for granted that we do on occasion know and know with indubitable certainty. But there is no proof of this in the *Essay* and no attempt to prove it. It cannot, therefore, be argued that he assumes what he sets out to prove.

The more effective criticism, however, centres upon another assumption which he makes, namely, that we can set limits to human knowledge. Can we really set up a precise and fixed barrier of such a sort that we can say, 'All problems this side of the barrier are soluble, those lying beyond are insoluble'? Can we determine the limits of knowledge beforehand? Locke's statement of the problem in the *Essay* is somewhat condensed. It is easier to understand his position if one examines it as set out in 1677 in the long note on study which he wrote into his journal for that year. In the course of this note he remarks:¹ 'This [to know what things

¹ King, i. 197-8.

are the proper objects of our inquiries and understanding], perhaps, is an inquiry of as much difficulty as any we shall find in our way of knowledge, and fit to be resolved by a man when he is come to the end of his study, and not to be proposed to one at his setting out; it being properly the result to be expected after a long and diligent research to determine what is knowable and what not, and not a question to be resolved by the guesses of one who has scarce yet acquainted himself with obvious truths.' From this passage it is clear that Locke did not mean that when beginning to inquire into any particular field of knowledge we can know beforehand how far our knowledge will extend. The expert alone 'at the end of his study' is in a position to say that such-and-such problems are wholly beyond our powers of apprehension.

But this further consideration cannot wholly free us from our difficulties. For when are we 'at the end of our study'? When are we in such a position that we can confidently say, 'This is a problem which the human intellect will never solve'? In the above note Locke sets before us three instances of problems insoluble to our intelligence. First, 'that things infinite are too large for our capacity'. Now in what sense is this statement true? It is certainly true if we mean by 'things infinite' those things which a finite mind like man's cannot understand. Then by definition finite minds cannot know infinite things, that is to say, cannot know those things which it cannot know. If more is meant than this empty tautology it can only be that many matters are at present beyond our understanding, that is, that we are not omniscient. This again must be admitted, but, of itself, affords no proof that the problem which I cannot solve today is such that I never shall solve it. The second instance that Locke gives reads: 'the essences also of substantial beings are beyond our ken.' This we cannot discuss fully without a prior discussion of what Locke means by the essence of a substantial being, a discussion which will come later. But, on the face of it, the question, 'What do I know of essences?' is only significant if essences are within the realms of experienceable entities. If they are wholly outside that realm then I shall never know them, admittedly, but also the question whether I can know them or not is absurd. Indeed, if I do know that these mysterious

entities are beyond my ken, that in itself is to know something about them. Of course, there may be entities and existences wholly beyond my knowledge, but then of these I neither have now, nor ever shall have, any conception whatsoever. Real essences, however, did mean something to Locke, little as he could explain them. And if we do know anything whatsoever about them, however slight the knowledge be, it is most dangerous to say that we shall never know more. Precisely the same general considerations apply to Locke's third instance, 'the manner also how Nature in this great machine of the world, produces the several phenomena, and continues the species of things in a successive generation etc. is what I think lies also out of the reach of our understanding'. Here again we must postpone detailed consideration. But we do know something about these natural phenomena. How then can we say that further knowledge is wholly ruled out?

Now if Locke's view was that we can set down limits to knowledge of a precise and definite sort, and that we can determine what problems are soluble and what wholly insoluble, then his position would be very difficult to defend. (We may, of course, say that we cannot know what lies beyond experience, but this, I contend, is not a significant limitation, especially when, as in the present case, the term *experience* is not confined to sense-experience, but covers all instances of awareness. To say that we cannot know what lies beyond experience is to say that the unknowable is unknowable, a tautology which cannot help us in any way.) Yet while in this precise sense we cannot hope to set limits to knowledge, in a more practical sense we certainly may assume that there are problems at present beyond us and likely to be beyond us for a very long time. And it is important to remember that Locke is thinking in practical terms. His interest here, as almost everywhere, is primarily practical. As a matter of logic we may not, strictly speaking, be in a position to deny the possibility of discovering a solution to the most abstruse problems, but practically we frequently find ourselves in a position, as the result of repeated failure, in which we feel able to say that it is most unlikely that this problem will ever be solved by us. What Locke

is really saying here is that if we examine human knowledge we shall find certain problems which the mind has failed completely to solve, and having found them we shall be well advised not to waste further time and energy upon them. We should concentrate upon solving the simpler problems first.

In defence of Locke, therefore, as against the second criticism, it is necessary to emphasize his practical interests. It is significant that he concludes the passage from the note on study to which I have referred with these words: 'That which seems to me to be best suited to the end of man, and lie level to his understanding, is the improvement of natural experiments for the conveniences of this life and the way of ordering himself so as to attain happiness in the other—i.e. moral philosophy, which in my sense comprehends religion too, or a man's whole duty.' His contribution, he here implies, is pre-eminently practical in purpose. He will seek to discover those fields of inquiry in which the patient and diligent work of man's intellect is most likely to be rewarded whether by certainty or by probability, so that the sum-total of human happiness may be increased. And this is the most important task of the *Essay* in the eyes of its author.

As a final word, however, we should add that it is not primarily for reasons of this sort that the *Essay* remains a philosophical classic for us today. Its value for us lies rather in the fact that the task he set himself involved him also in a far-reaching analysis of the cognitive experience, and in many important psychological, logical, and metaphysical considerations.

II

THE POLEMIC AGAINST INNATE KNOWLEDGE

LOCKE opens the *Essay* with an elaborate attack upon innate knowledge.¹ The matter is already introduced, though briefly, in Draft A of 1671. There, having established his empiricism in the main argument, Locke adds a few additional paragraphs to meet two possible objections. The first is that knowledge may be gained innately. This objection is stated and dismissed by Locke in one section.² He admits readily that not all knowledge is sensory. Reason 'by a right tracing of those ideas which it has received from sense or sensation may come to the knowledge of many propositions which our senses could never have discovered'. Yet this is no innate knowledge, it presupposes ideas given in sensation or reflection. In a few brief sentences Locke shows the falsity of the innate theory. When, however, a few months later, he came to write Draft B, he must have felt that the claim to innate knowledge needed a fuller examination, and he devotes thirteen sections at the beginning of the draft to it. He is no longer defending his own position but attacking another. In spite of the protests of Gassendi and his followers, the theory of innate knowledge had gained in favour during the seventeenth century both on the Continent and in England, and Locke felt that the time was ripe for a thorough re-examination of it. The final statement of his argument in the *Essay* takes up the whole of Book I, excluding the introductory chapter. The main difference between it and that of Draft B is that the latter begins with practical principles and

¹ The polemic is usually termed 'the polemic against innate ideas', and, as we shall see, innate ideas are considered towards the end of Locke's discussion. But they are introduced incidentally. It is not so much ideas that we are supposed to know innately as certain principles, both speculative and practical, which lie as a foundation for theoretical and practical knowledge respectively. Accordingly, it is not necessary at this juncture to consider the use Locke makes of the term *idea*. We may postpone consideration to a more appropriate place, namely, the beginning of the next chapter.

² § 43. Aaron and Gibb, pp. 67-69.

proceeds to speculative, while the *Essay* reverses this procedure. In what follows I shall, first, summarize the argument of the *Essay*, then indicate for whom the attack was meant, and, lastly, estimate its value.

I

Locke begins by referring to 'an established opinion among some men' that there are innate principles 'which the soul receives in its very first being and brings into the world with it'.¹ Such principles are that what is, is; that a thing does not contradict itself; that the whole is greater than its parts, and so on. The first argument adduced for the innateness of the knowledge of these and the like principles is that we all agree about them. To this Locke replies that, in the first place, universal agreement in itself is no proof of innateness, and, in the second, not all people, strictly speaking, do agree about these principles. Indeed, not only is there no universal agreement about them but a large part of mankind has never once conceived them. Yet if they were truly innate, if they were 'naturally imprinted' on the mind, surely they would be in the thoughts of all. But they are not, for children and many adults know nothing of them. How, then, can we talk of universal agreement?

This brings up another point. It may be argued that we are all at least *potentially* capable of knowing these principles. If this means that we possess from the first a capacity to know them Locke agrees with this view. He accepts innate capacities. If it means more, as it usually does—if it means that the proposition 'What is, is' is in our minds implicitly, but not yet explicitly, Locke replies bluntly: 'No proposition can be said to be in the mind which it never yet knew, which it was never yet conscious of.'² If again it means that we shall know these principles when we come to reason, Locke answers that we shall also know that seven and five are twelve when we come to reason, but no one supposes this to be innate knowledge. Moreover, Locke adds, it is not by reasoning that we know these principles, though we use them in reasoning. 'Those who will take the pains to reflect with a little attention

¹ I. ii. 1.² I. ii. 5.

on the operations of the understanding will find that this ready assent of the mind to some truths depends not either on native inscription, or the *use of reason* [i.e. reasoning]; but on a faculty of the mind quite distinct from both of them, as we shall see hereafter.¹ Obviously, the faculty referred to is the intuitive.

We cannot then argue from universal assent to the innateness of the knowledge of the principles. Nor again is it possible to claim for such knowledge any priority in time. Clearly the knowledge of the principles, abstract as it is, comes late. Sensation, recognition, seeing that red is not white, are all prior to our knowledge of the principle of non-contradiction. It is strange that the last named, none the less, should be singled out as a 'native inscription'.

But the argument, it will be said, is not from priority in time but from logical necessity. The principles are logically necessary and self-evident. Once we understand what the words in the proposition mean, for instance, 'What is, is', we must see it to be true. Now such necessity and such self-evidence, it is argued, can only be explained by holding that the principles have been inscribed innately upon the human mind, that knowledge of them is quite out of the ordinary and never acquired as other knowledge is acquired. To this Locke replies that admittedly the principles are self-evident. But so also are many other truths not usually regarded as innate, for instance, mathematical truths. Either these mathematical truths are also innate or self-evidence in itself is no proof of innateness. The principle 'What is, is' is necessary. Granted, but why? 'Not because it was innate, but because the consideration of the nature of the things contained in those words would not suffer him [the knower] to think otherwise, how or whensoever he is brought to reflect on them.'² In other words, however necessary and self-evident such principles are, Locke can see no argument in this fact for their being innate. He would be prepared to admit that as a class of objects known they make a group apart, though the analogies between them and propositions stating mathematical truths are many. But he cannot see that we need to presuppose

¹ I. ii. 11. In the first four editions the words *use of reason* are italicized.

² I. ii. 21. It is worth noting that Locke had already grasped this important truth in Draft B. Cf. § 15.

any peculiar, mysterious kind of knowing in order to explain our knowledge of them. They are known in the same way as we know any other knowledge. We intuit them, just as we intuit that two and two are four. The argument from self-evidence and necessity is shown to be as weak as that from universal assent.

Locke, therefore, concludes that there is nothing to show that principles used in speculation, such as identity and non-contradiction, are innately known. What now of those practical principles for which innateness was also being claimed? Locke begins again by asking whether there are any such practical principles about which we are all agreed. He finds it necessary to admit the existence of certain tendencies common to the human race. Common to all is 'a desire of happiness and an aversion to misery', but 'these are inclinations of the appetite to good, not impressions of truth on the understanding'.¹ As to moral principles as such, there is more agreement about speculative principles than about them, and yet not even the latter are known innately if our former argument is correct. It is very clear to Locke that the source of our moral principles is our own reason, or the education we have received from others, or the opinions of friends around us and the custom of the country in which we live. Locke believes that there are eternal, immutable laws of morality, but they are not known by any mysterious, innate knowledge, they are not implanted from the first upon our minds. Surely, if all men knew the moral principles innately we should not have the spectacle of whole nations breaking one or more of them and showing no shame in doing so, on the contrary, acting as if they were wholly unaware of the principle or principles concerned. Thus Lord Herbert of Cherbury must be incorrect when he argues in his book *De Veritate* that there are five practical principles which are known innately by all. Locke shows how easy it is to refute his position.

In a subsequent chapter Locke adds some further considerations in relation both to speculative and practical principles. If such principles are innate, the ideas out of which the principles are formed should also be innate. But they are obviously not so. *'It is*

¹ I. iii. 3.

impossible for the same things to be and not to be is certainly (if there be any such) an innate principle. But can any one think, or will any one say, that *impossibility* and *identity* are two innate ideas? Are they such as all mankind have and bring into the world with them? And are they those that are the first in children, and antecedent to all acquired ones? If they are innate they must needs be so?¹ In the case of identity, for instance, in order to feel convinced that it is no innate idea, one need only recall that learned men ascribe wholly different meanings to the term, and that the less educated hardly ever use it.

Similarly, the practical principles contain ideas which cannot possibly be innate. One of Herbert's innate principles was 'God is to be worshipped'. Now the idea of worship is surely not innate. Is the idea of God? Locke shows how individual men and nations of men seem never once to have conceived the idea of God, and amongst those who have there is great disagreement as to the nature of the conception. But how could this be if precisely the same idea of God had been stamped upon the minds of men from the beginning? Surely, in this sense, there is no innate idea of God. Moreover, if there is no innate idea of him, it is unlikely we have innate ideas of anything else.

So there are no innate ideas, and if no innate ideas then no innate principles. The doctrine is wholly discredited. Why then do men persist in it? The answer must be that it gives a show of authority and finality which teachers and preachers can put to effective use. The doctrine 'eased the lazy from the pains of search and stopped the inquiry of the doubtful concerning all that was once styled innate; and it was of no small advantage to those who affected to be masters and teachers, to make this the principle of principles—that principles must not be questioned; for, having once established this tenet, that there are innate principles, it put their followers upon a necessity of receiving some doctrines as such; which was to take them off from the use of their own reason and judgement, and put them upon believing and taking them upon trust, without further examination; in which posture of blind credulity they might be more easily governed by, and made

¹ I. iv. 3.

useful to, some sort of men who had the skill and office to principle and guide them.'¹ The doctrine of innate ideas is thus seen in its true light as a buttress of obscurantism. The first step in the theory of knowledge must be an emphatic denial of it, even though there be reckoned amongst its adherents many worthy and learned men. Accordingly, in setting out his own account of knowledge, of its nature and extent, Locke begins by denying innate knowledge. He will only make appeal to 'men's own unprejudiced experience and observation'.

II

We must now inquire as to the opponents whom Locke has in mind in Book I. Against whom is the polemic directed? This is a question which has vexed many, and the answers given today are somewhat confusing. It is not difficult to understand the reason for this. The traditional answer accepted by all until the middle and end of the nineteenth century was that Descartes and the Cartesians were being attacked. But when scholars came to realize Locke's own debt to Descartes and rediscovered the rationalist elements in his writings, and when they examined Descartes on innate ideas more closely, they felt that this answer was unsatisfactory. But if Locke is not attacking the Cartesians, whom, then, is he attacking? The only person mentioned is Lord Herbert of Cherbury, but he is hardly the principal opponent, for the examination of his theory is somewhat of an afterthought, as is clear from the way in which it is introduced. The answer first proposed was that the Cambridge Platonists were the opponents Locke had in mind, and certainly some of them did uphold the theory of innate ideas in some form or other, though it is well to remember that others of the school rejected it. Von Hertling has shown conclusively, it seems to me, that the attack could not possibly have been meant for this school as a whole. Professor Gibson is very guarded in his statements, but thinks that if Locke had any particular group in mind it was the university teachers of his day. It is certainly true that Locke was thinking of these teachers, as is obvious, for instance, from the closing sections of Book I,

¹ I. iv. 24.

but I hardly suppose that Professor Gibson wishes us to believe that the attack was meant solely for them. The difficulty of finding opponents for Locke has been so great that it has been seriously suggested by some writers that Locke, in order to make his own views clearer, began by setting up a man of straw, presenting in a concrete and vivid fashion a theory of knowledge which no philosopher had ever actually upheld, and refuting it convincingly.¹ I find it difficult to accept the suggestion. The references to 'these men of innate principles' in the text are of such a kind that they seem to me to rule out this hypothesis. Moreover, Locke was not the man to waste powder and shot on imaginary opponents.

Is it possible to come to more definite views on this matter? I believe that it is, but only through returning to the traditional answer once again, and reaffirming it, with, however, certain important modifications. In the first place, the attack is aimed at Descartes and the Cartesians. But it is also aimed with equal force at various English thinkers and teachers, moralists and theologians of his own day who, whilst not direct followers of Descartes, agreed with him in holding a theory of innate ideas. I am well aware that the reassertion of the traditional answer even in this modified manner will be accounted heresy in many quarters, but certain arguments suggest the necessity of its reassertion, and I propose now to put these arguments before the reader.

The first point—and a very important one—is that this traditional answer was established by Leibniz and Voltaire. Leibniz connected the polemic with the Cartesians in 1696 in his first short paper on Locke's *Essay*. Again, in the *Nouveaux Essais* of 1703 he opens the whole discussion of innate ideas by grouping Locke with the Gassendists as against the Cartesians and finding in him one of their most eminent partisans. (I have already quoted from the passage in question.)² The theory of innate ideas is expressly mentioned as being a matter in dispute between the two schools, and it is assumed without further ado that Locke is attacking the Cartesians. Voltaire takes precisely the same view of the situation. In his letter on Locke in the *Lettres Philoso-*

¹ For instance, Cassirer, *Das Erkenntnisproblem*, ii. 230-1, leans to this view.

² Cf. p. 31.

phiques. Voltaire praises Locke at Descartes's expense. He singles out for mention Descartes's impossible view of innate ideas and Locke's eminently successful attack upon it. He describes Descartes's theory in these words: 'He was certain that we always think and that the soul arrives in the body ready-provided with all metaphysical notions, knowing God, space, infinity, possessing all the abstract ideas and filled with fine thoughts, which it unfortunately forgets when the body leaves the womb.' Thus Voltaire also has no doubts whatever that Locke's attack is meant for Descartes. Now the evidence of these two men cannot be lightly turned aside. Leibniz had his finger on the intellectual pulse of Europe in Locke's own day and Voltaire was the prince of the learned men of the next generation. Both of them assumed without question that in Book I Locke was attacking Descartes and the Cartesians.

But if Locke had Descartes in mind, could Descartes ever have meant what Locke ascribed to him and what Voltaire, for instance, in the passage just quoted, also ascribed to him? In trying to answer this question it is first necessary to acknowledge—what I believe all commentators on Descartes are only too ready to acknowledge—that Descartes's theory of innate ideas is very vague and indefinite. I have not the space at my disposal to develop Descartes's theory in its full detail. I shall confine myself to one or two of the most important passages. There are the significant and explicit remarks which Descartes made in *Notes against a Programme*. First, in answer to the twelfth article of that programme, he says: 'I never wrote or concluded that the mind required innate ideas which were in some sort different from its faculty of thinking. . . . We say that in some families generosity is innate, in others certain diseases like gout or gravel, not that on this account the babes of these families suffer from these diseases in their mother's womb, but because they are born with a certain disposition or propensity for contracting them.'¹ And again in the same work in reply to another critic, he remarks: 'By innate ideas I never understood anything other than . . . that "there is innate in us by nature a potentiality whereby we know God"; but that these ideas are actual or that they are some kind of species different from the

¹ Descartes, *Works* (Haldane and Ross), i. 442.

faculty of thought I never wrote nor concluded. On the contrary, I, more than any other man, am utterly averse to that empty stock of scholastic entities—so much so that I cannot refrain from laughter when I see that mighty heap which our hero—a very inoffensive fellow no doubt—has laboriously brought together to prove that infants have no notion of God so long as they are in their mother's womb—as though in this fashion he was bringing a magnificent charge against me.' Descartes would likewise have laughed no doubt if he had lived to read Locke's polemic, but it is interesting in itself that the charge which Locke made later was already being made against him.

Now the above passages include an explicit denial on Descartes's part that he ever meant that children were born into the world with ideas, for instance, the idea of God, already implanted in their minds. What, then, would he have us suppose his theory of innate knowledge to mean? Two answers seem possible, and they might be supported by further quotations from Descartes's work. He seems to have meant sometimes merely this, that we have an innate faculty of knowing which he identifies with thinking. If he meant this then Locke would agree with him, for the latter admits, as we have seen, the existence of innate faculties. But, secondly, Descartes also seems to have meant that we are beings prone, as it were, to think in certain fixed ways and according to certain 'germs of thought' in the mind innately, though not in the sense that the child in its mother's womb is explicitly aware of these germs of thought. Some such view was suggested to Descartes by the necessity and universality of these truths. This view Locke attacked. He does not deny the element of necessity in such truths, but he does deny that this is an argument for calling them innate in *any* sense, even if all we mean to say is that we do not gain such truths in the same way as we gain other truths. It is frequently forgotten that Locke does attack this view of innate knowledge as well as the cruder kind which, in the passages quoted, Descartes claims should not be attributed to him.

But, now, is Descartes's claim in these passages justified? It is clear that in his own day he was supposed by some opponents to have taught that when the soul enters the body in the womb it

already possesses the explicit knowledge of certain truths in addition to its possession of the faculty of thinking, and we have seen that Voltaire later did not hesitate to ascribe this view to Descartes. I should like to refer to a passage which commentators on Descartes neglect but which Voltaire, for instance, might very well have had in mind. Moreover, the passage is doubly interesting since it is part of Descartes's reply to Gassendi, who wrote the fifth set of objections to Descartes's system in 1641.¹ In the course of his criticisms Gassendi remarks that he finds it difficult to believe that the mind is always thinking, and particularly that the mind had thoughts in the womb, for he can find no evidence of this.² And his doubts here provide him with one reason for denying at a later stage³ the existence of innate thoughts and innate ideas and for suggesting that all ideas are adventitious. Now Descartes in his reply finds the attribution of this view to him, that the mind has thoughts in the womb, neither strange nor unfair, but apparently acquiesces in it. 'You have a difficulty, however, you say as to whether I think that the soul always thinks. But why should it not always think, when it is a thinking substance? Why is it strange that we do not remember the thoughts it has had when in the womb or in a stupor, when we do not even remember the most of those we know we have had when grown up, in good health, and awake?'⁴ Now, are these 'thoughts' which are in the womb innate ideas? Does he mean thoughts of God, of extension, and the rest? In fairness to Descartes we might point out that it is possible that all that he means here are such prenatal experiences as feeling hungry or cold, experiences whose existence Locke himself recognizes. But there is nothing to show that he had such experiences in mind, and the word *cogitationes* which he used here (translated 'thoughts') is more suggestive of Voltaire's *belles connaissances* than of prenatal experiences such as hunger. The passage does seem to provide a possible foundation, at least, for

¹ Incidentally, the reader who finds himself unable to procure a copy of Gassendi's work may gain some knowledge of his general position by reading his long and careful criticism of Descartes. Cf. Haldane and Ross, ii. 135 ff.

² *Ibid.* 141.

³ *Ibid.* 153.

⁴ *Ibid.* 210. Adam and Tannery, vii. 356, '... quid miri quod non recordemur cogitationum quas habuit in matris utero . . .'; cf. also the *Reply to the Fourth Objection*, *ibid.* 115.

the theory of innate ideas in the crudest form, and his opponents can hardly be blamed for assuming that Descartes was committed to it. Again, less eminent members of the Cartesian school were probably more definite in their avowal of the theory. It is well to remember that Locke was in an excellent position to judge of the dispute. He spent some years in the company of Gassendists and Cartesians and listened to their arguments.¹ He came away with the impression that some of the Cartesians (and perhaps Descartes himself) on occasion did hold that we are born knowing certain truths, and he attacked this view. He also realized, of course, that this was not the only form of the argument, that the theory of innate ideas was being put forward in addition as a very vague explanation of necessity and universality, and he pays attention (though perhaps insufficient attention) to this further aspect of the theory.

Thus there is very substantial evidence in support of the view that Locke was attacking Descartes and the Cartesians. But they were not the only people he had in mind. Those university teachers who still followed the narrow scholastic tradition held that knowledge begins with 'maxims' from which we deduce other truths syllogistically. These maxims, they held, were known innately and could never be doubted. Locke himself admits that they cannot be doubted, but not because they are innate. It is clear from the final chapter of Book I that Locke is attacking this scholastic view. Again, some of the Cambridge Platonists held to the doctrine of innate ideas, though never, so far as I can see, in its cruder form.² For instance, there can be little doubt that Locke was acquainted with the statement of the theory in the seventh chapter of the first book of Henry More's *An Antidote against Atheism* (1653), for the instances given at the end of this chapter are just those speculative principles which Locke himself

¹ He certainly knew their point of view intimately before he visited France, and in France he would become still better acquainted with it.

² Henry Lee, who published his *Anti-Scepticism* in 1702, was unaware of a theory of innate knowledge in the crude sense, and he was probably well acquainted with the English form of the theory. Discussing Locke's polemic in the preface of his book, he remarks: 'All which I think might have been saved, in the strict sense which he puts upon the word *innate*; for therein surely he has no adversary.'

discusses. But not all the Cambridge Platonists advocated the theory, and none of them, perhaps, was excessively enthusiastic about it.¹ However, it was felt that it was necessary to posit some sort of innate knowledge of God, and it is clear that, vague as the doctrine was, it was a very popular one at the time. Locke's polemic caused men to think out the matter afresh, and to speak more warily. And it is an interesting piece of information which Molyneux sends on to Locke in September 1696: 'He that, even ten years ago, should have preached that *idea Dei non est innata* had certainly drawn on him the character of an atheist; yet now we find Mr. Bentley very large upon it in his sermons.' So also on the Continent, it is instructive to note how very careful Leibniz is to dissociate himself from the Cartesian account, even though he still sees the need of a theory of innate knowledge.

The conclusion to which we seem driven, then, is that Locke's polemic was meant for the Cartesians, for the schoolmen, for certain members of the Cambridge Platonists, and for those others, Herbert and the rest, who advocated the theory of innate ideas in any way.

III

There remains the task of estimating the polemic's worth. Now if all it contained were the denial of the theory of innate knowledge in the strict, explicit sense, it could hardly claim to have great intrinsic value. This, however, is not all that it does contain, though, unfortunately, Locke was so enamoured of his criticism of innate ideas in the cruder sense that he over-elaborates it. The truth is that Book I is badly written. It emphasizes the relatively unimportant and neglects the important. Locke had found the Cartesians and others vaguely talking about thoughts in the womb and had realized that only their vagueness saved them from absurdity. He proceeds at great length to develop this point and to prove a position so obvious that one or two brief paragraphs would have sufficed. The result is that the balance of the polemic is lost. Insufficient attention is given to problems far more important than

¹ Robert South and Matthew Hale, not Cambridge Platonists, might be named as other writers whom Locke may have had in view.

whether a child knows the law of identity in the womb. Not that Locke wholly neglects them, for he is aware of them and does touch upon them, but without giving them the attention they deserve.

Bearing this in mind, we may proceed with the examination of the polemic. In order to make the matter clear it is first necessary to state precisely what Locke is, and what he is not, denying, for it is easy to be confused here. To begin with, Locke is not denying prenatal experiences. He recognizes that the child in the womb may experience hunger.¹ But such an experience is not different in kind from the post-natal experience of feeling hungry. Nor, again, does Locke deny what psychologists today term innate dispositions. He nowhere discusses such things as tropisms,² reflexes, and instincts. Once, when Pierre Coste mentioned instinctive knowledge in animal life as needing explanation, he replied a little tartly: 'Je n'ai pas écrit mon livre pour expliquer les actions des bêtes.'³ His attitude here may be criticized. It is possible that much insight might be gained into the cognitive side of our nature by studying the lowlier forms of psychical activity. But in Locke's opinion, as in the opinions of his opponents, the theory of innate knowledge was meant to explain cognition at its highest and best, something far beyond the reach of animals. Indeed, it was just because this cognition was thought so excellent that it was necessary to introduce a fresh, non-natural faculty, pertaining to the inner essence of the soul of man, in order to explain it. Nothing that Locke says here in any way affects instinctive knowledge, if it exists, or, again, innate dispositions. He admits the latter, for instance, the innate disposition to seek the pleasant and avoid the painful. It is no theory of innate dispositions which he attacks in attacking innate knowledge. He is there concerned with what claims to be supra- rather than sub-rational.

It would be a complete misunderstanding, therefore, to suppose that Locke's denial of innate knowledge involves any denial either of prenatal experiences or of innate dispositions. But we must now

¹ Cf. *Essay*, II. ix. 5-6.

² Unless II. ix. 7 provides an instance.

³ Fraser's edition of the *Essay*, I. 205, n. 2.

refer to a misunderstanding in this connexion which is even graver and far more serious in its consequences. It is frequently assumed that Locke's denial of innate knowledge is equivalent to the assertion that the one kind of knowledge which exists is sensory, where sensory knowledge means seeing colours, hearing sounds, and so on. Locke holds that all knowledge is acquired and none innate, and by acquired knowledge he is wrongly assumed to mean sense-experience, and nothing more. The outcome of the polemic against innate ideas according to this view is a pure sensationalism. Now there is nothing in the text to justify the very big assumption that is being made here. On the contrary, when he talks of our knowledge of the speculative principles in the course of the argument he obviously does not mean that this knowledge is sensory in the narrow sense explained above. From the context it is quite clear that he has something like the intuition of Book IV in mind. I cannot see that there is anything in Book I which contradicts the theory of knowledge put forward in Book IV (whatever be the case with Book II) though, of course, it is necessary to admit that this theory of knowledge is not at all explicit in Book I. But when Locke denies innate knowledge he is not saying that the only kind of knowledge is sensory.

This point needs to be emphasized. All knowledge is acquired, certainly, but it is acquired by intuition or demonstration. As we shall see later, with the exception of our sensitive knowledge of the existence of external objects, sensation, in Locke's view, is not so much knowledge as the provider of materials for knowledge, which latter is either intuitive or demonstrative. So far is Book I from being sensationalist in the narrow sense that it hardly admits that sensing is knowing. It is, indeed, a very grave error to hold that Book I is sensationalist and that Locke in denying innate knowledge is denying intuition and demonstration.

Just as Locke is denying neither prenatal experiences nor innate dispositions, so also he is not denying the possibility of rational knowledge by intuition or demonstration. What, then, does Locke deny and what does he assert? The polemic establishes two points. First, we ought not to talk of truths known innately unless we are prepared to go the whole way and accept the view that a child at

birth knows the principle of identity. In other words, we ought not to use the term innate knowledge unless we mean innate knowledge in the strict sense. It has a plain meaning in English, and if we do not mean this we ought to use some other term. If, indeed, we are prepared to go the whole way, then Locke thinks our position absurd, and in this he is surely justified. In pointing out that Locke over-emphasized this side of the polemic one does not wish to deny either its soundness or its real value. Comparatively speaking, however, it is very much less important than the second point which Locke was also trying to make. The second point is this: We can explain all the knowledge the human mind ever gains in terms of sensation, intuition, and demonstration. Beyond these no appeal is ever necessary or even possible, so far as concerns human knowledge. A further type of knowledge, namely, innate knowledge, is superfluous.

To talk concretely we may consider the principle of identity. How do we know it? It is not so implanted in our minds naturally that we know it at birth in an explicit manner. Moreover, it is not there in our minds in a potential sense waiting to be actualized. This latter explanation is as unsatisfactory as the first. For knowledge is not sometimes a discovery and sometimes actualization of the potential within. Knowledge is always discovery. We discover by intuiting, by demonstrating, or sometimes, as Book IV will explain, by sensing. Actually we discover the principle of identity, Locke thinks, by intuition, and the mysterious fourth type of knowledge need not be dragged in to explain it.

Is this equivalent to a denial of the *a priori* in general? This term, *a priori* knowledge, which Locke himself never uses, is ambiguous, so much so that it is possible to assert that Locke both denies and asserts *a priori* knowledge. For if we mean by it a type of knowing which is other than all acquired knowing, if we mean by it a knowing of principles whereby we order experience, a knowing which is logically prior to that experience itself, then Locke emphatically denies such knowing. The only principles which Locke recognizes, namely, necessary relations between ideas, are themselves disclosed in experience in Locke's view (though this does not mean that they are disclosed to sensation

—or, again, by induction). On the other hand, if we mean by *a priori* knowledge a knowledge having an object, that carries with it universality and necessity, then Locke acknowledges the possibility of *a priori* knowledge. But the universality and necessity are in no sense inherent in the knowing mind, they are characteristics of that which is discovered. Thus Locke in denying innate knowledge is not denying the *a priori* in this second sense. At the same time, it should be immediately added that his analysis of knowledge of the necessary in Book I is most inadequate. He will not accept the view that innate knowledge is essential to explain necessary knowledge, yet at this stage of the argument he puts forward no alternative theory. We must wait until he has developed his theory of knowledge in the rest of the *Essay* before being in a position to judge the matter fairly. Book I, after all, is destructive and negative. Except by implication, it offers no positive theory.

Its value then consists, firstly, in showing the absurdity of a theory of innate knowledge in the crude sense; secondly, in suggesting that human knowledge can be explained in its entirety in terms of sensation, intuition, and demonstration. Both these points are valuable, particularly the second, but we have yet to see whether this second point is substantiated by the rest of the *Essay*. The practical bearing of the polemic too should not be forgotten; it aimed a shrewd blow at the obscurantism of the day in religion and morality and made fresh thinking in these fields essential.

III

THE NATURE AND ORIGIN OF IDEAS

No term is met with more frequently in Locke's pages than the term *idea*, and to understand his philosophy and his theory of knowledge it is first necessary to understand his usage of this term. It is, indeed, the central conception, both of Locke's own philosophy and of English empiricism in general after Locke. Without this conception and the theory built around it both Berkeley's idealism and Hume's scepticism, it is not too much to say, would have been impossible. It therefore deserves serious attention, and I propose in this chapter, first, to explain the nature of Locke's *idea*; secondly, to discuss his account of its origin, together with the distinction between simple and complex ideas; thirdly, to discuss the further distinction between ideas of primary and those of secondary qualities.

I

Locke is aware of the importance of the term in his philosophy and so defines it carefully at the opening of the *Essay*. 'It being that term which, I think, serves best to stand for whatsoever is the object of the understanding when a man thinks, I have used it to express whatever is meant by *phantasm*, *notion*, *species* or whatever it is which the mind can be employed about in thinking.'¹ The *idea* then, for Locke, is 'the object of the understanding when a man thinks', where 'thinking' is used widely to cover all possible cognitive activities. He expressly includes within the connotation of the term, first, phantasms, that is to say, sense-data, memories, and images; secondly, notions, to cover the more abstract concepts; and, lastly, species, whether sensible or intelligible.² In the controversy with Stillingfleet he admits that he has no special liking

¹ I. i. 8. Cf. Descartes's 3rd Reply, A. T. 181: '... omni eo quod immediate a mente percipitur'. In the Stillingfleet Correspondence Locke acknowledges that he uses 'idea' as Descartes does. Similar accounts of *idea* are found in many contemporary writers, e.g. Malebranche.

² On sensible and intelligible species cf. Hamilton's edition of *Works of Thomas Reid*, Note M, 'On the Doctrine of Species'; cf. also article on 'Species' in the *Catholic Encyclopaedia*.

for the term *idea* itself but that after working with various terms he has found this the most convenient of all those which were possible.

One criticism which has rightly been directed against Locke in this connexion is that he has included far too much within the connotation of this one term. Sense-data, memories, images, concepts, abstract ideas differ from each other greatly, and to call them all by the same name is to invite confusion. Locke wanted a comprehensive term to embrace all the immediate objects of the understanding, but his use of the word *idea* in this exceedingly wide manner does lead to ambiguity.

It is frequently argued, however, that in his actual usage Locke goes beyond even these wide bounds, and sometimes means by *idea* not so much an object of thinking but the thinking itself, the perceiving of the object.¹ Were this criticism justified, Locke would certainly be guilty of a grave inconsistency, since his definition confines *idea* entirely to the objective side. But I doubt whether it is justified. It is perfectly true that Locke used the word *perception* to mean both the perceiving and what is perceived. But does he ever use the term *idea* to mean explicitly the perceiving as opposed to what is perceived? Of course, there is the whole group of ideas known as 'ideas of reflection', that is, the ideas we have of the activities and operations of the mind. But these are still objects for Locke, and the difficulty in connexion with them is the perennial one of how subject can be object to itself. Granted this, there is then no inconsistency in respect to such ideas; they also are still objective. When Locke does want to talk of the apprehending or the perceiving he usually speaks of 'having ideas'. I doubt whether a single unambiguous instance of the explicit identification of *idea* with the perceiving can be found.

On the whole then it would seem that in this respect Locke uses the term *idea* consistently and means by it the immediate object of perception and of thought. But further inquiry as to the nature of this object meets with grave difficulties. For, in the first place,

¹ This criticism is put forward by Reid, Gibson, Husserl, Ryle, and others. Cf. Gibson's *Locke's Theory of Knowledge*, p. 19: 'The idea for him is at once the apprehension of a content and the content apprehended.'

the idea is said to be 'in the mind', and yet its precise relation to the mind is not easy to determine. Of all the ambiguous phrases used by philosophers this phrase 'in the mind' is surely the most ambiguous. For the ideas are not themselves mind, nor yet are they non-mental, but they are supposed to possess, as Professor Alexander has explained,¹ 'a twilight existence' of their own between the mind and the physical objects of the natural world. In the second place, the confusion is increased by the fact that *idea* may mean two things. It is a representation, representing either an existence or a quality of an existence in the physical world outside, or, secondly, it is a universal, a logical content. We shall consider Locke's theory of universals later, and until it has been considered it is not possible to make the nature of idea as universal wholly clear. For the present we may confine our attention to idea as representation. But we note now that Locke also means by *idea* a universal, a logical content or meaning. We may refer at once to that interesting passage in the controversy with Stillingfleet. When Stillingfleet had found some difficulty in making clear to himself what ideas of matter, motion, duration, and light he possessed, Locke remarked to him: 'If your Lordship tell me what you mean by these names, I shall presently reply that there, then, are the ideas that you have of them in your mind.'² The idea of matter is what I mean when I use the word *matter*. But it is then extremely difficult to identify 'idea' in this sense of the term with any semi-psychical entity or any 'twilight existence'. We must return to this question later. But the fact that Locke uses the word in this dual sense is not likely to add to clarity of thought.

Now this varied and confusing use of the term *idea* is very largely the consequence of Locke's adoption of the representative theory of perception and knowledge, and it is necessary here to show in what sense he accepted this theory and to what use he put it. Knowledge of the real, the theory asserts, need an intermediary object between the knowing mind and the ultimate object. This intermediary object is the one immediately given or thought and represents the ultimate object. The immediate object when I look at this table is no physical entity but an idea which represents the

¹ Alexander, *Locke*, p. 32. ² *Works*, i. 565, 'Second Reply' (1801 ed., iv. 413).

table. I know physical entities and their qualities through the mediation of ideas and through ideas alone.¹

In connexion with Locke's representationalism there are two extreme positions which we need to avoid. There is, first, the position of those who claim to find in Locke an enthusiastic advocate and, indeed, the original inspirer of the representative theory. On the other hand, there are those who argue that, despite appearances, Locke is a realist and not a representationalist. He may appear to be a representationalist occasionally, but this is not his true position. Both these views, however, may be shown to be defective.

For, while Locke does accept the theory of representative perception, he accepts it with no great enthusiasm. He is certainly not its originator. The view that he is responsible for it will not stand historical examination. It was held almost universally at the time, and held by opposing schools of thought, for instance, Gassendists and Cartesians. Locke was heir to it and it was an inheritance not wholly pleasing to him. If we take the theory in its crudest and most straightforward sense, that is, as meaning that we are acquainted with ideas which are exact copies of originals, then it is correct to say that in one important respect, namely, in respect of ideas of secondary qualities, Locke rejected the theory. Today its defects are perfectly plain. In the first place, given ideas only, how can we know whether they do adequately represent originals which we have never seen? To know whether the representation is correct or not one must first see the original. Locke himself seems to have been aware of this criticism, though it is not clear that he fully realized how devastating it could be. For in his *Examination of P. Malebranche's Opinion* he remarks: 'How can

¹ The full history of this theory remains to be written, but it is at least a synthesis (not necessarily made explicitly) of the medieval doctrine of *species* with that other doctrine, emphasized anew by Galileo and his successors, that things are not as they appear. In the medieval theory, for instance in Aquinas, the species is not itself the object, but that through which the object is known. With this at the back of their minds it was possible for seventeenth-century thinkers to talk of the idea as the object of perception and yet to assume that they were still in touch with the real external world. On the other hand, they insisted that the idea was the object perceived (and not that *through which* the object was perceived), for otherwise much that was central to their theory of perception, for instance the distinction between the ideas of primary and secondary qualities, would have been lost.

I know that the picture of any thing is like that thing, when I never see that which it represents?'¹ To know that the representations are faithful one would first have to see the originals and yet, if one saw the originals, seeing the representations would surely be superfluous. In the second place, the theory is defective because we have no right on the evidence before us to assert that these originals do exist. We only see the copies. How then can we possibly know that they *are* copies, copying certain originals which are never directly experienced by us? Without contradicting oneself it becomes possible to deny the ultimate object supposed to be copied by the idea, and the door is opened for idealism. Now how far Locke was aware of the full defects of this theory it is difficult to say, but there can be no doubt that he felt uneasy about its implications. The objections that he brings forward against his own position at the beginning of iv. iv reveal his uneasiness.

But if Locke felt even vaguely that the theory was inherently defective, why did he accept it? There is ample evidence in the *Essay* to show that he did, and to refute those others who think that Locke was not a representationalist. For instance, when at the opening of iv. iv he makes his doubts about representationalism clear, he immediately goes on to reaffirm it in the most explicit terms. 'Tis evident, the mind knows not things immediately, but only by the intervention of the *ideas* it has of them.'² One might argue that the account of sensitive knowledge in Book IV is inconsistent with his representationalism, and this may be so. Also Locke sometimes speaks loosely; for instance, he talks of ideas as if they were qualities in physical things, so that in having ideas we are in immediate contact with the external world. But for such loose talk, it is interesting to note, he apologizes beforehand: 'which *ideas* if I speak of sometimes as in the things themselves, I would be understood to mean those qualities in the objects which produce them in us'.³ His philosophy is certainly representationalist; and it is significant that in the very same paragraph as that

¹ § 51. *Works*, iii. 465 (1801 ed., ix. 250).

² iv. iv. 3, and cf. also ii. xxix. 8: '. . . our ideas which are, as it were, the pictures of things'.

³ ii. viii. 8; and for an instance of this loose language cf. ii. xxi. 1.

in which he apologizes for these lapses he modifies his definition of *idea* slightly so as to bring it more definitely into line with his representationalism: 'Whatsoever the mind perceives *in itself* or is the immediate object of perception, thought, or understanding, that I call "idea".'¹

But, again, if Locke knew the defects—or some of the defects—of the theory of representative perception why did he accept it? The only possible answer is that he must have felt there was no other alternative. It is indeed most difficult for the realist, who wishes to maintain that there are physical objects in the external world independent of the mind knowing them, to avoid representationalism or some sort of perceptual dualism. *Prima facie* there is a great deal of evidence for ideas in Locke's sense. I see the moon the size of a florin, or to speak more precisely, I see a white circular patch looking as big as a florin looks at arm's length. I know (or claim to know) that the real moon is a sphere of large dimensions. But the moon cannot at the same time both be and not be the size of a florin, and if the real moon is not the size of a florin what is the object which I see of that size? If it be answered that it is an appearance of the moon then this is what Locke means by *idea*, and we are admitting the dualism. In the same manner, when we ask where the moon the size of a florin is, Locke, in spite of the unsatisfactoriness of the answer, could find no other than that it was 'in the mind'. The circular patch of white the size of a florin does not fill the space that the real moon fills nor, presumably, does it fill part of that space. It is not where the moon is, nor can we suppose that it is in the intervening space between the moon and my body. It cannot be on the retina of my eye, since the whole of the latter is much smaller than the size of a florin, and it seems absurd to think that there is a white patch the size of a florin inside my brain. What then can we say except that the moon the size of a florin is in my mind, meaning that it is in the same place as is the image of the moon which I now imagine? Perhaps, we ought not to ask, 'Where is the object I see?' just as we should not ask 'Where is the image I imagine?' since we thereby presuppose that these objects are somewhere

¹ II. viii. 8. (The italics are mine.)

in space. But if we do ask the question, there is certainly a strong *prima facie* case for the answer Locke and his contemporaries gave.

Locke accepts the theory of representative perception, then, not because he is over-fond of it, but because he finds it inevitable. It is in this tone that he always speaks of it, as witness the interesting passage in his second reply to Stillingfleet: 'Not thinking your Lordship, therefore, yet so perfect a convert of Mr. J. S[ergeant]'s that you are persuaded that as often as you think of your cathedral church or of Des Cartes's vortices, that the very cathedral church at Worcester, or the motion of those vortices itself existed in your understanding; when one of them never existed but in that one place at Worcester and the other never existed anywhere *in rerum natura*; I conclude your Lordship has immediate objects of your mind, which are not the very things themselves, existing in your understanding; which if, with the Academics, you will please call representations, as I suppose you will, rather than, with me, ideas, it will make no difference.'¹ He supposes that Stillingfleet would not quarrel with him in his representationalism. What was new in the 'new way of ideas', as is obvious from the correspondence, was not representationalism but the stress on sensation and reflection as the sole source of materials for knowledge, in other words the thorough-going empiricism.

Locke thought, then, that some sort of representationalism and dualism was inevitable. At the same time he does not accept the copying theory in its crudity; for him representation or idea does not necessarily signify copy. Moreover, as we have seen, some ideas do not appear to be representative, but to be logical meanings, complete in themselves and pointing to nothing beyond themselves, while, as will become clearer, even representations are to some extent universals as well. Thus, while Locke accepts representationalism as his own general standpoint, he modifies it considerably and criticizes it.²

From the foregoing it will be easily understood that ambiguities

¹ *Works*, i. 554; *Second Reply to the Bishop of Worcester* (1801 ed., iv. 390-1).

² On the further question, In what sense, if any, is the idea of reflection representative? cf. p. 130 below.

in connexion with the term *idea* can hardly be avoided. It follows that it is almost impossible for Locke to give a coherent and satisfactory account of the relationship between idea and mind. The former is object, the latter subject. Yet ideas are 'in the mind'. It has been suggested that this merely means that they are experienced by mind. But it must mean more than this, for the question of existence is involved. Locke opposes such objects to those that are 'without the mind' and independent of it. The latter exist in a real world of physical objects, but the former exist in the mind only. Consequently, *the mind* itself has a double meaning. It is the knowing, the experiencing, and the willing agent; but it is also the place of ideas. In the first sense mind perceives the ideas, in the second it contains them. This phrase 'in the mind' obviously requires the most careful handling, but, unfortunately, Locke uses it freely in the *Essay* without explanation and without examination. In the *Examination of Malebranche* he argues that the idea cannot itself be mind or spiritual substance (for the latter is usually taken to be unextended and so could never represent extended things). Nor, again, can it be a modification of spiritual substance (for then on my seeing white and black the mind would at the same moment and in respect to the same part of it be both black and white). The ideas are 'in the mind', he here holds, as being seen by the mind.¹ But that is precisely the difficulty. The mind does not see the real physical object. It sees an object which somehow exists in the mind, and yet it is not the mind itself, nor a modification of the mind. The phrase 'in the mind' is highly ambiguous, nevertheless it is essential to Locke's theory of ideas—just as Berkeley's very idealism rests upon it and would be impossible without it.

We conclude, then, that the term *idea* is used ambiguously by Locke and that it is not possible to give a single definition of it. On the one hand, it is a semi-psychical, momentary existence 'in the mind'. Yet what sort of existence it there possesses it is most difficult to say, being neither spiritual substance nor a modification of spiritual substance. The only point which is clear is its function.

¹ *Examination of Malebranche*, § 18; cf. also § 39 and *Remarks upon Mr. Norris*, § 2.

It represents an externally existing entity, although again that representation may not be exact in all particulars. On the other hand, Locke may also mean by *idea* a universal meaning, a term of a proposition, a logical content. It is clearly a most ambiguous word which Locke ought to have analysed with greater care. In studying the matter, particularly in the light of subsequent developments, one cannot avoid the intriguing, and surely not wholly foolish, reflection that if Locke had analysed this concept more rigorously and more adequately, the idealism of Berkeley might never have come into being.

II

The next question to be considered in connexion with ideas is one of origin. How does the mind gain its ideas? The first book of the *Essay* has shown that none of them is present innately. They are all acquired. 'Let us then suppose,' Locke says,¹ 'the mind to be, as we say, white paper, void of all characters, without any *ideas*; how comes it to be furnished? Whence comes it by that vast store, which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer in one word, from *experience*: in that all our knowledge is founded and from that it ultimately derives itself.' Locke proceeds to analyse experience into sensation and reflection, and adds: 'These two are the fountains of knowledge, from whence all the *ideas* we have, or can naturally have, do spring.'²

We may postpone consideration of ideas of reflection to a more appropriate occasion, and turn immediately to ideas of sensation. In the opening sections of the *Essay* Locke has already remarked that he does not propose to inquire into the correlates of sensation on the physical and physiological side. He will not trouble 'to examine . . . by what motions of our spirits, or alterations of our bodies, we come to have any sensation by our organs, or any *ideas* in our understandings'.³ Instead he proposes to adopt the

¹ II. i. 2.

² Ibid.

³ I. i. 2.

'historical, plain method', that is, to accept facts as they are without seeking ultimate explanations. The fact he now accepts is that we do have ideas in sensations.

This is what he proposes to do in theory, but actually his procedure as he develops his argument in the second book is very different. For the account of the origin of ideas rests upon a theory of sensation, never fully asserted in the *Essay* it is true, but none the less always implied. The description of sensation in II. i. 3 is very vague: 'Our *senses*, conversant about particular sensible objects, do *convey into the mind* several distinct *perceptions* of things, according to those various ways wherein those objects do affect them.' The keyword here is the word 'convey'. The senses convey perceptions into the mind according as they are affected by things outside. Locke himself, however, can see that this explanation is inadequate and tries again: 'When I say the senses convey them into the mind, I mean, they from external objects convey into the mind what produces there those perceptions.' The senses now convey into the mind not perceptions but something that can produce perceptions. Clearly Locke is none too happy in his account of sensation. But the kind of explanation which he wishes to give can be gathered from these remarks and from subsequent passages in Book II, especially the chapter dealing with primary and secondary qualities, where 'physical inquiries' become necessary 'to make the nature of sensation a little understood'.¹ The explanation which he seems to presuppose runs somewhat as follows: In the world of nature are certain physical objects, composed of a very great number of corpuscles. These affect our sense-organs by emitting effluences or species which strike the sense-organs. This affection is then carried on to the brain, which in turn affects the mind. The consequence is the idea in the mind. Now Locke nowhere teaches this theory explicitly. He is too well aware of its difficulties.² In the *Examination of Malebranche*, where he actually discusses it, he is careful not to accept it outright; none the less he is obviously more inclined to this explana-

¹ II. viii. 22.

² He gets nearest an explicit statement, perhaps, in II. viii. 13; cf. also IV. ii. 11-13.

tion of sensation than to any other of those which Malebranche puts before his reader. In so far as he does accept it, it is well to note, he makes three assumptions, which are never proved in the course of the *Essay*, first, that such physical objects exist, that is, he assumes a realism; secondly, that the brain being affected affects the mind, that is, an interactionist theory of the mind-body relation; thirdly, that perception is brought about causally by the action of physical objects on the mind through the brain.

But while Locke is compelled to base his account of sense-experience upon some theory of this sort, he is not really interested in speculations about the correlates of sensation as such, and so far as he can avoids them. His real interest lies in his attempt to establish his empiricist thesis. The theme of Book II to which he returns over and over again is man's dependence upon sensation and reflection for the beginnings of knowledge. He classifies ideas in order to show that all of them are ultimately derived from experience. He analyses them only so far as is necessary to prove the same thing—and this, incidentally, is the reason why Locke's analyses in Book II are frequently so inadequate. He digresses, but always returns to the main theme; and it is almost amusing to observe his anxious efforts to drag in his central thesis before closing some of his chapters. The whole purpose of Book II is the establishment of the empiricist position.¹

Since this is so, it is important to make clear the nature of Locke's empiricism, particularly in view of the fact that this theory of his has in the past been sometimes expounded in unsatisfactory ways. I may mention two interpretations which are, in my opinion, particularly misleading. For the first, empiricism is identified with what may be called sensationalism in the narrow sense. According to this kind of sensationalism we know the external world in the act of sensing and know it *only in this way*. When I open my eyes and look around me my seeing is knowledge. I see the world as it is in its full reality. And as much as I ever shall know of it I know in this way. Now Locke's empiricism

¹ The last five chapters of the book, however, form an exception. There he discusses ideas from the point of view of their clarity and adequacy rather than of their origin. But these chapters are a sort of appendix and, as the drafts show, they were not an original part of Book II.

is not to be identified with sensationalism in this sense. It is true that Locke does say in Book IV, as we shall see, that we know the *existence* of things in sensing. But this is very different from saying we know the full nature of those things in sensing. It is true also that he does occasionally imply that we know in sensation many of the qualities of existing things and many coexistences of these qualities. But this again is very different from asserting that knowing is to be identified with sensing and that there is no knowing apart from sensing. So far from being the only knowledge we have of the external world, sensation, as Locke usually conceives it in Book II, provides no knowledge of that world. It provides the 'materials' for knowledge; it fills the mind with ideas. But knowledge comes later. This is the prevailing view of Book II and indeed of the whole *Essay*. It is only explicitly denied when the fact of existential knowledge compels Locke, in spite of his main theory of knowledge, to recognize that sense-perception (not to be identified with bare sensing) is itself a knowing. Even then it is only one sort of knowing and a rather doubtful sort at that. If sensationalism be defined in the narrow sense described above, it is surely false to identify Locke's empiricism with it. His empiricism is no sensationalism, and yet many who read Book II hastily and do not bother to understand Books III and IV, mistakenly write it down as such.¹

We may pass to the second misinterpretation. Locke's empiricism is frequently identified with his compositionism. This is the theory that we begin with simple ideas which are given us in the course of experience. We then take some of these and combine them into complex ideas, but all complex ideas are combinations of simple ideas first given in experience. Empiricism, according to this view, is the belief that all ideas are either simple in the sense of being given in experience, or compounds of such simples. Now this interpretation is more dangerous than the former because it is supported by a good deal that Locke actually says in the text. None the less, it is, in my opinion, unsound interpretation, and that because it confuses what is incidental to Locke's empiricism with what is essential to it. The compositionism is

¹ Cf. also *First Reply to Stillingfleet*, *Works*, i. 363.

not itself the empiricism. It is the outward garb in which the empiricism appears. It is not difficult to show that Locke's distinction between simple and complex ideas is inadequate and, indeed, breaks down in the course of the *Essay*. But whilst admitting this, as one must, I wish to maintain that Locke's empiricism remains in its essentials untouched by such criticism. For it cannot rightly be identified with that distinction between simple and complex ideas, in which he tries to express it.

In setting forward the distinction Locke was once again accepting current fashion. The guiding concept of the age was that of composition. Since Descartes's day, at least, stress had been put on the need for analysing the complex into its simple parts. Things were assumed to be either simples or compounds and the task of the scientist was to reveal the elements out of which the compounds were made. Locke would be quite familiar with the method in the sciences, and when later he applied it to the study of mind and its ideas, there was precedent here also for his procedure. Indeed, Hobbes, as the *Elements of Philosophy* makes clear, had already used the method in this realm with a degree of thoroughness to which Locke never attained. Yet Locke too was committed to this theory and it provided the framework for Book II, even though the distinction between simple and complex ideas was finally more of a hindrance than a help to him. That the latter was in fact the case is clear on following Locke's argument. For, first, he failed to make the conception of a simple idea, and so the distinction between simple and complex, wholly clear to himself. Secondly, such distinctions as he was able to make between simple and complex ideas broke down as the work developed. Thirdly, the class *complex ideas* could not possibly contain all the ideas which according to this theory it was supposed to contain.

Locke failed to make the nature of the simple idea clear to himself largely because he meant by the term *simple idea* two quite distinct things: (a) the *given*, (b) the indivisible, the atom. Generally speaking, the simple idea is that which the mind receives;¹

¹ Cf. II. i. 20-25. In receiving the simple ideas the mind is said to be passive (in accordance with traditional teaching). But Locke does not use the terms

the complex that which it makes, 'the workmanship of the mind'. But the simple idea is also 'the uncompounded', that which 'contains within it nothing but one uniform appearance or conception in the mind and is not distinguishable into different *ideas*'.¹ That is to say, it is the atom. And the atom may be the outcome of a process of abstraction rather than be a *given* of sensation. (a) and (b) are not synonymous, yet Locke means by the term *simple idea* sometimes the one and sometimes the other, and this fact does much to confuse his argument.

But whether the distinction between simple and complex be between what is given and what is not given or between the atomic and the composite, both distinctions break down as the argument proceeds. Frequently in the *Essay* complex ideas, as well as simple, are held to be *given*. '*Simple ideas*', he remarks, 'are observed to exist in several combinations united together'.² But this surely means that the complex idea is given. And this is no chance passage. He constantly speaks of observing ideas 'going together'. I know that the simple ideas which together frame my idea of the table do go together because I have observed them to go together.³ What then of the view that the simple alone is given? Again, Locke was compelled to admit that some ideas were simple and yet not atoms. We may take the instance of the ideas of space and time. 'Though they', he holds, 'are justly reckoned amongst our *simple ideas*, yet none of the distinct *ideas* we have of either is without all manner of *composition*; it is the very nature of both of them to consist of parts.'⁴ Thus whichever view of it we take, the distinction between simple and complex breaks down. Not everything given is a simple idea and not all composites are complex ideas.

active and passive in any very consistent way. For instance, the text of ii. i. 25 tells us that in the reception of simple ideas 'the understanding is merely passive', but in the heading of the same paragraph Locke says it is 'for the most part passive'. Again in ii. vi. 1 perception is included amongst the *actions* of the mind. What Locke means, however, is fairly clear in spite of such inconsistencies. In sensing the mind receives and does not itself create. In that sense it is passive, although in another sense receiving is itself an activity. Simple ideas are given us, they are not creations of ours. Perceptions, as opposed to sensations, may, however, involve an element of judging, cf. ii. ix. 8 and below, p. 134.

¹ ii. ii. 1.

³ Cf. ii. xi. 7, xxii. 2, xxiii. 1, &c.

² ii. xii. 1.

⁴ ii. xv. 9.

Thirdly, the class *complex idea* cannot possibly retain all that is packed into it. According to the compositional theory every idea which is not a simple is a composite idea made up of simples. But surely ideas of relation and general ideas are not composite in this sense. Locke himself came to see this and it is exceedingly interesting to note the changes which he made in the fourth edition when he had fully realized this fact. Two instances will suffice. In II. i. 5, in the first edition, he remarks of the simple ideas: 'These, when we have taken a full survey of them, and their several *modes* and the *compositions* made out of them, we shall find to contain our whole stock of *ideas*.' The fourth edition, however, drops the phrase 'and the *compositions* made out of them' and substitutes 'combinations and relations'. That is, relations are not compounded ideas but a distinct group. More significant are the additions in II. xii. 1. Here he alters the classification of ideas in certain very important respects. The difference may best be shown in tabulated form thus:

<i>First Edition</i>	<i>Fourth Edition</i>
I. Simple Ideas.	I. Simple Ideas.
II. Complex Ideas:	II. Complex Ideas.
(a) modes,	III. Ideas of Relation.
(b) substances,	IV. General Ideas.
(c) relations.	

In the fourth edition both ideas of relation and general ideas are considered as distinct classes of ideas. They are not compounded ideas. Incidentally, it is to be regretted that Locke did not rewrite Book II with this new classification in mind. Even in the first edition, however, Locke does not permit himself to be bound too closely by his classification. He conveniently forgets it when discussing ideas of relation and general ideas. In the case of ideas of reflection his thoughts about them are never guided by the simple-complex division.¹

Locke, then, begins with the compositional theory in Book II, but as his argument proceeds it becomes less and less useful. He is not greatly perturbed at this, however, precisely because he does

¹ It is true that II. xix is entitled 'Of the Modes of Thinking' but the thought of that chapter is certainly not compositional.

not think compositionality fundamental to his argument. The real purpose of Book II is not to show that all ideas are either simple or complex and that the latter are compounded of the former. The real purpose, as has been said, is to establish empiricism, and the foregoing is not empiricism.

What then is Locke's empiricism? It is the doctrine that the mind is originally white paper, upon which nothing has been written, the *tabula rasa* of earlier thought.¹ Upon it are imprinted ideas. Experience (that is to say, sensation and reflection) 'stocks' the mind. This is, of course, highly metaphorical language. It means that were we unable to sense and to reflect (or introspect) knowledge would be impossible for us. To the person blind from birth the word *red* no doubt conveys something. He has heard it discussed and may have sought to imagine its character. But what it cannot convey to him is what I now experience in looking at this red object. Ultimates are given to the mind in experience which cannot be suggested to it by description or definition, but must themselves be experienced. And Locke's point is that, whenever we think, our thought-content will be found to consist of material which may be different enough from these immediately experienced ultimates, but which is based upon them in the sense that had there been no experience, there could have been no such content in the mind. 'All those sublime thoughts which tower above the clouds, and reach as high as heaven itself, take their rise and footing here: in all that great extent wherein the mind wanders in those remote speculations it may seem to be elevated with, it stirs not one jot beyond those *ideas* which sense or reflection have offered for its contemplation.'² The ultimates given in sensation and reflection are essential as the basis of human knowledge. This is the essence of Locke's empiricism.

And if this is the doctrine of empiricism in its essentials may we not also take one further step in order to complete our elucidation of it? Locke's empiricism in this sense is surely independent of his 'idea-ism' and representationalism. The truth or falsity of

¹ Cf. Thomas Aquinas (*Summa Theologica*, i, qu. 79, art. 2): 'Intellectus autem humanus . . . est sicut tabula rasa in qua nihil est scriptum, ut Philosophus dicit in 3 de Anima, text. 14.' Also Gassendi in the passage cited above, p. 35.

² II. i. 24.

empiricism, that is to say, has nothing to do with the truth or falsity of representationalism. At one point in his argument Locke himself seems to be departing from his representationalism. It is in the discussion of sensitive knowledge in Book IV to which we have already referred. As we shall see, it is not wholly clear how far he is prepared to go. But he does seem to say that we know directly the existence of things in sensation and that we thus break out beyond ideas. In that case sense-experience is not merely having ideas, seeing colours, hearing sounds, and the like. It is also a knowledge of the *existence* of physical objects. That is to say, Locke is rejecting the view that we know through ideas only. Yet there is no reason to suppose that he wishes at the same time to reject his empiricism. He would still, no doubt, hold it to be true that all our knowledge of the external world begins with sense-experience, but that now the knowledge of the existence of a physical object is part of that sense-experience. In a similar manner, presumably, the intuition of the self which, on Locke's view, goes along with all reflection or introspection is part of the reflective experience. Now whether these theories are valid or not is not our present concern. The point is that empiricism on the above view need not entail representationalism; that the representationalism and 'idea-ism' of Book II also are but parts of the garb in which Locke tries to set out his empiricism.

To conclude, Locke's empiricism is the doctrine that for human beings sensory and reflective experience is essential if any knowledge is ever to be gained. It is not to be identified with narrow sensationalism, nor with the view that all ideas must be either simples or compounds of simples, nor again with the further view that we only know things mediately through ideas. It has to do with something more fundamental than any of these theories. It is the assertion of man's dependence upon sensation and reflection. Other beings more highly placed in the hierarchy of spiritual life may be independent of sensation and reflection. But for man the only possible foundation of the structure of knowledge is experience. Neither innately nor by 'high priori' methods alone can he hope to know. He depends upon experience and must always wait upon it.

III

One further distinction needs to be examined in order 'to discover the nature of our *ideas* the better, and to discourse of them intelligibly'.¹ This is the distinction between primary and secondary qualities. In considering this famous distinction it will be well, first, to expound the account given in the text; secondly, to link it up with previous thought; thirdly, to discuss the significance of what is indeed a very significant theory in Locke's *Essay*.

The main outlines of the theory are no doubt familiar to all who are acquainted even superficially with Locke's philosophy. The ideas we have of the qualities of things are divided by him into two classes. If we take as an example the ideas of qualities which go to make up our complex idea of an apple, we find that some of these are of qualities which belong to the apple in the sense that the apple cannot be conceived as lacking them, for instance, the apple is solid and extended. Others again are of qualities which may or may not belong to the apple, for instance, its taste, colour, smell, and so on. Now Locke calls the first type of qualities primary qualities and the second secondary qualities, and he holds that the ideas of the primary are exact representations of these qualities but those of the secondary are not so. This is the general theory. It is when we consider the details and the implications of this theory that we meet with very serious difficulties.

For, to begin with, we are perplexed here again by ambiguities, most of which are the outcome of Locke's failure to distinguish sufficiently carefully between qualities and ideas of qualities—a fault which he himself confesses and for which he apologizes.² The consequence is that many interpretations of this theory become possible, for each of which some confirmation can be found in the text. We may best proceed by first setting out the alternatives clearly. (a) We know primary qualities of things directly. By primary qualities are meant solidity, extension, figure, motion or rest, and number.³ We know the secondary qualities indirectly through our ideas of colours, sounds, smells, and so on. (b) We know the primary qualities of things directly as in (a), but secon-

¹ II. viii. 7.

² II. viii. 8.

³ This is the list given in II. viii. 9. It is occasionally varied.

dary qualities are merely ideas in the mind. (c) We have ideas in experience which exactly resemble the primary qualities, that is, we do not know these qualities directly, but have an exact indirect knowledge of them. And we have ideas which are secondary qualities, as in (b). (d) We have ideas which exactly resemble the primary qualities, as in (c), and have other ideas which it is customary to call ideas of qualities, and which we may here call ideas of secondary qualities. Actually, however, these latter ideas are not copies of external qualities. They represent (though without copying) certain powers possessed by things which cause us to have these ideas on certain occasions. These powers probably depend 'upon the primary qualities of their minute and insensible parts, or, if not upon them, upon something yet more remote from our comprehension'.¹

Now whilst the text does not rule out any of these four interpretations, the view which best accords with the rest of the *Essay* and which predominates in II. viii and elsewhere when Locke is discussing primary and secondary qualities is the fourth.² This will become clear if we summarize Locke's argument.

We must not too readily assume with the cruder kind of representationalist that every one of our ideas is an exact copy of what lies beyond it. We need to make a division of ideas into those which do exactly copy what is outside and those which do not. Now, first, we may consider the group of ideas which exactly resemble what is outside, namely, the ideas of primary qualities. In the past sufficient attention has not been given, I believe, to the very careful and deliberate language with which Locke describes the primary qualities and what we know of them. They are first said to be 'inseparable from the body in what estate soever it be'.³ All corporeal objects possess the primary qualities whatever other qualities they may or may not possess. But how have we learnt this important truth? Firstly, 'sense constantly finds [them] in every

¹ IV. iii. 11.

² Fraser would prefer interpretation (a) or (b). I do not deny that there are passages which confirm Fraser's views, cf. II. viii. 22, but there are many more which support the fourth interpretation. For a discussion of Fraser's views cf. Mr. Reginald Jackson's article on this matter in *Mind* (January 1930).

³ II. viii. 9.

particle of matter which has bulk enough to be perceived'.¹ This I take to mean that whenever we experience a physical object ideas of the primary qualities are part of the whole complex idea which we then have. Here is our first suggestion of the constant presence of these qualities in things. But Locke goes farther. Not only do we experience them in the ideas we have of those physical objects big enough to be seen and felt, but also 'the mind finds [them] inseparable from every particle of matter, though less than to make itself singly be perceived by our senses'. This is a very important addition. It means that our knowledge of the nature of corporeal objects is not confined to the information given in sensation. 'Take a grain of wheat,' Locke proceeds, 'divide it into two parts, each part has still *solidity, extension, figure, and mobility*; divide it again and it retains still the same qualities; and so divide it on till the parts become insensible, they must retain still each of them all those qualities'.² They *must* retain the primary qualities. Now it is not the senses which give Locke this information. What is the further faculty at work here, and how much does it reveal to us of the nature of the corporeal object? Before we seek to answer this question we must examine the rest of what Locke has to say about primary and secondary qualities.

Of primary qualities Locke remarks in II. viii. 15: 'Ideas of primary qualities are resemblances of them and their patterns do really exist in the bodies themselves.' Now the strange thing is that Locke nowhere offers proof of this all-important principle. Instead he devotes all his space to the attempt to show that there are no qualities in things resembling our ideas of secondary qualities. He apparently assumed that all his readers would agree with his theory about primary qualities so that there was no need for him to defend it. Consequently, there is no serious attempt to face the problem which, after the criticism initiated by Berkeley, became so real, namely, how we know that the ideas of primary qualities do resemble the qualities themselves.³ This Locke accepts as part of the theory of representative perception and merely

¹ II. viii. 9.

² Ibid.

³ He makes one or two incidental suggestions, for instance, in II. viii. 21, with which I shall deal later. Cf. p. 127 n.

states. He reserves his energies for the consideration of the other part of that theory which he could not accept.

Turning to secondary qualities, the ideas of these, we are told, do not resemble the qualities of things outside. Actually, the table is not brown, though I see brown when I look at it. This idea of brown which is mine does, however, 'represent' something. It represents those powers in the table, probably dependent on its primary qualities, which cause me to see brown. 'Such *qualities*, which in truth are nothing in the objects themselves but powers to produce various sensations in us by their *primary qualities*, i.e. by the bulk, figure, texture, and motion of their insensible parts, as colours, sounds, tastes, etc., these I call *secondary qualities*.'¹ To talk about ideas of secondary qualities is thus slightly misleading, for there are no secondary qualities in the sense in which there are primary qualities in things. This table has, Locke explains, a power to make me see brown. We are not sufficiently well acquainted with the thing to enable us to say precisely what that power is, though we may well suppose that it depends on the primary qualities of its insensible parts. Things also have a third sort of qualities, to which Locke refers, namely, the powers they have to affect other things and produce changes therein. Secondary qualities themselves are an instance of powers,² but of powers which affect our human bodies and particularly our sense-organs. We shall meet with Locke's conception of *power* later, and we need not examine it here. But these secondary qualities are a sufficiently singular group of powers to be considered alone.

To Locke's contemporaries the view that any ideas in the mind given by the senses were not resemblances of things or of their qualities was apparently somewhat novel and needed to be defended. Locke begins by reminding his readers of a group of ideas which though given in sensation are yet not usually considered to be resemblances, namely, ideas of pleasure and pain. The pain felt by the wounded man, it would be generally granted, does not at all resemble the actual wounding of the flesh. Why not extend

¹ II. viii. 10.

² Primary qualities are also powers, since all qualities are so. 'The power to produce any *idea* in our mind I call *quality*', II. viii. 8.

this to all ideas of secondary qualities? Why should they be supposed to resemble those motions in physical objects which bring them about? 'It being no more impossible', Locke adds in words curiously reminiscent of Occasionalism, 'to conceive that God should annex such *ideas* to such motions with which they have no similitude, than that he should annex the *idea* of pain to the motion of a piece of steel dividing our flesh, with which that *idea* hath no resemblance'.¹ Thus it may be possible that the ideas of secondary qualities do not resemble them. Locke now proceeds to prove this. He appeals to the mutability of the evidence of the senses. This table looks brown in one light and grey in another. This same water is warm to one hand and cold to another. Facts of this sort suggest that the ideas we have are not always exact copies. For if the table is brown then, when we see it to be grey, the idea we have on that occasion is no exact copy of the quality in the table itself. In the same manner if the water is warm it cannot also at the same time be cold. On the basis of instances of this sort Locke proceeds (somewhat dogmatically) to assert that *none* of the ideas of secondary qualities in our mind does copy the qualities exactly.² This evidence also overthrows, in Locke's opinion, the crude view that things themselves are brown, grey, warm, and the like. The latter are merely ideas in our minds, and they are ideas which do not even copy the qualities of things outside. What corresponds to such ideas in the things are so many powers to make me see brown or grey in the appropriate circumstances. A physical object, then, possesses the primary qualities, extension, figure, solidity, motion or rest, and number; it also possesses, probably as the result of its possession of the primary qualities, certain powers which influence the mind through the sense-organs and give it the ideas it has of secondary qualities.

Such is Locke's account of the distinction between primary and secondary qualities. What now of the historical background of this theory? The terms of the distinction are not original to Locke, for they are to be found in medieval speculation, at least so far

¹ II. viii. 13.

² II. viii. 15-22. The most he could say on this argument would be that not all of them do.

back as Albertus Magnus.¹ But they are there used with a different meaning. The original distinction is one between those touch-qualities which, according to scholastic interpretation, Aristotle had regarded as fundamental² and the other qualities which depend upon these primary ones. The qualities both primary and secondary are, of course, wholly objective; there is no suggestion of any dependence upon mind. To understand Locke's distinction we need to pass to modern thought, and to the re-emergence of a species of atomism in the physical science which then arose. Another doctrine of Aristotle's has become important, that of the common sensibles, which now provide the new science with its basic concepts. Galileo, Gassendi, Descartes, and Hobbes all cooperate to work out the new distinction between two sorts of qualities, those which are essential to physical things and those which are subjective, and not in the physical things themselves.

It is Robert Boyle, however, who first expresses the new distinction in the old scholastic terminology. In 1666 Boyle published *The Origin of Forms and Qualities, according to the Corpuscular Philosophy*. In this work he regards matter as one in nature throughout, 'a substance extended, divisible, and impenetrable'. Within matter, however, changes occur as a consequence of motion, and the one matter becomes many different bodies. But however much these material bodies differ from each other they lose none of their essential properties. 'And since experience shows us that this division of matter is frequently made into insensible corpuscles or particles, we may conclude, that the minutest fragments as well as the biggest masses of the universal matter are likewise endowed each with its peculiar bulk or shape. For being

¹ Cf. Clemens Baeumker, 'Zur Vorgeschichte zweier Lockescher Begriffe', *Arch. Gesch. Phil.*, vol. xxi (1907-8), pp. 296-8 (a discussion of the phrase *tabula rasa*) and pp. 492-517. In vol. xxii (1908-9), p. 380 there is a further note with an apt quotation from Albertus Magnus (ed. Borgnet, v. 473 b). 'Dicuntur autem istae quatuor *qualitates primae*, quia non fluunt ab aliis, sed omnes aliae qualitates sive contrarietates proveniunt ex ipsis. . . . Et sic patet quod una contrarietas non dependit a reliqua; quare, ut dictum est, *qualitates primae* dicuntur. *Secundariae* autem sunt quae causantur ab istis, scilicet durum, molle, dulce et amarum, album et nigrum et similia.' St. Thomas also talks of *qualitates primae* in the same sense.

² *De Anima*, ii. and iii. Certain touch-qualities are 'primary differences', particularly hot and cold, wet and dry.

a finite body its dimensions must be terminated and measurable and though it may change its figure yet for the same reason it must necessarily have some figure or other.' In the same manner it must be in motion or at rest. But there is another group of qualities which for Boyle are subjective. These qualities only exist as the consequence of the existence of 'certain sensible and rational beings that we call men'. 'The figure, shape, motion, and texture of bodies without them' influence the sense-organs of men and produce what we know as sensible qualities. Such qualities we wrongly attribute to the corporeal objects themselves. 'We have been from our infancy apt to imagine that these sensible qualities are real beings in the objects they denominate, and have the faculty or power to work such and such things . . . whereas indeed there is in the body, to which these sensible qualities are attributed, nothing of real and physical, but the size, shape, and motion or rest of its component particles, together with that texture of the whole, which results from them being so contrived as they are',¹ that is to say, nothing but, as Boyle here calls them, the 'primary accidents' or qualities. The other qualities do not belong to the body itself; the primary alone belong to the body. 'I say not that there are no other accidents in bodies than colours, odours and the like, for I have already taught that there are simpler and more primitive affections of matter, from which these secondary qualities, if I may so call them, do depend: and that the operations of bodies upon one another spring from the same we shall see by and by.'²

It is unnecessary to follow Boyle further in his analysis of qualities. The distinction between primary and secondary qualities and again the terms themselves are already present. And Boyle's 'if I may so call them' in the last-quoted sentence reveals that he is conscious of using the words 'secondary qualities' in a new sense. Locke borrowed the terms from him—although since Boyle published this work when the co-operation between him and Locke was at its height, they might very well have been suggested by Locke himself or have been already in use in the scientific circles at Oxford to which both Locke and Boyle belonged. The

¹ Boyle, *Works*, vol. ii, p. 466.

² *Ibid.*

whole theory might have been worked out in conjunction by Boyle, Locke, and the others. When, twenty-four years later, the theory re-emerges in the *Essay*, we find it developed in one respect. Boyle makes the secondary qualities subjective and they are equivalent to what Locke later called *ideas* of secondary qualities. Locke, however, set out the whole theory in representationalist terms, and, as we have seen, the *ideas* of secondary qualities do represent (though not copy) qualities in real things, namely, Locke's secondary qualities. Thus while secondary qualities for Boyle are wholly subjective (being identical with Locke's *ideas* of secondary qualities), they are objective for Locke, being powers in things and represented in the mind by ideas. However, the difference is largely one of terminology. Boyle, in my opinion, means the same thing as Locke, but the latter has used his terms more carefully. On this point there is no fundamental difference in the position of the two.¹

Before concluding this chapter I propose to say a word or two about the significance of the division of ideas into those of primary and those of secondary qualities in Locke's philosophy.² The main purpose of this division in Locke's mind is obvious. He wishes to examine the ideas of the secondary qualities and it is to these that he gives most attention. But the more interesting and the more difficult questions arise when we try to understand his theory of primary qualities and our knowledge of them. With respect to secondary qualities, Locke's examination of them resulted in a serious modification of the theory of representative perception. That theory, if my interpretation is correct, still dominates the passages in which the distinction between primary and secondary qualities is set forth. Even the ideas of secondary qualities still 'represent'. But in respect to them he wholly denies the cruder copying theory. The ideas of secondary qualities are in a practical sense of very great value, so great that life would become impossible without them. None the less, colours, tastes, and sounds do not resemble those powers in things which produce them. The

¹ I believe that Baeumker in the aforementioned article tends to exaggerate the difference between Locke and Boyle.

² Cf. also William Kneale, 'Sensation and the Physical World', *Phil. Quarterly*, vol. i (1950-1), pp. 109 ff.

deeper significance of this side of his teaching lies perhaps here. It justifies and makes necessary an appeal beyond the senses. It shows why Locke could not possibly have been a mere sensationist. For sense-experience of itself cannot provide us with the full truth about physical things. If it could, reasoning and theorizing would be superfluous and wisdom would lie in the passive acceptance of all that the senses give. But it cannot do so. Further inquiry becomes both possible and necessary. In other words, the real as it is is not just given in sense-experience, and so when the mind proceeds further by way of reasoning it is not of necessity leaving the real behind. It may very well be the case that it approaches nearer it. The scientist may have a truer conception of the physical world than has the unreflective man who contents himself with the evidence of the senses, and Locke believes that this is so.

But if we do not expect the senses to enlighten us about the qualities real things possess in the case of secondary qualities, why do we expect them to do so in the case of the primary? What is the explanation of the exception which Locke makes? I do not think one can find a definite answer in Locke. It is most regrettable that he should have given so little attention to the primary qualities and to our knowledge of them. He seems, however, to be saying two things. First, we do have ideas of these qualities in sensation and we also know certain things in connexion with them by reason. What we know by reason is that all corporeal objects possess the primary qualities, even including those objects which are too small to be sensible. Secondly, the ideas of the primary qualities resemble those qualities, although it is not, presumably, by the senses that we know this, for the most that sensation could do would be to provide the ideas.

I may deal with the first point first. If we know by reason or intuition or in any non-sensuous way that the things in the physical world are extended, solid, and so on, surely here is information and 'material' for thought not given in sensation and reflection. Is this inconsistent with Locke's empiricism? It may be so. On the other hand, the theory Locke has in mind might be of this kind: We begin with sensory experience, without which there could be no beginning. Now everything which I have ever

experienced by means of the senses of sight and touch, the table, the chair, and all other objects, have been extended—to take this quality only. The idea of extension is always part of my complex ideas of things. Having observed and reflected on this, there flashes upon my mind an intuition for which experience has prepared me, the intuition that all external objects, which cause me to have the ideas I do have, are themselves extended. The intellect itself now perceives that extension is an essential property of corporeal objects, so that we can say that any corporeal object, even though it be so small as to be invisible, is extended. This intuition would be identical with Descartes's as he expounds it in the wax illustration in the *Meditations*. But Locke might still seek to safeguard his empiricism by arguing (a) that what we experienced prepared us for the intuition of the truth, (b)—a more important point—that our first idea of extension was given in sense-experience and that without it the intuition could not occur. The 'material' of this knowledge also, like all other 'material', is first presented empirically.

It is questionable whether these considerations would save Locke from inconsistency. But the point need not be pressed, for I am not sure that the above is what Locke really means. Does he mean that we have an intuition of this sort? He does not say so explicitly. The fact that he had not yet given his account of intuition may have hindered him from developing this side of the argument.¹ Nevertheless he does seem in *ii. viii* to imply an intuition of the sort described above. And if it is an intuition, what precisely is intuited? Are we supposed to intuit an analytic proposition to the effect that matter, as it is defined by the scientist, is necessarily extended? *ii. viii. 9* does not seem to mean much more than this. Yet it does, I think, mean something more. He wants to say that *things* in the real world are material in the sense that they are extended. But is this further step justified? Do we intuit the essential nature of existent things? After all, these primary qualities are just the concepts which the scientist of the seventeenth century found it necessary to presuppose if his science

¹ We have met with the same difficulty in examining his account of our knowledge of the principles in Book I.

was to be possible. He theorized in terms of extension, mass, motion, and number. And he theorized in these terms because they were essential to any quantitative approach to reality, the sole approach of which he was capable. 'What is real is measurable.' The scientist claimed to discover (by measuring) the real dimensional properties, the sizes, shapes, and positions of things. But he could not discover the real colours and tastes which things have, if indeed they themselves have colours and tastes. Accordingly, the question arises naturally: Are we not to attribute the exception made by Locke in the case of the primary qualities to the exigencies of the physical science of Boyle, Newton, and the rest, rather than to any intuition of the nature of the reality lying outside? For Locke himself says later that the real essence of things is hidden from us. But surely, if I know that this piece of gold must be extended, solid, and so on, I know something about its real essence? What then of the theory that the real essence is unknown? Locke might reply that in knowing the primary qualities I know the nature of matter in general and not the real essence of this piece of gold. I only know that it must have some size and some shape. But can I, then, intuit the primary qualities of matter in general? Or are these qualities those which must be conceived to belong to matter as defined by the scientist? Are they necessary for science? Is Locke feeling his way towards the Critical position of Kant?

This point is linked with the other problem to be considered here, namely, the relation which exists between the ideas of the primary qualities and those qualities themselves. The idea 'resembles' the quality. This would seem to mean that, when I now see this table as a rectangular object, the table itself is rectangular. But, of course, if this is what Locke is saying, he is open to the criticism Berkeley makes, that we are as frequently misled about the precise shape of a thing as we are about its precise colour. Sometimes he certainly seems to be saying this and I do not know how else to interpret the words: 'The *ideas* of the *primary qualities* resemble them.' Yet when he first introduces primary qualities in II. viii. 9 he seems to be thinking of them not as *determinates*, if I may use W. E. Johnson's terminology, but as *determinables*,

not as particular shapes, for instance, but as shape in general. The object so small as to be insensible must have *some* shape or other without definitely determining which particular shape it has. Now if it be asked: Are Locke's primary qualities determinates or determinables? I am afraid it is not possible to give a definite answer. If it is a case of having an idea through the senses and knowing that this idea is a true copy of what exists outside in respect to, let us say, figure, then presumably the idea would be of a determined figure, and the primary quality so known a determinate. On the other hand, if we are dealing with the abstract working concepts assumed by the scientists, or if with intuitions of the general nature of reality—if this latter is possible—then the primary quality is a determinable. Sometimes in *ii. viii* Locke seems to have the former in mind and sometimes the latter, and no clear answer can be given.¹

Locke's distinction between primary and secondary qualities then gives rise to many vexatious problems. He had certainly not thought out the distinction with sufficient care. Its meaning is never entirely clear and we are left in much doubt as to whether his empiricism still remains unimpaired. Nevertheless, three conclusions do emerge from this argument, vague and indefinite as it is, and these are conclusions which are surely of the first importance in epistemology: (1) that secondary qualities are not what we first think them to be; (2) that the primary are essential to material existence (leaving it an open question whether 'material existence', as the scientists of the seventeenth century conceived it, was real—as I believe Locke thought it to be—or a mere working hypothesis); (3) that these essential qualities are already given us as ideas in sense-experience.

¹ The attempts to defend the view that the primary qualities resemble the ideas we have of them are hardly serious. In *ii. viii. 18* he remarks: 'A circle or square are the same, whether in *idea* or existence, in the mind or in the manna.' But this hardly helps us when we want to know whether the object which I now see to be circular is actually circular and this is the point that needs defending. Again, in *ii. viii. 21*, Locke remarks, after explaining how the same water may appear warm to one hand and cold to another: 'which yet figure never does, that never producing the *idea* of a square by one hand which has produced the *idea* of a globe by another'. But surely this is hardly a sufficient defence. The apparent shape of an object varies with the conditions of perception, just as the apparent temperature of the water does.

IV

THE BEGINNINGS OF MODERN PSYCHOLOGY

JOHN LOCKE is rightly regarded as the father of English psychology. He was not the first Englishman to interest himself in psychological topics. But what he wrote in the *Essay* was far more fruitful and influential than were the writings of his predecessors, and his approach to psychological problems was the one which dominated subsequent thought. And yet the *Essay* is not primarily a psychological dissertation. Locke's purpose in it is the examination of the nature and extent of human knowledge. Now consideration of human knowledge may, of course, be psychological. But if the greater stress is put on the objective side, on *what* we know rather than on the act of knowing, such an inquiry ceases to be psychology. This, for the most part, is the case with the *Essay*. The great problems of Book IV might have been handled in a psychological manner: actually the treatment is more logical and metaphysical, although psychological considerations are not wholly absent. It is in Book II that we find what can properly be called psychological discussions. But they are present here, it is interesting to note, as part of the general analysis of ideas. There is, as we have seen, one group of ideas, the ideas of reflection, which are the product of the mind's power to turn upon itself and to be aware of itself and of its 'operations' (a question-begging word which needed more careful notice than Locke gave it. But cf. Draft C, p. 60 above). To complete his account of ideas Locke had to say something about this group; hence the more psychological chapters of Book II. I use the words 'had to say something' advisedly, because, in spite of the fact that these chapters are of the utmost importance in the history of English psychology, they were not part of the original scheme of the *Essay*. Locke's main concern was with the ideas of sensation and our knowledge of the external world. The most significant omission from the Drafts in those parts of them which correspond to Book II of the *Essay* is the discussion of ideas

of reflection. The chapters on perception and on the modes of thinking¹—the two chief sources of psychological information in Book II—have nothing corresponding to them in the Drafts,² and there is little enough to correspond to the other psychological discussions which that book contains. Thus the psychology of the *Essay* is something of an afterthought. Locke realized that his description of ideas would not be complete without some account of ideas of reflection, and so he finds it necessary to say something about them. None the less, as he proceeds, these strictly psychological problems begin to interest him in themselves, and there can be no two opinions as to the value of what he has to say. His psychological pages, few as they are in a comparative sense, are rich in content and very deserving of serious study. In what follows I propose first to examine Locke's account of the operations of the mind, and then to discuss his description of mind in relation to matter and his theory of the self.

I

Most of our information about the mind comes through reflection, that is, introspection.³ But Locke does not rule out the study of behaviour. On the contrary, he makes use of this method in observing the behaviour of children and animals, and deducing certain psychological information from what he has 'observed. He notices how the child shows signs of wonder at the world around it, how it seems most concerned with that world, rather than with the inward world of reflection, or how animals seem to be able to perceive, or how a bird will strive to remember a tune. 'For to pass by other instances, birds learning of tunes, and the endeavours one may observe in them to hit the notes right, put it past doubt with me that they have perception, and retain *ideas* in their memories, and use them for patterns.'⁴ All such psychological information is gained by the observation of behaviour.

¹ II. ix and xix respectively.

² Unless § 21 of Draft B be said to correspond to II. ix.

³ The word *reflection* does not, in this context, mean cogitation or even meditation. It is reflection in the sense of a bending or turning back upon oneself. The corresponding modern term is clearly introspection.

⁴ II. x. 10.

None the less, the chief source of information in Locke's opinion was reflection. Reflection he defines in the following terms: 'By *reflection*, then, . . . I would be understood to mean that notice which the mind takes of its own operations, and the manner of them, by reason whereof there come to be *ideas* of these operations in the understanding.'¹ The definition, it will be noted, is representationalist. The mind takes notice of its own operations, but does not, apparently, know them directly, but has ideas of these operations as a consequence of the notice it has taken. And this representationalism is confirmed by the rest of the paragraph in which reflection is likened to sensation. 'This source of *ideas* every man has wholly in himself; and though it be not sense as having nothing to do with external objects, yet it is very like it, and might properly enough be called internal sense.'² But as we follow Locke in his account of these operations of the mind, perception, memory, comparison, and so on, the representationalism is not at all apparent. Indeed, these accounts would have been the same if Locke had never adopted the representationalist position. There is no hesitation about accepting the evidence of reflection on its face value. The modern psychologist has far more doubts about the validity of his introspective method than Locke had about reflection. Thus, though nominally Locke remains representationalist in his explanation of the knowledge we have of our minds, actually he proceeds as if we know ourselves and our operations directly in reflection and as if this knowledge was in all cases exact. Indeed, at the close of the *Essay* the mind alone of all existing things is said to be known directly without the mediation of an idea. We need ideas, he there says, because 'the things the mind contemplates are none of them, *besides itself*, present to the understanding'.³ In Book II he prefers to retain at least the semblance of representationalism in dealing with our knowledge of the various operations of the mind, though little more than the semblance is retained.

Now reflection comes late. The child's first experiences are sensory; reflection and inward-looking are the marks of adult life. 'The first years are usually employed and diverted in looking

¹ II. i. 4.² *Ibid.*³ IV. xxi. 4. (The italics are mine.)

abroad. Men's business in them is to acquaint themselves with what is to be found without; and so, growing up in a constant attention to outward sensations, seldom make any considerable reflection on what passes within them till they come to be of riper years, and some scarce ever at all.¹ An important consequence of this is that the knowledge we have through introspection is knowledge of the human mind in maturity; and this incidentally helps to explain why in English psychology (a psychology in the past mainly introspective in method) the study of the adult human mind came first before child and animal psychology. As we have seen, Locke is not wholly silent about children and animals; in II. ix he has gathered together a good deal of psychological information of a sort about them. Also he has occasionally something to say about low states of consciousness, both permanent in certain animals and temporary in human beings.² But clearly his main interest lies in the adult human mind and in the information which reflection gives him about it.

Within that mind Locke recognizes two powers or 'faculties', those of '*perception* or *thinking* and *volition* or *willing*'.³ These he calls the simple ideas of reflection, since, as will later become clear, we can talk of other operations of the mind as so many modifications of these. For instance, all the cognitive powers we have, sense-perception, imagining, reasoning, inferring, and so on, may be grouped under the first head of perception or thinking. (The simple-complex division is here, however, used in a loose sense; we can hardly say that the complex ideas in this case are composed of so many simple ideas. And so far as the argument goes, the whole division can be completely disregarded.) Together with thinking and willing Locke also recognizes as present in the mind a capacity to feel pleasure and pain.⁴ He thus sets down roughly the three main elements of subsequent psychological investigation, cognition, conation, and emotional feeling-tone. He calls the first two 'faculties', but it must not be supposed that he

¹ II. i. 8.

² Cf. II. ix, especially II. ix. 7, also his account of attention in II. x, and of the association of ideas in II. xxxiii.

³ II. vi. 2.

⁴ II. vii, though the capacity, as such, is not examined here. The paragraph is instead a discussion of the usefulness of the capacity.

advocates a 'faculty theory', or asserts that different faculties exist as distinct entities in the mind. On the contrary, he expressly warns his readers against this view. 'The ordinary way of speaking', he says, 'is that the *understanding* and *will* are two *faculties* of the mind, a word proper enough if it be used, as all words should be, so as not to breed any confusion in men's thoughts by being supposed (as I suspect it has been) to stand for some real beings in the soul, that performed those actions of understanding and volition, . . . so many distinct agents in us which had their provinces and authorities and did command, obey, and perform several actions, as so many distinct beings.'¹ Thus Locke foresaw the misuse of the term *faculty*; and he is in no sense to be held responsible for the unfortunate 'faculty theory'.

Perception. The word *perception* is used, as Locke himself admits, in a very wide and even loose sense when it is identified, as in the above case, with *thinking*. We may continue to use it in this way, Locke holds, but if we do so we need to distinguish within it, for instance, between sense-perception and that perception which occurs in knowledge and which is identical with Descartes's intuition. In II. xxi. 5 Locke gives the term three meanings: 'Perception, which we make the act of understanding, is of three sorts: (1) the perception of *ideas* in our minds [that is, sense-perception and perception of ideas of reflection]. (2) The perception of the signification of signs. (3) The perception of the connexion or repugnancy, agreement or disagreement, that there is between any of our *ideas*.' He proceeds to point out that the last two senses of the word cover what we usually mean by the term *understanding*. It is regrettable, however, that Locke did not proceed further with this analysis. Does he mean, for instance, that there is a common element in sense-perception, in the apprehension of what a sign signifies, and in the perception of an agreement between ideas? This is an important point in itself, especially in connexion with the problem as to the relations between sense-experience and reason.² But it is also important in connexion with Locke's empiri-

¹ II. xxi. 6.

² Cf. further the fifth essay on the Law of Nature in the (1660-4) Latin essays in the Lovelace Collection (Bodl. MS. Locke, f. 31). Sensation and reason together illuminate the human mind and there is no other illumination.

cism. In II. i he confines the term *experience* to sensation and reflection. Did he sometimes vaguely feel that experience is as wide as perception in this triple sense? Why, after all, should experience be confined to sense-experience and reflection? Locke did, of course, so confine it; and yet one feels sometimes that he was the happier in his empiricism because for him experience was linked with perception, and because he could be vague and ambiguous about the connotation of the latter term, which certainly carried with it a wider meaning than mere sensation.

In the chapter in which he discusses perception,¹ however, Locke practically identifies perception with sense-perception, even with sensation in the narrowest sense, a state in which the mind passively receives what is given it, which he now contrasts with 'thinking'. 'Thinking in the propriety of the *English* tongue signifies that sort of operation of the mind about its *ideas* wherein the mind is active, where it, with some degree of voluntary attention, considers any thing. For in bare, naked *perception*, the mind is, for the most part, only passive, and what it perceives it cannot avoid perceiving.'² The characteristic mark of sensation is its involuntariness; the mind is, in that sense, passive. Of course, the mind must receive, it must 'take notice'. Sense-perception like other forms of perception is an act,³ it does not proceed mechanically. As Locke says: 'Whatever impressions are made on the outward parts, if they are not taken notice of within, there is no perception.'⁴ In other words, sense-perception for Locke is not merely a corporeal process, though it has a physical side. It is also mental, and the mind even in sensation is active. If the word 'impression' is used it is important to remember that in respect of mind this term is metaphorical only. The mind is not a piece of wax to take an impression. Something of the sort may be true of the brain. But the mind is an active entity possessing this power of being aware of things, although in sensation it must take what is given it and cannot at all choose, nor in sensation does it change the given in any way.⁵

The general question as to the relation between sensation and

¹ II. ix.

³ II. vi. 2, xxi. 5, and elsewhere.

² II. ix. 1.

⁴ II. ix. 3.

⁵ Cf. II. xxix. 3.

knowledge need not now be considered by us. We may postpone it until we come to a discussion of iv. ii. 14. But there remains one further matter in connexion with Locke's account of perception which should be noted here. A distinction is sometimes made to-day between sensation and perception. In sensation the mind receives the given, but in perception it makes this significant to itself. I *see* a rectangular patch of brown before me, but I *perceive* a table, having legs (which I cannot now see), being made of wood of a certain thickness, and so on. Now it is interesting to note that Locke in this chapter on perception makes a like distinction, though he does not use precisely the same terminology. He does not use the term perception here in contra-distinction to sensation, as it is frequently used today. But he does say that the mind immediately it receives its sensations 'judges' upon them and thinks of what it judges rather than sees. 'The *ideas we receive by sensation are often in grown people altered by the judgement without our taking notice of it.*'¹ Locke gives an instance. A globe of uniform colour is before me. I see 'a flat circle variously shadowed'. But I immediately say that I see a globe of uniform colour. 'We having by use been accustomed to perceive what kind of appearance convex bodies are wont to make in us, what alterations are made in the reflections of light by the difference of the sensible figures of bodies, the judgement presently, by an habitual custom, alters the appearances into their causes.'² Locke is assuming that the ideas we receive in sensation are caused by things, but when we do receive these ideas we have learnt to connect them with the things and so immediately and almost without knowing to ourselves we 'alter the appearances into the causes'. Locke does not, however, describe farther how it is we know this thing or cause. Is it also experienced? He does say that most often, if not always, this farther judgement takes place in the case of what we see, and the reason he gives for this is interesting. 'But this is not, I think, usual in any of our *ideas* but those received by *sight*; because sight, the most comprehensive of all our senses, conveying to our minds the *ideas* of light and colours, which are peculiar only to that sense, and also the far different *ideas* of space, figure,

¹ II. ix. 8.² *Ibid.*

and motion, the several varieties whereof change the appearances of its proper objects, viz. light and colours; we bring ourselves by use to judge of the one by the other.¹

Now Locke has pointed out elsewhere² that space, figure, and motion are amongst those ideas given by more than one sense. Actually they are given by touch as well as by sight. Accordingly, Locke's theory here would seem to amount to the following: I learn to interpret the visible in terms of the tangible, and in doing so I am guided, first, by what (in Locke's opinion) is common to the two, namely, shape, size, and motion, and again by my past experience. Having experienced such and such a visible object I have then had such and such a tangible experience. In this latter respect Locke's theory is an approximation to Berkeley's in the *New Theory of Vision*, though Berkeley's is much more carefully conceived, and Berkeley would never admit the first point. He categorically denied the existence of any common sensibles in our sensory experience. None the less, he learnt a good deal from this passage.

It suggested a problem also to another Irishman, William Molyneux, which he forwarded to Locke, who included it in subsequent editions of the *Essay*.³ A man born blind has learnt to distinguish by touch between a cube and a sphere. Suppose now he gains his sight and is shown the cube and the sphere without being permitted to touch them, would he be able to say which is the sphere and which the cube? Molyneux and Locke answered in the negative. So did Berkeley. We interpret one sensation or group of sensations in terms of the other only as the result of the constant experience gained by us in the past in which the visible and tangible experiences have come together and are attributed by us to the same source. In the case of the blind man such experience would be lacking and so he would not be able to judge what tangible experience would follow the new visible experience.⁴

¹ II. ix. 9.

² II. v.

³ II. ix. 8.

⁴ Leibniz (in his comment on this passage in the *Nouveaux Essais*) disagrees, answering with a modified affirmative. 'I think that supposing the blind man knows that these two figures which he sees are those of the cube and the globe, he could distinguish them.' At the very first moment of sight; no doubt, he would be too dazzled to distinguish anything. But if he were told that a globe and a cube lay before him, he could distinguish them. 'The basis of my view is that

This celebrated problem is not easily tested and, until recently, there was little reliable evidence one way or another. A. C. Fraser in his editions of the *Essay* and of Berkeley's *Works* has collected some empirical evidence of a very indefinite sort.¹ But the phenomenon has been studied more carefully recently by physiologists and the evidence is all in favour of Molyneux and Locke.² Certainly, the confusion and bewilderment of blind men on first coming to see is sufficiently attested, and this confirms Locke's main point, that in the course of our experience we have learnt to interpret what is seen. Were this lesson not learnt by us vision would not be the useful accomplishment it is.

Memory. The account which the *Essay* gives of memory is hardly satisfactory. This much perhaps may be said in its favour that subsequent accounts have been equally unsuccessful, for the problem of memory remains one of the most baffling in modern psychology. But Locke's treatment is slight and superficial, hardly ever coming to grips with the real difficulties. A criticism put forward by Norris, when the *Essay* first appeared, caused Locke to reconsider the matter and to alter the wording of the text for

in the globe there are no points distinguished by the side of the globe itself, all there being level, and without angles, while in the cube there are eight points distinguished from all the others.' Fundamentally, Leibniz would say, space is the same to a blind person who cannot see and to a paralytic who cannot touch, and geometry is the same, for though the images are different, the geometrical principles (apprehended by reason, according to Leibniz) are the same. Locke might agree with Leibniz on this latter point, but would urge that this does not justify the affirmative answer Leibniz gives. Berkeley, of course, would disagree, although when he says in the *New Theory of Vision* that the visible square is better fitted to be a sign of the tangible square than is the visible circle, he is perhaps admitting Leibniz's point.

¹ Mr. Michael Foster has referred me also to Voltaire's *Éléments de la philosophie de Newton*, III. vi, where Voltaire reports an actual case in which a man born blind on coming to see failed to distinguish by sight between the round and the angular.

² Professor J. Z. Young sums up the evidence in his Reith Lectures, *Doubt and Certainty in Science*, Oxford, 1951, pp. 61 ff. 'One man when shown an orange a week after beginning to see said that it was gold. When asked "What shape is it?" he said "Let me touch it and I will tell you". After doing so he said that it was an orange. Then he looked at it and said, "Yes, I can see that it is round." Shown next a blue square, he said it was blue and round. A triangle he also described as round. When the angles were pointed out to him, he said, "Ah, yes, I understand now, one can see how they feel." For many weeks and months after beginning to see, the person can only with great difficulty distinguish between the simplest shapes, such as a triangle and a square.' p. 62. Cf. further 'But Now I See' by Richard Gregory, *The Listener*, 24 May 1962, pp. 908 ff.

subsequent editions, but his new position, it will be found, begs the question as completely as did the old.

Memory for Locke is one of the two forms of retention. The first is contemplation, whereby the mind retains the idea by 'keeping it for some time actually in view'. Memory is the second, which he defines as 'the power to revive again in our minds those *ideas* which after imprinting have disappeared, or have been as it were laid aside out of sight'.¹ To remember is, as he explains elsewhere, to perceive something 'with a consciousness that it was known or perceived before'.² Memory may be of two kinds: it may be a voluntary recalling, invoking the mind in a conscious effort, as when we search for a forgotten word and find it, or it may be a voluntary recalling, invoking the mind in a conscious times, too, they start up in our minds of their own accord and offer themselves to the understanding; and very often are roused and tumbled out of their dark cells into open daylight by some turbulent and tempestuous passion.³

But the acutest problem in connexion with memorizing, whether it be voluntary or involuntary, arises when the question is asked: How do we retain what is retained in memory? Or, in Locke's language, where is the idea when I have once experienced it, then forgotten it, but will in a few minutes recall it? At first Locke was content with the usual answer, that it was 'in the memory', and the memory he then described as 'the storehouse of our *ideas* . . . a repository to lay up those *ideas*, which at another time it [the mind] might have use of'.⁴ But John Norris⁵ neatly criticized Locke. If there are ideas in the mind of which we are at present unaware, 'latent ideas', as Locke calls them in Draft B, why should there not also be innate ideas in the mind of which we are not at first aware? What of Locke's earlier principle that there are no ideas in the mind 'which it perceives not'? Locke saw the point of the criticism, and in the second edition the following words were added: 'But our *ideas* being nothing but actual

¹ II. x. 2.

² I. iv. 20; cf. Hobbes, *Human Nature*, iii. 6: 'we take notice that it is again.'

³ II. x. 7.

⁴ II. x. 2.

⁵ *Reflections upon an Essay concerning Human Understanding*, § 4.

perceptions in the mind, which cease to be any thing when there is no perception of them, this laying up of our *ideas* in the repository of the memory signifies no more but this—that the mind has a power, in many cases, to revive perceptions which it once had, with this additional perception annexed to them—that it has had them before. And in this sense it is that our *ideas* are said to be in our memories, when indeed they are actually nowhere, but only there is an ability in the mind when it will to revive them again, and, as it were, paint them anew on itself, though some with more, some with less, difficulty; some more lively, and others more obscurely.' The meaning of this passage is not wholly clear. Has he now given up the 'repository' theory so completely that he regards each instance of memory as a new fresh perceptual intuition, like the original perception in every respect, except that we remember that we have had this perception before? Such a theory might possibly do away with the difficulty as to the whereabouts of ideas we later recall when we are not actually recalling them. But a greater difficulty would then remain, that of distinguishing between perceiving and remembering. The distinction Locke makes between the two is based on the fact that we remember that we have had this experience before. But this ground is insufficient for the distinction, since we frequently perceive something we have perceived before, and remember to have perceived before, and yet this particular perception is not itself an instance of memory. Memory, if it is perception, is a peculiar kind which carries with it not merely the feeling that we have seen this before, but also that we are not now perceiving in the ordinary sense but remembering. As Locke himself says in this passage, it is a 'reviving' of the perception, and it is this reviving which needs to be explained. Locke leaves it unexplained, and as long as he does so his analysis of memory is inadequate.

In various passages Locke also discusses the relations between memory and certain other operations of the mind.

In the journal for 1678 an interesting note is to be found on memory and imagination. 'Memory is always the picture of something, the idea whereof has existed before in our thoughts, as near the life as we can draw it: but imagination is a picture drawn

in our minds without reference to a pattern.’¹ What is interesting about the passage is the connexion which Locke proceeds to show between imagination and madness. Madness consists not in the lack of powers of reasoning, for madmen reason very well, but in a failure to distinguish between imagining and remembering. The madman thinks that he is remembering when he is only imagining. If he could be brought to see that his imaginations are imaginations only and not remembered realities he would be healed. ‘Madness seems to be nothing but a disorder in the imagination, and not in the discursive faculty.’² With respect to the relations between memory and attention Locke tells us that ideas to which no attention is paid ‘quickly fade and often vanish quite out of the understanding, leaving no more footsteps or remaining characters of themselves, than shadows do flying over fields of corn’.³ No doubt, Locke adds, physical and physiological occurrences help or hinder memory, ‘since we oftentimes find a disease quite strip the mind of all its *ideas*’.⁴ Indeed, in the *Education*⁵ he goes so far as to say: ‘Strength of memory is owing to a happy constitution and not to any habitual improvement got by exercise.’ None the less in the *Essay* he holds that our memories can be improved by attention, on the one hand, and by repetition, on the other. In the same manner, if our ideas are accompanied by pleasure or pain the attention we pay to them is greater and so we remember them the more easily. Finally, without memory knowledge would be impossible, for we should be confined to present objects.⁶ A retentive memory means a mind well stocked with information; and a quick memory, which enables us speedily to recall what we need, makes for intelligence. God has no need of memory, for he sees all things instantaneously; but for man memory is a valuable gift without which his world would be narrow and limited beyond all present imagining.

Of the other operations of the mind Locke’s analysis is still more meagre than it is in the case of perception and memory. Of *discerning* or distinguishing between ideas he remarks that, like memory, it is indispensable for knowledge. For were we not able

¹ Aaron and Gibb, p. 103.

² King, ii. 173, and cf. *Essay*, ii. xi. 13.

³ ii. x. 4.

⁴ ii. x. 5.

⁵ § 176.

⁶ ii. x. 8.

to distinguish between our ideas we could never perceive any agreements or disagreements between them. If pressed Locke must also have admitted that discerning is itself an instance of knowing, even in his limited sense of that term. If the reader compares the account given of intuition in iv. ii. 1 with that of discerning in ii. xi. 1, he will see that discerning is one instance of intuition. To perceive that white is not black, a circle not a triangle, is discerning in Book II and intuiting in Book IV. Even in Book II Locke describes discerning as perceiving that two ideas are the same or different and finds in it an instance of that knowledge of a truth which men have wrongly called innate.¹ The importance of discerning lies in the fact that it is a power which leads to exactness of judgement and clearness of reason. This enables Locke to make an interesting distinction between judgement and wit. 'For *wit* lying most in the assemblage of *ideas*, and putting those together with quickness and variety wherein can be found any resemblance or congruity, thereby to make up pleasant pictures and agreeable visions in the fancy; *judgement*, on the contrary, lies quite on the other side, in separating carefully one from another *ideas* wherein can be found the least difference, thereby to avoid being misled by similitude and by affinity to take one thing for another.'² Wit is something superficial, the quick perception of a congruity; judgement and estimation of truth by reason depend more upon discerning.

With discerning goes *comparing*. Upon it depends 'all that large tribe of *ideas* comprehended under *relations*'.³ One would have thought that this was so important an operation that it demanded very close attention. Locke, however, merely mentions it here and adds that beasts compare but little. The fact is that the term *comparing* covers so vast a field that it could not possibly have been completely analysed in this chapter. Every act of knowing, and every judgement, as Locke interprets them, involve comparison. In the same way, *compounding* also, the putting together of several simple ideas, is merely mentioned, and Locke passes at

¹ ii. xi. 1.

² ii. xi. 2. Laird (*Hobbes*, p. 267) points out that the same distinction is to be found in Hobbes. But cf. Thorpe, *Aesthetic Theory of Hobbes*, p. 97, n. 55.

³ ii. xi. 4.

once to instance one special kind of compounding, namely *enlarging*, where the same idea is repeated, the instance Locke gives being that of a dozen, where the unit is repeated a dozen times.¹

There are other psychological chapters in Book II,² but they need not detain us at this point. For the first (II. XIX) is little more than a catalogue of those operations which are cognitive, or, in Locke's language, modifications of thinking in its widest sense.³ Locke realizes that even as a catalogue this is incomplete, as is, he admits, his whole account of the ideas of reflection. 'I do not pretend to enumerate them all nor to treat at large of this set of *ideas* which are got from *reflection*: that would be to make a volume.'⁴ Again the material covered in the second and third of these chapters, dealing with the modes of pleasure and pain and with power, can best be dealt with in the section on Locke's moral philosophy.

A word should be added here, however, about Locke's theory of the association of ideas. The chapter dealing with this theory⁵ only appeared in the fourth edition of the *Essay*, and this of itself suggests that it is not central to Locke's thinking. In Hume's philosophy a theory of association of ideas is central, for he explains the normal process of reasoning about all matters of fact in terms of this theory. Locke, on the other hand, only uses it to account for aberrations from the normal. It is 'a sort of madness'. In Book IV he assumes that we have knowledge (although it may be only probable) of the real connexions in things. But opposed to the 'natural connexions' of ideas thus gained Locke in this chapter admits certain other connexions of ideas 'wholly owing to chance or custom'.⁶ These connexions are simply 'habits of thinking in the understanding'. For instance, hearing the first line of a poem we know, we tend to think of the remaining lines. Many connexions of this second sort are erroneous and misleading. 'This wrong connexion in our minds of *ideas*, in themselves loose and independent one of another, has such an influence and is of

¹ The two remaining operations considered in II. XI are *naming* and *abstracting*. I postpone discussion of these to Chapter VI below.

² II. XIX, XX, and XXI.

³ It is interesting to note how the differences between many of these can in Locke's opinion be interpreted in terms of degrees of attention. Cf. II. XIX. 3-4. On attention cf. also II. XIV. 9-15.

⁴ II. XIX. 2.

⁵ II. XXXIII.

⁶ II. XXXIII. 5.

so great force to set us awry in our actions, as well moral as natural, passions, reasonings, and notions themselves, that perhaps there is not any one thing that deserves more to be looked after.'¹ Locke gives many instances: children dislike the dark because their nurses have told them stories of goblins and sprites that infest it; they dislike a book because they were once forced under threat of punishment to read it. A man will avoid a building or a town where something unpleasant to him once occurred. There are foolish beliefs and prejudices upon which frequently parties and sects are established, the beliefs being solely the outcome of this unfortunate association of ideas in our minds. Locke adopts the role of the practical psychologist and warns his readers against the errors that might arise from this source.²

II

Having considered Locke's account of the operations of the mind we now turn to consider his account of the mind itself, although in doing so we may be said to be leaving psychology in the narrow sense for metaphysics. Following traditional ways of thinking Locke regards the mind as a substance, but a substance which is immaterial. He accepts the usual dualism, the 'two parts of nature',³ active immaterial substance and passive material substance. At the same time, he is, as we shall see later, most uneasy in his mind about the conception of substance itself, both material and immaterial. He finds it difficult to justify his use of the concept, and yet he cannot proceed without it. He feels himself to be on surer ground in making a distinction between the two sorts of substances. It is a fundamental point with him that the universe cannot be explained in terms either of matter alone or of mind alone. The one cannot be reduced to the other. Of the two, perhaps, mind is the more indispensable, for mind is the active, productive principle. Matter produces nothing. In

¹ II. xxxiii. 9.

² Locke thought his discussion here to be original: cf. Molyneux Correspondence, especially *Works*, iii. 554. On the history of this theory, cf. an interesting account in Laird's *Hume's Philosophy of Human Nature*, pp. 38-41.

³ II. xxiii. 15.

particular, to think of it as producing thought, Locke agrees with Cudworth, is to think an absurdity.¹

Locke's views were, thus far, the traditional ones, accepted by the Church and upheld by Cartesianism. He came into conflict with the latter, however, on the question of the mind's essence. Descartes had held that mind was essentially thinking, and Locke denied this on the ground that if thinking were the essence of mind it would be a permanent characteristic of it, and there would be no break in thought. But no proof can be offered that the soul is always thinking. Indeed, the evidence points the other way. Thinking is certainly one of the operations of mind, but hardly its essence.² It may be a fact that we do not cease to think in our sleep, and that we think the long night through, but forget our thoughts when we wake. Yet this, Locke thinks, is 'very hard to be conceived'.³ The further doctrine that in sleep the mind, no longer affected by the senses, withdraws itself from the world of sensible things and gives itself over to contemplation upon pure, intelligible objects, Locke found somewhat absurd. When we wake up we remember no such contemplation. Moreover, if this thinking proceeds in sleep then the waking self is only one of two selves, and each man has a dual personality. This, Locke admits, may be the case; but on the whole it seems more sensible to suppose that in sound sleep thinking has ceased entirely. Dreaming is a state of thought which is vague and loose, when the mind does not concentrate on its thinking. But when a man sleeps soundly, moving neither hand nor foot, it is difficult to believe that his mind continues to think its thoughts. And it is a curious doctrine, he adds, referring to the Cartesians, that men fast asleep are still actively thinking, whilst animals in their waking moments and behaving in all respects as if they were thinking are said to be incapable of thought.⁴

¹ Cf. IV. x. 9-10. That he is here following Cudworth is clear from the journal of 1682. Cf. Aaron and Gibb, p. 118.

² II. i. 10.

³ II. i. 14.

⁴ II. i. 19. This latter is a shrewd scoring point. But it is to be doubted whether Locke had considered all the psychological evidence in favour of the view that the mind continues to be active in sleep. First, as Fraser points out, somnambulism shows mental (and bodily) activity in sleep not remembered by the sufferer on waking. Secondly, is Locke correct in supposing that we are ever wholly

His disagreement with the Cartesians on this point, however, does not seem to have disturbed his contemporaries. On the other hand, the strange and apparently heretical doctrine, that matter in some cases may itself have power of thought superadded to it, which he casually threw out at the beginning of Book IV, shocked the orthodox, once its implications were realized. Stillingfleet reserved his severest criticism for it. He regarded it as a serious blow against established belief, and ranked it amongst materialist doctrines of the human mind. His criticism, it must be admitted, was not wholly unjustified. Even in Book II Locke had talked of the human mind as if it were a thing in space. It is where the body is, and like it in that it moves. 'Finding that spirits as well as bodies cannot operate but where they are, and that spirits do operate at several times in several places, I cannot but attribute change of place to all finite spirits.'¹ Locke's thought here is evidently influenced by his consciousness of the close bond which exists between mind and body in the case of human beings. Even though the human mind be wholly other than the human body it is where that body is and moves with it.

It is consciousness of the same fact, doubtless, which prompted him to put forward the suggestion of iv. iii. 6. In that chapter Locke is considering the extent of human knowledge, and, after pointing out that our knowledge cannot possibly extend further than our ideas, he adds that it does not extend even so far. For we may and do have ideas between which we can perceive no relations and so though we have ideas we have no knowledge. He takes as an example of this our inability to relate the ideas of *matter* and *thinking*. For we cannot determine whether matter has anywhere been given the power of thought; 'it being, in respect of our notions, not much more remote from our comprehension to conceive that God can, if he pleases, superadd to matter a faculty of thinking, than that he should superadd to it another substance with a faculty of thinking'. Matter and thinking are two ideas,

uninfluenced by the senses in sleep, even the deepest sleep? Lastly, it is a fact that we forget many dreams. Sometimes, a chance meeting recalls a dream which we should not have otherwise recalled. Locke did not examine all the evidence against him.

¹ II. xxiii. 19.

but in their case no relating with absolute certainty is possible, either positively or negatively. For while Locke's usual belief is that matter cannot think, he also sees the possibility that Omnipotency may have superadded the power of thought to matter.

Now although Locke introduces the doctrine in this casual way it is clear that it is no haphazard statement. It is the fruit of careful thought, and when his suggestion is later attacked he does not at all withdraw it but seeks to defend it.¹ It is possible, he contends, that thinking in human beings is superadded by an omnipotent cogitative Being to what is otherwise material. Locke himself continues to believe that the probability is that we are both material and immaterial substance. But this cannot be demonstrated from the evidence at our disposal. There is indeed evidence in support of the opposite view that substantially we are material but with power of thinking superadded. In his replies to Stillingfleet Locke adduces the materialistic accounts that accredited authors, such as Virgil and Cicero, give of the human spirit. It is air or fire or breath, and we find terminology of the same sort even in the Scriptures. So that to regard the mind of man as substantially material is no new doctrine. (Locke's appeal here seems a little unfair. Such writers hardly used those terms to defend the materiality of mind. All their terminology was material and they obviously chose the least solidly material, air and fire and the like, to describe mind.) Secondly, he argues that to deny this possibility, that material beings might be made to think, would be to deny the omnipotency of God. If we assume that the essential qualities of matter are extension and solidity, then, surely, no one would deny that God can and does add other qualities to it. Not even Descartes denied that God could add life and power of organization to matter in the case of vegetables, and sense and spontaneous motion to matter in animals. How then is it so impossible that God should have

¹ In later editions he modifies his earlier statements. These modifications are partly the consequence of the correspondence with Molyneux (cf. *Works*, iii. 523 and 526) and are designed to safeguard himself against the charge that on his supposition God himself might be a thinking material. But this is never Locke's position. Matter itself cannot originate thinking. The ultimate explanation of thought must itself be cogitative. None the less an omnipotent cogitative Being might very well have superadded power of thinking to material existence, and this might be the explanation of the human being.

added the power of thinking to matter in the case of man?¹ Of course, we cannot understand how matter could possibly think. But we also do not understand how immaterial substance thinks. On any view thinking and knowing are mysteries. Why should not God have added to matter this mysterious power of thinking and knowing? If life can be superadded to matter why not thought? It must be at least possible, Locke concluded, and our substance may be entirely material.

Stillingfleet was justified in seizing upon this crucial point. He argued that Locke had here broken with tradition and that his position was dangerous both to religion and morality. In reply Locke submitted that the break was with Descartes only. 'For, as far as I have seen, or heard, the fathers of the Christian Church never pretended to demonstrate that matter was incapable to receive a power of sensation, perception, and thinking from the hand of the omnipotent Creator.'² So far Locke is correct. No one doubted the omnipotency of God. At the same time, he is avoiding the real point at issue. The Church had taught that man is as essentially immaterial as he is material. Scholastic philosophy had worked out a system for which the human being was both matter and spirit. At death the body decomposed, but the soul being substantially different from it did not suffer decomposition.³ Indeed, the soul could not suffer decomposition; its immortality could be deduced rationally from its nature. But if Locke's new position were accepted this could no longer be possible, as Locke admits. Until we prove that man is immaterial as well as material substance, we cannot *prove* that he is immortal. And since God is omnipotent it may be the case that we are not both material and immaterial. Not that, Locke thinks, belief in the immortality of the soul is at all shaken by this possibility, for that is already sufficiently established by revelation and does not need the support of reason. As God is able to cause material being to think so he can give immortality to that being, if he so chooses. None the less, the

¹ Cf. Second Reply to Stillingfleet, *Works*, i. 589, and with respect to the whole matter cf. First Reply, i. 374 ff., and Second, i. 587 ff.

² *Works*, i. 593 (1801 ed., iv. 469).

³ Cf. Thomas Aquinas's discussion of the soul in Book II of *Contra Gentiles*, especially chapters 63 and 65.

criticism is fair as against Locke that, by merely suggesting the possibility that substantially we are wholly material, he had thereby denied the doctrine that the human soul is necessarily immaterial, and so had aimed a blow at Christian doctrine, if not at Christian faith.

There is another reason why Locke's new suggestion was opposed and feared. It savoured of the materialism of Hobbes. Though Locke would never admit that his thoughts were influenced by Hobbes, his position here certainly approaches the latter's. For Hobbes had taught that thinking as such is an abstraction, and so also is mind. The concrete is the 'thinking-body'.¹ Upon this basis he built what was in effect a materialist philosophy. Now Locke admitted the possibility of a 'thinking-body', but he could not accept the materialism, for he believed that 'thinking-body' does not explain itself nor is it explained by body. In other words, mere matter can never be the source of thought even though material beings think. He would admit the possibility that *we* are substantially material, but he could not deny the necessary existence of some pure cogitative Being to explain the presence of thought even in beings substantially material. Thus Locke was divided between two tendencies. He found it difficult to think of man consistently as composed of two distinct substances, material and immaterial. This violated for him the unity of human personality. And yet a mere materialism was equally impossible. For want of a better solution he accepted the traditional and Cartesian dualism. It was better than the one monism with which he was acquainted, namely, materialism. But *rv. iii. 6* and the relevant passages in the Stillingfleet controversy mark his dissatisfaction with that dualist solution and his tentative, although perhaps not very convincing, effort at another.

Thus we are not in a position to say outright that man is a complex of material and immaterial substances. The problem of the mind-body relation is one which, in Locke's opinion, is at present beyond our powers, since the inner nature of mind itself as well as of body is so completely hidden from us. But though we cannot understand the ultimate nature of our own constitution as human

¹ *Elements of Philosophy*, I. iii. 4.

beings we continue to regard ourselves as so many *selves*,¹ and the problem which remains to be considered is how we come by this idea of a self. Locke's examination of this matter, in a chapter added in the second edition, contains some of the closest thinking in the *Essay*. The problem is neglected in the first edition. There, as we have seen, it is not wholly clear how much reflection or introspection reveals. It does reveal the operations of the mind, but does it reveal the mind itself? Book IV asserts that we have an intuitive knowledge of our own existence,² but this seems to be a knowledge that we exist merely, without knowing what we are. 'Tis past controversy that we have in us something that thinks; our very doubts about what it is confirm the certainty of its being, though we must content ourselves in the ignorance of what kind of *being* it is.'³ And yet we constantly talk of our self. The word has obviously some meaning for us. Locke realized that he had not attended to the problem properly in the first edition and so adds a chapter in the second. He identifies *self* with *person*; to myself I am a self, to another a person. And the problem becomes one as to the meaning of personal identity, and is linked to the general problem of identity. The self is an identity, but what sort of an identity?

Now Locke distinguishes between four sorts of identities: (1) logical identity, *a* is *a*, (2) the identity of an object continuing through time, (3) the identity of an organization, (4) personal identity. In the first edition when he used the word *identity* he usually meant logical identity, as when he says that we know of every idea that it is identical with itself. He opens the present chapter on identity by reminding us of this first type of identity. 'When we see anything . . . we are sure (be it what it will) that it is that very thing and not another.'⁴ He immediately passes to consider another sort of identity, that of identity in time. Identity here consists in the fact that apart from change in time there is no other change. The complex idea I have now of this table is

¹ The language is Locke's. Cf. I. xxvii. 9, 'every one is to himself that which he calls "self"', and the following sentences.

² IV. ix.

³ IV. iii. 6. Later, in his *Examination of Malebranche*, § 46, he categorically asserts that reflection does not give us knowledge of the mind itself but only of its operations.

⁴ II. xxvii. 1.

the same in every respect as the idea of it that I had yesterday and so I say it is the identical idea. Or, as Locke puts it: 'In this consists *identity*, when the *ideas* it is attributed to vary not at all from what they were at that moment wherein we consider their former existence, and to which we compare the present.'¹ That which is thus identical in time has, of course, but one beginning, and from its beginning to the present moment it has been and is identical with itself.

This concept of identity through time Locke now proceeds to analyse further in an interesting way. A thing may be identical in this sense of being substantially and materially the same in spite of the passage of time. A heap of stones can be identical through time in this sense. If I add a stone or take one away it is not the same heap. Or if again I remove many or all of the stones and replace them by an equal number of exactly similar stones in an exactly similar arrangement it is yet not the same heap. But another kind of identity in time is possible. For some objects remain the same, and are thought of by us as identical, in spite of the fact that in the sense in which the heap of stones remains the same they do not remain the same. These are identical in a third sense, that is, in so far as a certain organization of parts is maintained, and in their case 'the variation of great parcels of matter alters not the identity'.² This is frequently true of certain inanimate bodies, for instance, machines. But a better instance is an organic body. Locke thus describes the identity of a plant: 'That being then one plant which has such an organization of parts in one coherent body, partaking of one common life, it continues to be the same plant as long as it partakes of the same life, though that life be communicated to new particles of matter vitally united to the living plant in a like continued organization conformable to that sort of plants.'³ The point which Locke makes here is a very sound one and a very important one. The identity of the heap is not the only identity that can be conceived. There is a fundamental difference between a chance 'cohesion' of parts and an organization of parts. In its anxiety to reduce all things to simples Locke's generation frequently missed this difference, but

¹ II. xxvii. 1.

² II. xxvii. 3.

³ II. xxvii. 4.

Locke asserts it explicitly, and his assertion is one more instance of his ability to pass beyond the conceptions of his day and to free himself from them. Identity of organization is as real as identity of a heap.

Now when we turn from plants and animals to ourselves we too are identities, first in the sense that we also are organisms. The human body is an organism. And when we talk of a man's identity we most often mean the identity of his body. If the soul of a man were ever to pass into a hog, we should not think the hog then a man. Again, a man who becomes another person (in the case of dual personality) would usually be held by us to be the identical man, simply because it is the same body.

There is, however, still another kind of identity of which we are aware. It is that peculiar sort which is linked with self-consciousness. 'When we see, hear, smell, taste, feel, meditate, or will anything, we know that we do so.'¹ And this means, in this context, not merely that we are aware of the passing perceptions, but of an abiding, identical I. Perceptions come and go, 'each perishing the moment it begins',² and in discussing personal identity we cannot be discussing the series of psychical events, the congeries of perceptions. Over and above these we are aware of an I continuing through time, an I which now enjoys such and such experiences and yesterday had others. And the identity of this I is not identical with the identity of an organism. For we are not sure that it may not cease to be for a time, for example, in sleep. Yet even if I as a person temporarily ceased to exist last night I know that I am now the same person that I was yesterday. The identity depends entirely on this consciousness I have of myself. Each person is conscious of himself at present and remembers himself in the past and he is conscious that he is now the same person as he was then.

Now our difficulties in connexion with this fourth type of identity all arise from the fact that we wish to reduce it to one or another of the other three types although, since it is an identity of a different sort, the attempt is doomed to failure from the start. We are living bodies, and as such we possess the kind of identity that an organism possesses. But our identity as persons is wholly

¹ II. xxvii. 9.

² II. xxvii. 2.

different, since it is not disturbed by breaks in the conscious life of the person. We are also substance—Locke, as we have seen, is not sure that we can say outright both material and immaterial substances. If we are merely material substances with the power of thinking superadded, then, obviously, the identity of person is not that of the corporeal substance. Supposing, however, that mind is immaterial substance, what would be the relation between the self or the person and this immaterial substance, and would the identity of the one be that of the other? Locke puts the problem in the following terms: 'Whether, if the same substance which thinks be changed, it can be the same person, or remaining the same it can be different persons?'¹ He answers both parts of this question in the affirmative. The substance may be changed and yet the person remain the same. If there are two immaterial substances *A* and *B*, and if *A* had an experience yesterday and *B* recalls this very same experience today as his own, then *A* and *B* would be two substances, but one and the same person. It *may* be the case that I am not now the same immaterial substance I was ten years ago, but I am certainly the same person because I can remember myself ten years ago. Of course, it is exceedingly probable if I am an immaterial substance at all that I am the same immaterial substance now that I was ten years ago. But we must at the same time admit the possibility 'that two thinking substances may make but one person'.² Similarly, the substance may remain the same and yet there may be two persons. If a man claimed to be the same immaterial substance as Socrates was, but could not recall Socrates's experiences as his own, then supposing his claim true, Socrates and he would share one substance but be two persons. And this again is possible, so far as our knowledge goes, though we usually regard it as impossible.

The conclusion to be drawn from this is that when I think of my own existence I may think of it in three ways, each way of existing being fundamentally different from the other so far as I know. I exist as a living body, I exist as a person, I may also exist as an immaterial substance. We cannot be sure that the identical person inhabits the identical body, or again that the identical

¹ II. xxvii. 12.

² II. xxvii. 13.

person is allied to the identical immaterial substance. Each of these three has its own identity. And though it is easier to think of one man as being one body, one immaterial substance, and one person knit together into a man, we cannot at all prove this to be the case. So far as personal identity goes the only test is consciousness. I am aware now that it was I who yesterday acted thus and thus and I realize that those actions were *mine*. It is this consciousness, in Locke's opinion, which provides us with our concept of an identical person. Without it there could be for him no morality and no responsibility. Person is 'a forensic term appropriating actions and their merit; and so belongs only to intelligent agents capable of a law and happiness and misery'.¹

By way of criticism it is hardly necessary to point out that this analysis is not satisfactory. To begin with, we find here no adequate analysis of the concept of identity. Locke merely shows that the term is vague and carries with it more than one meaning. But the term remains vague even after II. xxvii. Again, no one would say that Locke has made clear the nature of the term 'person'. He claims to have shown how we come by the notion of personal identity, namely, by our consciousness of being a person now having these present experiences and being the same person to whom such-and-such happened yesterday. This claim itself can be questioned. The very fact that we say 'He has now forgotten that he did so-and-so, yet he *was* the person who did it,' or again 'He thinks that it was he who did so-and-so, but in fact it was another person' points to the conclusion that we have other criteria for determining personal identity than the one Locke mentions. Even if his theory were acceptable, however, it would still not tell us what a person is, what it is which now exists and abides through time. If it be said that a person merely *is* the consciousness of present and past experiences this is an interesting theory, but I do not think that it is Locke's either in this chapter or elsewhere. It is not possible to say what Locke thinks a person to be. He offers us a criterion for testing whether *A* is one and the same person yesterday and today, yet he does not at all enlighten us on what it is to be a person. Accordingly, the chapter is inadequate both as

¹ II. xxvii. 26.

an analysis of identity, and as an analysis of the self. Its worth and importance however lie, first, in a recognition of kinds of identity, and, secondly, in its emphasis upon the fact that there is this consciousness of an abiding self in our experience. I am not merely a series of perceptions, for I am conscious of a permanent self, an I who experiences these perceptions and who is now identical with the I who experienced perceptions yesterday.¹

¹ On Locke's theory of personal identity cf. further H. P. Grice 'Personal Identity', *Mind* (200), October 1941, and Antony Flew 'Locke and the Problem of Personal Identity', *Philosophy* (96), January 1951.

MODES, SUBSTANCES, AND RELATIONS

WE have seen that Locke's division of ideas into simple and complex was not entirely successful, but it provided him with a basis for classification. In this chapter I propose to study the three sorts of complex ideas which he recognized. These are modes, substances, and relations. '*Modes* I call such complex *ideas* which, however compounded, contain not in them the supposition of subsisting by themselves, but are considered as dependences on or affections of substances.'¹ Locke gives three examples, gratitude, triangle, and murder. Secondly, '*the ideas of substances* are such combinations of simple *ideas* as are taken to represent distinct particular things subsisting by themselves, in which the supposed or confused *idea* of substance, such as it is, is always the first and chief'.² Examples are the ideas of lead or of man. Lastly, cause and effect, or again identity, are instances of ideas of relations, though from the first Locke is a little vague about our ideas of relation. They '*consist in the consideration and comparing one idea with another*'.³ But comparing is hardly compounding, and in the fourth edition, as we have seen, he dropped even the pretence that these were complex ideas.

I

We may begin with modes. We should first note that the conception of mode itself is not wholly clear. It is not wholly clear, for instance, how mode is related to attribute. But as one reads the chapters on modes one gains the impression that Locke is less concerned with the clarification of this concept than with the verification of the empiricism set out in the opening chapters of Book II. Thus if he can more easily prove that an idea is ultimately

¹ II. xii. 4.² II. xii. 6.³ II. xii. 7.

derived from sensation or reflection by grouping it with modes he will do so, even though it would be more natural to group it with relations.

And herein, doubtless, lies the explanation of the somewhat artificial classification of the ideas of space, time, number, and infinity in the *Essay*. In the two early Drafts he usually discusses these under relations, on the whole the more satisfactory classification. Why then in the *Essay* does their consideration form part of a theory of modes? The Drafts reveal the answer, and explain at the same time Locke's curious division of modes into simple and mixed. Draft A consists of an exposition of empiricism together with a defence against possible objections. One of these is that we have an idea of infinity which is neither given in sensation nor derived from it. In answer Locke seeks to show that even the idea of infinity is really a complex idea, made up of simples originally given in sensation or reflection. In order to prove this he argues, first, that our only clear conception of infinity is quantitative infinity, that is, infinite number. Secondly, any finite number may be regarded as a complex idea, gained by 'enlarging' a unit given in sensation, that is, repeating the same simple idea over and over again. For instance, a dozen is gained by repeating the unit twelve times; it is a complex idea formed of twelve simples. Locke terms this the simple mode¹ to distinguish it from those modes which are compounded of simple ideas of different kinds and are called mixed. But infinity is also a quantity though not a fixed one. It can also, in Locke's opinion, be regarded as a complex idea gained by enlarging, only the process of enlarging in this case is endless. Thus finite numbers and infinity itself are simple modes, and when so regarded it is easy to show their ultimate dependence upon the sensed unit. Moreover, in addition to number, space and time may be analysed in terms of simple modes. Any definite length is so many units of length set together; any period of time is so many seconds or minutes or hours. Even infinite space is a mode of space, and infinite time a mode of time. Consequently, when Locke writes his *Essay* he no longer talks of

¹ Not to be confused with the simple *idea*, for the simple mode is a complex idea.

ideas of space, time, number, and infinity as relations but as modes. His purpose in doing so is plain. In classing them as simple modes he can more easily and more effectively maintain and confirm the empiricism of Book II.

Space. One of the most striking facts about the chapters on space in the *Essay* is the absence of any definite statement in them as to the nature of space itself. From the *Essay* alone it is not possible to understand Locke's real position in connexion with this important matter, and it is difficult enough even when his other writings are taken into account. It is frequently said that Locke's theory of space is Newtonian, and no doubt one or two of his remarks might be held to imply a Newtonian view of space—though even here the influence of Gassendi, whose theory of space differs in certain details from that of Newton, is the more marked. But implicit in the *Essay* also is a profound criticism of Newton's view, whilst Locke's remarks outside the *Essay* are almost the direct opposite of the Newtonian theory.

For Newton space is an absolute continuum stretching infinitely in all directions. It is a positive entity within which things exist and move, but it itself does not move nor does it alter its nature in any manner. 'Absolute space', says Newton in his *Principia*, 'by its very nature without reference to anything external always remains similar and immobile.' For Locke in the journals space is either merely relative or it is 'a possibility for extended beings or bodies to be, or exist'. The former view is set forward in the brief entry of 27 February 1676. He discusses 'imaginary space', that is, 'space separated in our thoughts from matter or body' and holds that it is nothing 'real or positive'. Real space is space filled by a body and exists only relatively to that body, or it is the space between two bodies and again exists relative to them. In the notes on space written in the journals of 1677 and 1678 he repeats this position. Any particular space is still a bare relation. But he does now admit the possibility of our conceiving space where there is no body. However, we do not then conceive absolute, positive, infinite space. All he means, he explains, is that we can always 'imagine a bare possibility that body may exist where now there is none'. 'Space, in itself, seems to be nothing but a capacity or

possibility for extended beings or bodies to be or exist.¹ Or, as the 1678 journal puts it: If we think of particular bodies, space is 'nothing but the relation of the distance of the extremities. But when we speak of space in general, abstract and separate from all consideration of any body at all or any other being, it seems not then to be any real thing but the consideration of a bare possibility of body to exist.'² This latter modification might very well be the outcome of Locke's converse with the Gassendists, for, as Bernier explains it, one of the main points of Gassendi's theory is that space is no substance and no mode, but 'a capacity to receive entities'. Locke's account in the journals seems to be working towards some such position though it never quite reaches it.

The publication of Newton's *Principia* in 1687, however, seems to have left Locke in a quandary. He was as convinced as ever that we have no positive idea of absolute space, and yet his reading of Newton made him conscious of the difficulties in a merely relativist position. The crucial passage in the *Essay* is II. xiii. 27, where for a moment he faces the issue squarely. Here he puts forward no solution of his own. On the contrary, he is obviously anxious not to commit himself. But the most significant fact in connexion with this passage is that Newton's theory of space is not considered in it even as one possible alternative. Apparently Locke is so convinced that it is wrong as it stands that he cannot regard it as worthy of consideration.

The passage runs: 'But whether any one will take space to be only a relation resulting from the existence of other beings at a distance or whether they will think the words of the most knowing King Solomon, "The heaven and heaven of heavens cannot contain thee", or those more emphatical ones of the inspired philosopher, St. Paul, "In him, we live, move, and have our being" are to be understood in a literal sense, I leave every one to consider.' In stating the alternatives in this passage there is no reference to Newton's theory—so little is the *Essay* Newtonian in its conception of space! Locke recognizes two alternatives only. The first is relativism in the sense explained above.³ If, however, this

¹ Aaron and Gibb, p. 94.

² *Ibid.*, p. 100.

³ The sense afterwards maintained by Berkeley; cf. *Principles*, § 116.

alternative be rejected as inadequate, then we cannot merely assert with Newton that a positive, absolute, and infinite space exists. Our idea of infinite space is essentially negative, as Locke will later prove. The only way in which it could be made positive would be by identifying it in some way with the one positive infinity we can possibly conceive, namely, the Deity. Henry More had argued that infinite extension is divine and Locke had himself reflected on this possibility, as is clear from the journal of 1677.¹ Supposing God's being were positively conceived by us, and supposing he were extension, we might then have a positive idea of infinite extension. But Locke, although he plays with this alternative, does not accept it outright. For, first, he was not sure that we had a clear positive conception of God's infinity. Secondly, to assert that the Deity was an extended being might savour in 1690 of materialism or Spinozism. Yet this is the only form in which Locke will at all consider this second alternative, that absolute space exists as a positive entity. The words of St. Paul may be literally true. God may be the space in which all things exist. Then we should have a positive idea of absolute space, but on no other view is this possible.

The sequel to Locke's criticism is highly interesting. In 1713 Newton published the second edition of his *Principia* and in it he added a scholium in which he recognizes that God constitutes, although he is not identical with, duration and space. 'He endures for ever and is everywhere present; and by existing always and everywhere, he constitutes duration and space. . . . In him are all things contained and moved.'² It is not Locke's criticism alone, of course, that had influenced Newton, for others were as definite as Locke in their rejection of his position. But Locke's refusal to admit Newton's theory even as an alternative must have counted with the latter.

As to Locke's own view of space, it is clear that he first favoured a relativism which would accord best with his empiricism, and that he then seems to have felt some doubt about the adequacy of

¹ Aaron and Gibb, p. 96.

² *Principia*, the General Scholium to Book III; cf. Florian Cajori's edition (Cambridge, 1934), p. 545. In a note on the passage Cajori refers to Berkeley and Leibniz, but not to Locke.

this position as a basis for scientific procedure, in view of Newton's demand for a more positive conception of space. But he could not accept Newton's theory as presented in the first edition of the *Principia*, since he could not conceive a positive, absolute space. The one possibility was the linking of space with the Deity. But here again Locke hesitated. He would not openly accept the view that God is the space in which all things exist and move. At the same time, it is certainly true that some of his language in the rest of the *Essay* implies an absolute rather than a relative view of space.

Locke, then, avoids a discussion of the nature of space as such. Instead he sets before himself three distinct problems: (1) Can space be identified with body? (2) How may place be defined? (3) In what sense are all ideas of space derived from sensation?

Discussion of the first point takes up the whole of the second half of II. xiii. The point at issue was an important one. If extension were the essence of body then Descartes's mathematical physics could rightly become the prototype of the physical science of the new age. On the other hand, if it were not no physics could succeed which did not take into account such other conceptions as force, gravity, and impenetrability. Now Locke begins by pointing out that body is usually regarded as both extended and solid, and these words are not usually supposed to be synonyms. It is true that we cannot think of solid body without thinking of it as extended. But this does not permit us to identify the two terms. Nor is space identifiable with body. Space offers no resistance to body, but one body resists another. The parts of space are inseparable and immovable, while the parts of bodies are separable and movable: 'Thus the determined *idea* of simple *space* distinguishes it plainly and sufficiently from *body*, since its parts are inseparable, immovable, and without resistance to the motion of body.'¹ To the argument that all entities are either substances or accidents, so that space, which is obviously not substance, must be an accident or a property, and so may very well be the essential property of body, Locke replies that it is a very great assumption to assume that substances and accidents are the sole existents

¹ II. xiii. 14.

whilst we are so uncertain as to the nature of substance. Finally, Locke believes that a vacuum is possible, and if it is, then there exists space where there is no body, so that the two cannot possibly be identified. The existence or non-existence of a vacuum was another point in hot dispute on the Continent, and Locke brings forward the following arguments in favour of its existence. Since body is finite, a man 'at the extremity of corporeal beings' could yet stretch forth his hand beyond his body. In that case 'he would put his arm where there was before space without body'. Secondly, if God annihilated an object (as we must suppose he can), this would create a vacuum. Thirdly, the motion of objects ultimately necessitates a vacuum. Lastly, we have the idea of a vacuum, since we talk and argue about it, and this shows that our idea of body is not the same as that of space, for we can think of a space where there is no body. From all these arguments Locke concludes that there is a vacuum¹ and that body is not essentially extension. Impenetrability is as essential a characteristic of corporeal existence as is extension.²

The consideration of *place* need not long detain us. Locke rejects both the Aristotelian and the Gassendist (and again Newtonian) conception of place. For Aristotle the place of a thing is definable in terms of the vessel or body which contained it. If, for instance, a bottle is completely filled with water and closed, the place of the water can then be defined in terms of the inner sides of that vessel. For Gassendi and Newton place is a determined part of space, occupied by a body. In Newton's language: 'Place is a part of space which a body takes up.' In Locke's view, however, this latter description of place is 'confused'. He defines place in terms of 'two or more points', the place of an object O is the same today as it was yesterday if it remains at the same distance from two or more fixed points.³ Thus place is a relative conception,

¹ Thinking in terms of a vacuum, it should be added, does not apparently necessitate acceptance of the Newtonian absolute continuum stretching infinitely in all directions. Observe the carefully qualified manner in which Locke speaks in II. xiii. 24 and 27.

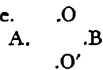
² Nowhere is Gassendi's influence on Locke more obvious than in the argument summarized in the above paragraph.

³ II. xiii. 10. Locke's argument here is obviously defective even of a plane. In

'nothing but', as he explains in Draft B, 'extension with relation to some other bodies or imaginary points that are at a certain determinate distance from it'.¹ Because this is so Locke thinks we cannot speak of the place of the universe, for there are no fixed points outside it to which we can relate it.

The third problem is the most important of the three. Unfortunately, it is also the one which Locke faces with least success. It is really the problem of the relation between the space perceived and the space conceived, between the *given* of sensation and the *conceived* of thought. Locke feels confident that all thoughts about space find their starting-point in sensation. My first idea of space is given in sensation. For instance, I see this patch of brown which I call a table and another patch of brown which I call a chair. I also see the shape of the two patches and I see the distance between the two. This is all part of the immediately given. Of course, that the table is two yards broad and that it is six yards from the chair is not immediately given. Sensation of itself would not enable us to understand these terms. Yet we do gain an idea of space in sensation. Locke, therefore, terms space a simple idea. And he continues to describe it as such even though he recognizes that it is divisible.² It is a simple idea as being the *given* of sensation and not as being indivisible. The real difficulty in connexion with the simple idea of space, however, arises when the question is asked: What precisely is given? Is it space as such? Hardly! Then is it the *minimum sensibile*, 'the least portion whereof we have clear and distinct *ideas*'?³ He occasionally appears to be holding this view. But as the argument proceeds, the simple idea is almost identified with a stated length agreed upon as the unit of measure, for instance, an inch, a foot, a yard. Then any other determinate length is a mode of one of these, and the idea of it is gained by 'enlarging' the unit. But why should one inch be *given* rather than six or ten? Locke's argument is certainly weak here. He tries to deal with geometrical figures in the same way, to make them all

the diagram below, the points marked O and O' are both the same distance from the points A and B, but they are not in the same place.



¹ § 141.

² II. xv. 9.

³ *Ibid.*

modes of a simple idea, namely, the line. Vary the manner in which lines are joined and you get the various figures. But, as Leibniz pointed out, this presupposes that every figure consists of more than one line, and this is certainly not the case, as the circle and the oval sufficiently prove. It is necessary to conclude, therefore, that Locke's attempt in the *Essay* to systematize his thoughts on space, particularly in terms of simple ideas and modes, was not very successful.

The failure of Locke's efforts, however, ought not to blind us to the real point of his argument. It is not whether we can talk of all spatial phenomena in terms of simple ideas and modes, but whether it is true that sensation does provide us with a minimum without which our further thinking about space could not occur. Locke, himself, would protest most emphatically against the view that sensation gives us all we know about space. He was quite clear that the mind could discover much rationally which was not revealed in sensation. But he did not believe that our knowledge of space was independent of sensation. If I understand Locke rightly what he wished to assert is a position frequently asserted today. I may quote Dr. Broad: 'All that I am maintaining is that these crude objects of sense-awareness do have properties that are evidently spatial, and that we can see in them the germs of the refined notions of points, straight lines, etc.'¹ I do not think that Locke claims more when he holds that spatial conceptions are ultimately derived from simple ideas of sensation. Yet it has to be admitted also that he never shows how we are to relate the *given* of sensation with the truths discovered in geometry, and with the intellectual conceptions upon which that study is based.

Time. Locke's account of time manages to avoid the major issues even more completely than does his account of space. Problems as to the reality or non-reality of time, as to its absoluteness or relativity, are never once considered. On the whole he seems to assume the Newtonian view as the basis of his discussion. Time flows on 'in one constant, equal, uniform course',² and its 'utmost bounds' are 'beyond the reach of thought'. Yet he never examines this position nor even states it explicitly or claims it as his own.

¹ C. D. Broad, *Scientific Thought*, p. 35.

² II. xiv. 21.

The consequence is that the chapter on time is somewhat undistinguished. Locke contents himself with making two points. First, he distinguishes between duration and time. Descartes had also made this distinction and had made it in terms of modes. Time was a mode of duration.¹ This accorded very well with the view Locke wished to assert. For him also each interval of time is a mode of duration in general. Time is 'duration, as set out by certain periods and marked by certain measures or *epochs*'.² Our standard of measurement is fixed conventionally. The revolutions of the sun and moon, the flight of migratory birds, the coming of the seasons, the swing of the pendulum, or any other isochronous movements may be used. But Locke points out possible errors here against which it is necessary to guard oneself. Time must not be identified with the motion of the sun or the pendulum: nor must we say with Descartes and the Cartesians that it is 'the measure of motion'. Time is not motion, nor is it the measure of motion, since in measuring motion space and mass must also be taken into account.³ The fact that all our standards of time are motions of various sorts misleads us into supposing that there is a closer relation between time and motion than actually exists. Yet it is not the motion in itself which is important, but motion in 'constantly repeated periods'. 'Nor indeed does motion any otherwise conduce to the measuring of duration than as it constantly brings about the return of certain sensible ideas in seeming equidistant periods.'⁴ It is a mistake therefore either to identify time with motion or to suppose that time is simply the measure of motion.⁵

The second and more important point concerns the origin of the idea of duration in general. Our awareness of duration in the first instance is, Locke thinks, bound up with our consciousness of succession, which is 'suggested by our senses, yet is more constantly offered by what passes in our own minds'.⁶ Succession,

¹ *Philosophiae Principia*, i. 57.

² II. xiv. 17.

³ II. xiv. 22.

⁴ *Ibid.*

⁵ Once we have agreed upon a standard, for instance, the apparent revolutions of the sun, we may, of course, use it in measuring the passage of time even before these revolutions occurred or after they have ceased. We may talk of a million years before the sun came into being or after it has ceased to exist.

⁶ II. vii. 9.

therefore, is experienced both in sensation and reflection, but best in reflection, when we consider the train of ideas which constantly succeed one another in the mind. Now duration is 'the distance between any parts of that succession, or between the appearance of any two *ideas* in our minds'.¹ Our idea of duration is thus bound up with and, apparently, consequent upon, our idea of 'the fleeting and perpetually perishing parts of succession'.² As against Locke it might be argued that the succession of which we are aware in this case must in the very first instance be recognized as temporal and known to be different in that respect from, for instance, a numerical succession. Consciousness of time is either simultaneous with, or prior to, consciousness of the sort of succession which Locke has here in mind. But in discussing the origin of the idea of duration Locke seems to be thinking not merely of our consciousness of time but of our first consciousness of a finite duration or length of time. The idea of duration is not the same, apparently, as the idea of succession (even temporal succession). We gain the former when we come to note how things endure throughout succession, so that we are led to think of a fixed length of duration. When we first observe 'a distance between any parts of that succession' we first become aware of measurable duration.³

But again the same difficulty arises in the case of time as arose in our treatment of space. What precisely is given? It is not time or duration as such in the wider sense. What is given us ceases to be when we are not attending to it; whereas time as such proceeds on its 'constant, equal, uniform course'. Yet we should, it appears, never become aware of time in this objective sense were not something given us from our earlier sensory and reflective experiences. This something given is, first, a succession of perishing parts, the succession being neither too rapid nor too slow to be discerned by us, and, secondly, a certain distance between parts of this succession. Thus we gain our first idea of a definite length of time. Is this then the simple idea of time out of which the modes are framed?

¹ II. xiv. 3.

² II. xiv. 1.

³ II. xiv. 3 has sometimes been taken to mean that we must be aware of a permanent—the self or an object—before we can be aware of duration. I think this is reading too much into the passage. These are rather illustrations of durations, as is clearer from the corresponding passage in Draft B (§ 103).

Locke's answer is uncertain. In II. xv. 9 he suggests that we may regard the *minima sensibilia* as the simple ideas both in the case of the ideas of space and time. 'But the least portions of either of them', he there remarks, 'whereof we have clear and distinct *ideas*, may perhaps be fittest to be considered by us as the *simple ideas* of that kind, out of which our complex modes of *space*, *extension*, and *duration* are made up and into which they can again be distinctively resolved.' Now presumably this simple idea, the *minimum sensibile*, which, as Locke admits, varies from person to person, cannot be our unit in measurement. In that case, the unit itself would be a complex idea, whereas Locke assumes that it is a simple idea (largely because the number one, or unity, is in his opinion a simple idea). However, as is clear from the above passage, he is not wholly certain that the *minimum sensibile* is the simple idea, so that the unit may still be the simple idea. Locke, it is clear, has no definite theory to offer us as to the character of the *given* in our first awareness of time through sensation or reflection.

The discussion of space and time concludes with a comparison between them.¹ Both are infinite (in the negative sense which Locke later makes clear), both are capable of greater and less, both are divisible, and divisible into parts which are themselves extensions and durations respectively, and in both such parts are inseparable. All finite beings are in space and in time. And lastly, time is to duration as place is to space. So much they have in common. As to the differences: first, duration is in one dimension only, space in three, or, as Locke puts it, 'duration is as a line, expansion as a solid'. (He might also have added that duration is as a line pointing in one direction only.) Secondly, the parts of duration are never together but follow each other in a succession, whilst those of space are all together.

Number. Judged even by the standards of his own day Locke's description of number is defective. To begin with he falls into the strange fault of considering integers alone. The reason for this is not difficult to find. He thinks he has found in number the nearest instance of the relation of simple mode to simple idea. The simple

¹ II. xv.

idea is the unit, having no 'shadow of variety nor composition in it',¹ and any other number is a mode of it, made by putting so many units together and giving the compound a name. The modes are completely distinct from each other and therein lies the explanation of that clarity which pertains to arithmetic. Locke, however, is oversimplifying his problems by neglecting fractions. The unit, after all, is a composite. There are fractions, not to mention incommensurables such as $\sqrt{2}$.

But even if we confine our attention to integers, Locke's account must still be written down as unsatisfactory. 'By the repeating of the idea of an unit and joining it to another unit, we make thereof one collective idea, marked by the name two.' Surely this is no adequate account of 2 and of its relation to 1. Is the idea of 200 gained by repeating to ourselves the unit two hundred times? And why does the number 2 reappear in 200? What is there common in 2, 20, 200, 2,000, and so on? Obviously, 2 is a member of a series of integers, built up according to a certain order, beginning not with 1 but with 0. Locke mentions the need for an order in II. xvi. 7, but he does not see that it is essential to number and that there is no description of number without taking it into account. Leibniz in discussing this chapter in the *Nouveaux Essais* is well aware of its defects, and he puts his finger on the explanation. 'You see then, sir, that your idea or your application of simple or mixed modes is greatly in need of correction.'²

Infinity. Some of the most interesting pages that Locke wrote about infinity are to be found in Draft A. As has already been pointed out, the whole purpose of the discussion of infinity and indeed of simple modes is here revealed. It is meant to answer the objection that might be made against Locke's empiricism, the objection that the idea of infinity is a positive idea gained independently of all sense-experience. Locke admits that we have this idea, but he claims that it is negative, not positive, and that it originates in sensation and reflection. In the Draft he seeks to prove this in two ways. First, he seeks to overthrow the argument

¹ II. xvi. 1.

² II. xvi. 5. It is good to think that we have been saved from the cumbersome arithmetical notation suggested by Locke in II. xvi. 6.

of the schools, that since the finite is negation and the infinite is the negation of the finite the latter is a double negative, and in that way most positive. He argues against this subtlety by claiming that the finite is not a negative. It is a positive, determined quantity, determined both as to its beginning and end, and though this does involve negation of what is not within the bounds of the finite, the idea of the finite is itself a positive idea. In the *Essay*, in which he has promised to follow the 'historical, plain method', he drops this argument altogether and bases his case on the second argument of Draft A. This consists in analysing the idea of infinity and showing that it is an idea of an endlessly growing progression, which idea is not positive but negative. We shall see how he develops this argument in the *Essay*. He makes another interesting point at the end of the discussion of the infinite in Draft A. Even if some people claim a positive idea of infinity, it still at most can only be a 'modus of Number or Extension',¹ and therefore is ultimately derived from the given in sensation and reflection. Later, Locke drops this point also, maintaining that such people from the nature of the case cannot but be deceived.

Turning now to the discussion of the *Essay* we perceive its motive more plainly in the light of the foregoing. II. xvii is no inquiry into infinity in general. It is solely an attempt to demonstrate that the concept of infinity contains in it nothing not ultimately derived from sensation and reflection. To prove this Locke first endeavours to show that the only conception of infinity which can seriously be considered by us is the quantitative. Once this is admitted he then feels fairly certain that there can be no further hindrance in the way of his argument. The quantitative is not our only conception of infinity. But, Locke argues, it is the only one that is clear. We do conceive God as infinite and we know by revelation, if by no other means, that he is no mere quantity. But his infinity is on the whole beyond our comprehension. Our one clear conception of it is in quantitative terms. 'When we apply to that first and supreme Being our *idea* of infinite in our weak and narrow thoughts, we do it primarily in respect of his duration and ubiquity.'¹ If we would further seek to understand the infinity of

¹ § 45. Aaron and Gibb, p. 72.

² II. xvii. 1.

God's power, wisdom, and goodness, we can only do so with any measure of success in terms of quantity. God has the power of the most powerful human being and infinitely more; he has the wisdom of a Solomon and infinitely more; the goodness of the saint and infinitely more. It is clear we are thinking in quantitative terms. The only conception of infinity which is at all clear to us is the quantitative.

In so arguing Locke is challenging the thought of his day. He denies that we have a clear idea of the infinite as quality. He denies that we have a clear notion of the Absolute, the *Ens Perfectissimum*. If he is right Descartes's transcendent metaphysics and the whole of Spinoza's philosophy rest upon a conception which lacks clarity and is ambiguous. 'The true infinite', said Leibniz when he read this passage, 'exists, strictly speaking, only in *the absolute*, which is anterior to all composition, and is not formed by the addition of parts.'¹ This Locke denies. The only infinite we clearly conceive is endless progression in quantity. It is the infinitely great in quantity, whether in number, in space, in time, in wisdom, or in power. Infinite number is a series beginning (so Locke thought) with 1 but ending never. Infinite space is space stretching out endlessly in all directions from a given point. Infinite time is endlessness whether backwards from the present or forwards to the future. It is precisely the sempiternity of which Spinoza was so contemptuous. But for Locke no other idea of eternity and no other of infinity is clear. This chapter on infinity is a bold challenge to the rationalists to justify their position.

Now if it be once admitted that our only clear idea of infinity is quantitative Locke can then easily show that it is no positive idea and that it is ultimately derived, like all other ideas, from the simple ideas of sensation and reflection. We cannot gain a positive, determined idea of endless progression. A positive idea of an infinite number is, from the nature of the case, an absurdity. 'For our *idea of infinity* being, as I think, *an endless growing idea*, but the *idea* of any quantity the mind has being at that time terminated in that *idea* (for be it as great as it will, it can be no greater than it is), to join infinity to it is to adjust a standing measure to

¹ *Nouveaux Essais*, II. xvii. 1.

a growing bulk.'¹ Thus absolute space and absolute time in so far as they are infinite are essentially negative conceptions. Even if we identify absolute space and time with the Deity it is still doubtful whether we have any positive concept of infinity.² Our thinking that we have leads us to antinomies of various sorts which can only be resolved by realizing that the idea of infinity is for us essentially negative.

This negative idea has originated in the following way. Experience gives us a finite length, a finite period of time, or a finite number of objects. We can think of these as doubled, as trebled, quadrupled, and so on 'without ever coming to an end'. Here already is the conception of infinity. We may begin with any positive number and pass on to higher and higher numbers proceeding forward endlessly. Infinity for Locke is this endless progression. It is, therefore, an idea ultimately derived from sense-experience; it rests upon what is given in sensation. Of course, sensation only provides the basis. We can never verify in experience the endlessness of the series. Locke would be prepared to admit that the mind itself works upon an assumption not gained in experience, namely, that if x be any number, there exists some number y of which we can say it is greater than x . But what Locke wants to argue is that the whole conception of number was first suggested to us by sensory experience, and that even this conception of infinite number derives from the same source. Infinity is a negative idea ultimately derived from simple ideas of sensation and reflection.

Thus even the idea of infinity, remote as it is from the first objects of sensation and reflection, ultimately rests upon sense-experience. Infinity is not itself *given* in sensation or reflection. Yet it is no positive idea known (for instance, innately) in complete independence of sense-experience. On the contrary, it is the consequence of the mind's enlarging of the *given* together with the mind's assuming that enlarging can go on for ever. In other words, to put it in Locke's terminology, infinity is essentially a mode of a simple idea. And when Locke has proved this he is content. Ideas of space, of time, of number, and even of infinity,

¹ II. xvii. 7.

² II. xvii. 20.

are simple modes of simple ideas; and Locke does not desire to prove more in connexion with them. 'I pretend not', he says,¹ 'to treat of them in their full latitude; it suffices to my design to show how the mind receives them, such as they are, from *sensation* and *reflection*; and how even the *idea* we have of *infinity*, how remote so ever it may seem to be from any object of sense or operation of our mind, has nevertheless, as all our other *ideas*, its original there. Some mathematicians, perhaps, of advanced speculations, may have other ways to introduce into their minds *ideas* of infinity; but this hinders not but that they themselves as well as all other men got the first *ideas* which they had of infinity from sensation and reflection in the method we have here set down.'

Other Simple Modes. 'For method's sake' Locke proceeds to mention briefly a few more simple modes before passing to mixed modes. Simple modes, he repeats, are the consequence of 'the faculty the mind has to repeat its own *ideas*'.² There are modes of motion, for instance, sliding, rolling, walking, and so on, and modes of sound. 'Every articulate word is a different *modification of sound*.'³ There are modes of colour, that is, 'shades' of the same colour. (Here again we see how artificial is the system of classification. For instance, I see an object coloured royal blue. Apparently I am then, in so far as I see the colour, seeing a simple mode, i.e. a complex idea, it being a mode of 'blue', which is the simple idea. So the simple idea is blue in general, whilst the particular shades are complex ideas.) Finally, there are modes of taste and smell, although we hardly ever refer to these since we have few names for them.

Proceeding, Locke considers 'the modes of thinking', to which we have already referred, together with the modes of pleasure and pain. The long chapter which follows on power can hardly be held to be a discussion of a mode at all, whether simple or mixed. The idea of power is said to be a simple idea, though Locke has to confess that it '*includes in it some kind of relation*'.⁴ The relation between it and the simple mode is not at all clear. Are we to suppose that each of the mind's faculties is a mode of power? But in that case thinking, which has its own modes, would itself be a

¹ II. xvii. 22.² II. xviii. 1.³ II. xviii. 3.⁴ II. xxi. 3.

mode. In the chapter on power Locke's scheme seems to break down altogether.¹

Mixed Modes. Locke completes his account of modes with a chapter on mixed modes, that is, modes made up of simple ideas which are not the same. II. xxii, however, is slight and in a sense merely introductory to the subject. He has much more to say of mixed modes in Book III, and we cannot fully discuss this highly important group of ideas until we come to consider that book. Some interesting points, however, emerge from the present chapter, which we may here note.

In the first place Locke tries to explain once again what he means by a mode. These mixed modes are 'such combinations of simple *ideas* as are not looked upon to be characteristic marks of any real beings that have a steady existence, but scattered and independent *ideas* put together by the mind'.² The underlying conception is of something dependent, not having an existence of its own. But to this is added, in the case of mixed modes, the further conception that we are here usually dealing with a creation of the mind. This latter fact is stressed by Locke. He never considers the objectivity or subjectivity of simple modes: he seems even to be avoiding the issue. But in the case of mixed modes he is quite explicit. The mind chooses what ideas it shall put together without considering whether there is anything in reality corresponding to the complex idea it has created; 'though I do not deny', Locke adds, 'but several of them might be taken from observation and the existence of several simple *ideas* so combined

¹ There is also the very curious fact that in the final section of this chapter Locke talks of having now brought to an end his discussion of 'original ideas', i.e. presumably certain simple ideas, rather than simple modes, as if the chapter were a discussion of simple ideas. 'Original ideas', however, are now confined to a few only of the simple ideas, all the rest being derived from them. 'I believe they all might be reduced to these very few primary and original ones, viz., *extension, solidity, mobility* or the power of being moved; which by our senses we receive from body; *perceptivity*, or the power of perception, or thinking; *motivity* or the power of moving; which by reflection we receive from our minds' (II. xxi. 73). To which we must also add, Locke thinks, existence, duration, and number, given in both sensation and reflection. We have here a division between original and derivative ideas which cuts across the earlier division into simple and complex, since many simple ideas, e.g. ideas of the secondary qualities, are obviously no longer original.

² II. xxii. 1.

as they are put together in the understanding.¹ The mind might be following the order of nature, but most usually it is creating without reference to that order. We simply put ideas together and give a name to the combination. Locke, perhaps, over-emphasizes the part the adoption of a name plays, for he seems to think there would be no idea had we no single name for it. To kill one's father is parricide, and here is one complex idea. On the other hand, the killing of an old man has no distinct name and therefore, Locke argues, there is no complex idea of that sort. But surely the killing of an old man is as distinct a notion as parricide, even though it is not symbolized by one word.

Locke notes three ways in which the mind is furnished with the complex ideas of mixed modes. '(1) By experience and *observation* of things themselves; thus by seeing two men wrestle or fence, we get the *idea* of wrestling or fencing. (2) By *invention*, or voluntary putting together of several simple *ideas* in our own minds: so he that first invented printing, or etching, had an *idea* of it in his mind before it ever existed. (3) Which is the most usual way, by *explaining the names* of actions we never saw, or notions we cannot see.'²

In concluding this section on modes we may point out that the conception grows and develops in Locke's hands, but never becomes really explicit. He is obviously borrowing his terminology from traditional sources, but refusing to be tied down to it. The one thing he is anxious to prove in this whole discussion is his own empiricist position. We might also add that he is so anxious to show that all our modes are ultimately derived by the mind from simple ideas of sensation and reflection that he tends to neglect the part which the mind itself contributes to the making of these complex ideas. He consequently neglects many very grave problems, but consideration of some of them at least is merely postponed, for he returns to them later in the *Essay*.

II

Having considered modes we must now consider *substances*. At the outset a distinction must be drawn between complex ideas

¹ II. xxii. 2.

² II. xxii. 9.

of particular substances and the conception of substance in general. Locke's concern is with the former and in the Drafts he examined these only, but when he came to write the *Essay* he had realized that a word must first be added about substance in general before the nature of our complex ideas of substances could rightly be understood. He accordingly adds an important paragraph at the opening of II. xxiii.

By substance the schools had meant two things, and one of the difficulties in the whole conception, as is clear from Stillingfleet's use of the term in his controversy with Locke, is that these two meanings were not distinguished with sufficient care. In the first place, substance is *ens*, real existence (or, sometimes, the essence, the 'true nature' of a real existence). In the second, it is that which supports accidents, *per se subsistens et substans accidentibus*. The second was regarded as the more philosophical usage of the term. From Aristotle's day onward the conception of substance had never been examined with the attention it merited. It is true that some doubts had been expressed in the schools, particularly amongst the nominalists. Can we, it had been asked, divide a thing into substance and accidents? If we take away all the accidents what then is left? Can substance so isolated mean anything positive?¹ But if a few of the schoolmen turned these questions over in their minds, without reaching any very definite results, philosophers generally were ready to accept the Aristotelian division into substances and accidents without further examination.

Now there was a special reason why Locke could not follow the fashion and acquiesce in the current terminology and conception. He had made it his business to examine all the ideas in the mind, particularly those which appeared at first sight to originate in a source other than sensation or reflection. The idea of substance appeared to be such an idea. Locke himself admits that we neither have nor can have this idea directly by sensation or reflection.² No one experiences substance, as such, directly. Nor is it gained by

¹ Cf. Tellkamp, *Das Verhältnis John Locke's zur Scholastik*, p. 72. He mentions Nicholas of Autrecourt as one who had questioned the validity of the conception.

² I. iv. 18.

enlarging or combining the ideas experienced. We experience size, colour, shape, and so on, but however much we enlarge these ideas we never get the positive idea of substance as such. Nor again does it come by combining. How then do we come by this idea of substance? This is the problem which Locke set himself.

It is important to note, before we proceed further, that Locke is dealing with ideas here. This means that any solution offered, from the nature of the case, applies only to ideas and does not apply, directly at least, to reality. It tells us what the nature of our idea is, and not what the nature of the real is. The most this method can do is to show how an idea is gained and what precisely it means. The idea of a substance, Locke discovers, is an idea of something supporting accidents. This involves no knowledge of the real existence of the something. For to have an idea or concept even of a thing's being is not to know that this thing exists. Locke analyses the *idea* only.

Now the problem is to show how this idea of substance in general is derived. Locke thinks that though it is not immediately experienced it can none the less be shown to be derived from what is experienced. This is only possible because we do not have a positive idea of substance but merely 'an obscure and relative idea'. How is it derived? It is derived, Locke thinks, from our experience of qualities and accidents. Our idea of substance in general, he asserts at the beginning of II. xxiii, is the idea of a support of qualities. 'If anyone will examine himself concerning his *notion of pure substance in general*, he will find he has no other *idea* of it at all, but only a supposition of he knows not what support of such qualities which are capable of producing simple *ideas* in us; which qualities are commonly called *accidents*. . . . The *idea*, then, we have, to which we give the general name substance, being nothing but the supposed, but unknown, support of those qualities we find existing, which we imagine cannot subsist *sine re substante*, without something to support them, we call that support *substantia*; which, according to the true import of the word is, in plain English, *standing under* or *upholding*.'¹ Our efforts to speak positively of substance are like those of children

¹ II. xxiii. 2.

when they seek to explain what they do not understand. Or we are like Locke's celebrated Indian 'who, saying that the world was supported by a great elephant, was asked what the elephant rested on? to which his answer was "A great tortoise"; but being again pressed to know what gave support to the broad-backed tortoise, replied—something, he knew not what'. So substance is a something-I-know-not-what. That is to say, while the concept of a support to accidents is clear, the concept of the support itself, of the something there common to all substances, is not clear. The idea of substance in general is, as he explains to Stillingfleet, 'a complex idea made up of the general idea of something or being, with the relation of a support to accidents'.¹

This conception needs to be analysed further. It is a conception of substance in general and, therefore, abstract.² It is gained by abstracting from ideas of particular substances the element common to all. Thus the idea of substance is already present in the idea of a particular substance or of a thing. How, then, is it derived in the case of the idea of a particular substance? Should we say that it is something known rationally, so that the substance-attribute relation is apprehended logically? But this is what Locke denies. The substance is a something-I-know-not-what, hence it is not possible to discern rationally the relation between the qualities observed and the substance, which is unknowable. How, then, can we speak of substance at all in this case? Locke does not provide a clear answer, yet it is most important to attempt an answer to this question. For here, surely, is the true source of the idea of substance in general. But though no explicit answer is to be found, an answer is given implicitly, and Locke throughout is assuming it in his argument. We may take an idea of a particular substance, for instance, the idea of this table. It is a complex idea consisting of the simple ideas of brown, hard, smooth, rectangular, and so on. But in addition there is an extra element. These ideas are experienced by me in this case as one group or family belonging together. As Locke himself tells us, they are observed 'to go

¹ *Works*, i. 367 (1801 ed., iv. 19).

² Locke is quite explicit about this. Cf. *Works*, i. 371 (First Letter): 'I must take the liberty to deny there is any such thing *in rerum natura* as a general substance that exists itself or makes any thing.'

together'. Moreover, they go constantly together. 'The mind being, as I have declared, furnished with a great number of simple *ideas* conveyed in by the *senses*, as they are found in exterior things, or by *reflection* on its own operations, takes notice also, that a certain number of these simple *ideas* go constantly together.'¹ There is an awareness of ideas as going together. The mind has not ideas of isolated qualities, but of qualities together in one unity. Now here, surely, is the empirical basis of the idea of substance. The 'togetherness' of these simple ideas is as real a part of the experience as are the ideas themselves. (It might also be said that one thing which I experience, namely, my own body, is still more definitely a whole as experienced. I certainly experience my own body as one thing having such and such qualities.)

Here then is that empirical basis for the particular, and so also the general, idea of substance. The general idea of substance as a something-I-know-not-what holding together accidents is an idea derived from the experience of qualities going together. Locke, however, does not explicitly derive the conception of *thinghood* or substantiality from experience in this way, for it would amount to saying that we know the *thing* or substance in experience, and this is what Locke cannot say. There are two reasons for this. First, the idea of the thing is a complex idea, and according to Locke's original position only the simple is given. Secondly, and this is more important for Locke, to say we experience *things* would suggest that in sensation we know through ideas things as they are. But sensation can never reveal the inner nature of existent things. On this Locke insists.

We must distinguish carefully, then, between our complex ideas of substances and the substances themselves. The complex idea is not the substance, it is not even a true representation of it. But whenever a thing affects me a certain number of ideas 'come together'. They suggest to me one thing, and I combine these ideas and give the whole combination a name, regarding it as the name of a substance, that is to say, of an entity in which qualities are held together. But this does not give me knowledge either of this underlying structure and support of qualities, or indeed of

¹ II. xxiii. 1.

all those qualities themselves, as they actually are. We call such complex ideas, ideas of substances or things, without having any clear positive conception of substance. Our ideas go together in groups or families. We become accustomed to this grouping, and it is this which suggests to us things or substances. But experience does not at all reveal the true nature of these substances. Indeed, the true nature of any substance is, Locke thinks, hidden for ever from us. He concludes, therefore, that our complex ideas of particular substances are ideas in the mind only, framed according to the suggestions of experience, it is true, but not providing us with exact knowledge of things or substances in nature.

Two further points of interest should be noticed in this discussion of our complex ideas of substances. For the most part the preceding discussion has been in terms of corporeal things, such as tables and chairs. Locke now turns to spiritual substances. All that we have said above applies here also. We have as clear a notion of spiritual substances as we have of corporeal; we know the one as well as the other—that is to say, fundamentally we know neither. In reflection we experience thinking, reasoning, fearing, and so on, ‘which we concluding not to subsist of themselves, nor apprehending how they can belong to body, or be produced by it, we are apt to think these the actions of some other *substance*, which we call *spirit*’.¹ Locke here, however, neglects one important difference. The simple ideas come together in groups in the case of corporeal objects. But thinking, reasoning, and fearing, are not experienced together in precisely the same way. The only sense in which I can perceive the oneness of my thinking, reasoning, and fearing is by realizing that they are *mine*. Behind the conception of substance in this case is, apparently, a consciousness of self. And we may appropriately ask: Is this consciousness a consciousness of something-I-know-not-what which holds accidents together? In so far as we conceive self as a substance in the traditional sense, we must no doubt think of it as that which supports its qualities. But are we justified in so conceiving it? Locke in his discussion of personal identity shows that we cannot without further proof identify the self of which we are conscious in

¹ II. xxiii. 5.

experience with an immaterial substance. II. xxiii throws no additional light on this problem.

One wonders whether reflection upon spiritual substance might not be responsible for the second point to which we now refer. We find in Locke (not merely in the *Essay* but elsewhere, for instance, in the Drafts) what might be regarded as a tentative effort to describe substance more adequately. When he does try to get behind the veil of ideas what he finds are 'active and passive powers' or 'active powers and passive capacities'. In his corpuscular physics most qualities are really powers, and powers play an important part in his conception of corporeal objects. When we turn to reflect upon the mind it becomes still more obvious that spiritual substance consists of powers or faculties. Locke says himself that powers 'make a great part of our complex *ideas* of substances'.¹ There is here a germ of a new conception of substance to be developed by his successors, Berkeley and Leibniz, although in different ways. Nevertheless, it would be wrong to ascribe to Locke any doctrine identifying substance with power. Thus when he studied John Sergeant's *Solid Philosophy Asserted*, in which the view is expressed that the essential nature of material substance is potentiality, Locke writes in the margin 'Matter is a solid substance and not a power'.² What this solid substance which is not a power is we cannot say, for we do not know the inner and substantial nature of things, whether material or mental. And this 'we are not at all to wonder at, since we, having but some superficial *ideas* of things, discovered to us only by the senses from without, or by the mind reflecting on what it experiments in itself within, have no knowledge beyond that, much less of the internal constitution and true nature of things, being destitute of faculties to attain it'.³ And it is in this agnosticism that Locke ultimately rests.

To conclude: Locke certainly 'bantered the idea of substance', to use Berkeley's phrase. He showed that the traditional view could not stand examination. He did not deny the being of substance,

¹ II. xxiii. 7-10.

² Cf. J. W. Yolton, 'Locke's Unpublished Marginal Replies to John Sergeant', *Journal of the History of Ideas* (October 1951), p. 558.

³ II. xxiii. 32.

and he did not deny the need of a support to qualities. But he denied that we have knowledge of this substance. Experience itself suggests its existence, but it does not reveal its nature. It is hidden from us and will remain hidden from us, until we gain faculties, which we do not now possess, whereby the inner nature of the being of things will be revealed. Our idea of substance in general is an idea of a something-we-know-not-what supporting accidents, whilst our idea of a particular substance is a complex idea consisting of many simple ideas observed to go together, to which is superadded this idea of substance in general, the something supporting accidents.¹

III

The third group of complex ideas considered by Locke consists of ideas of *relation*. These are the product of the mind's power of comparing. 'The comparing them one with another in respect of extent, degrees, time, place, or any other circumstances, is another operation of the mind about its *ideas*, and is that upon which depends all that large tribe of *ideas* comprehended under *relation*.'² Locke gives serious attention to this group and he is to be praised for realizing its importance. After the appearance of the *Essay* no philosopher could neglect relations. None the less, the analysis that we find here is crude and uncertain. The demands of his classification in this case become a positive hindrance. They help to muddle both Locke's thought and that of his reader.

It is interesting to compare the two Drafts in connexion with the idea of relation. One of the surprises provided by Draft A is that we find relations being discussed already in the third section, that is to say almost at its opening. So that when Locke first sat down to think out the nature and extent of human knowledge he lost no time in coming to this subject. In Draft B the account of relations comes at the end. He is there clearly trying to fix it into his scheme but failing to do so. He does not seem to know where exactly to introduce relations, and once he has dragged them in

¹ On Locke's theory of substance cf. further D. J. O'Connor, *John Locke*, pp. 73-88.

² II. xi. 4.

he does not know how further to develop his argument. But in the first draft his thoughts are on his main problem—the nature, limits, and extent of human knowledge—and realizing that a discussion of knowledge involves also a discussion of relations he loses no time in introducing them. At first he discusses them as a group of ideas wholly distinct from both simple and complex ideas, but very shortly¹ he is suggesting that they had best be considered as ‘collected ideas’ (the early name for complex ideas), of which substances are also instances. The purpose of this change we have already understood. It is easier then to talk of them as ‘terminating in simple ideas’ and so to justify his empiricism. The subsequent discussions of relations both in Draft B and the *Essay* seem to be dominated by this purpose, so much so that, as we have seen, two of what are termed in Draft B, ‘the three grand relations of time, place, and causality’² are in the *Essay* no longer considered as relations but as simple modes. Their empirical origin can then be more easily demonstrated.

It thus happens that the difficulties inevitable in any discussion of relations are heightened by Locke’s concern for his classification and by his anxiety to prove his empiricist presuppositions. The issue is further complicated by the fact that, in the language of the *Essay*, we ought to be dealing with ideas of relations and never with relations themselves. Strictly speaking, the immediate objects are never relations, even relations between ideas, but ideas of such relations, which ideas presumably might differ from the relations as much as our idea of a table differs from the table. But Locke could not possibly maintain his representationalism and continue to talk sensibly about relations. When on his guard he does speak of *ideas* of relation; but quite as often he talks of relations only, and he certainly assumes that we know relations between ideas directly. Relations themselves become ideas, rather than objects of which we have ideas.³ At the same time they are not, apparently, mere ideas, mere phantasies or creations of the mind. Locke does not openly discuss the problem of the objec-

¹ § 6.

² § 145

³ In II. xi. 7, the idea is even said to be the comparing. ‘The last sort of complex *idea* is that we call *relation*, which consists in the consideration and comparing one *idea* with another.’ Locke’s language here is obviously very loose.

tivity or subjectivity of relations. His position on that question is vague. But what he seems to hold is that while relations do not exist in the sense in which substances and their qualities exist, while they are not as independent of the mind as such substances are, for they are 'extraneous and super-induced'¹ upon the substances (being the products of the mind's activity in comparing), none the less there is a foundation for the relation in reality. Ideas of things can be compared because there is that in them which admits of comparison, and this ultimately means that there is something in that which they represent, the real existences, which makes the relation possible. When Locke gives us illustrations he obviously assumes that the relations being considered exist between real things, and though they only exist when we are explicitly and openly comparing, they are none the less objective as, at least, referring ultimately to an objective fact. 'Having the notion that one laid the egg out of which the other was hatched, I have a clear *idea* of the relation of *dam* and *chick* between the two cassiowaries in St. James's Park.'² Here, obviously, Locke has in mind an objective foundation for the relation he discusses.

But no very explicit answer to the question as to whether relations are objective or subjective can be found in the *Essay*. Locke is explicitly concerned with other problems which we can now examine. He devotes a chapter to the discussion of 'relation in general'.³ He opens by showing how 'the understanding in the consideration of any thing, is not confined to that precise object', but can 'look beyond it' and compare it with some other thing. Now the things so brought together are said to be 'related'. Each thing of this sort can be described in two ways, first, as it is positive, secondly, as it is relative. For instance, if of Caius I say he is a *man*, this is describing him positively, but if I say he is a *husband*, this latter is a relative term, and I signify more than Caius here, I signify another person. The relation between Caius and this other person is that of one married person to another. There is for every relation a 'foundation', here 'the contract and ceremony of marriage', and as a consequence of his entering into this contract I am able to describe Caius by the relative term *husband*. The

¹ II. xxv. 8.

² *Ibid.*

³ II. xxv, and cf. II. xxviii.

number of such terms is very great indeed. There is hardly a limit to the number of relations into which an individual may enter.¹ The two terms related are called co-relative terms, for instance husband–wife, father–son. Sometimes, however, a term may be relative and yet not possess a co-relative, for example, *concubine*, though there is, of course, something to which the object denoted by the term is related. And there are still further terms which ‘conceal a tacit, though less observable, relation’,² for example, *old*, *great*, *imperfect*, all relative terms though seemingly positive. Locke, however, does not discuss the further point whether there really exists a positive term which is in no sense relative. He assumes that there are such terms without discussion.

Now it is not necessary to know all there is to know about an individual before one can know how he, or it, is related to another individual. I may not know what a man essentially is, but if I know that he has entered into a contract of marriage with a woman, then he is a husband, and I know fully what this relation is. Similarly, there may be a change of relation without any change in the individual. ‘E.g. *Caius*, whom I consider to-day as a father, ceases to be so to-morrow, only by the death of his son, without any alteration made in himself.’³ (In this sense, some relations at least must be said to be external, although the problem of the externality or internality of relations is never really considered by Locke.) But he is sure we need not know the whole nature of *X* before we can know that it is related to *Y* in a certain way. Indeed, he thinks, ‘the *ideas* which relative words stand for are often clearer and more distinct than of those substances to which they do belong’.⁴

The final point Locke wishes to establish is that ‘relations all terminate in simple *ideas*’, that is, that ‘all the *ideas* we have of *relation* are made up, as the others are, only of simple *ideas*, and that they all, how refined or remote from sense soever they seem, terminate at last in simple *ideas*’.⁵ He proposes to demonstrate this in particular instances of relations, to which we can now turn.

Cause and Effect. In his treatment of cause and effect Locke

¹ Cf. the long list in II. xxv. 7.

³ II. xxv. 5.

⁴ II. xxv. 8.

² II. xxv. 3.

⁵ II. xxv. 11.

considers efficient causes only. The efficient was only one of the four causes recognized by Aristotle and the schools. 'As for the other three sorts of causes', Locke remarks in Draft A,¹ 'I do not at present so well understand their efficacy or causality.' The material, formal, and, especially, final causes were too 'metaphysical' for his 'historical, plain method'. Moreover, the only one of the four causes that mattered to the new science of Locke's day was the efficient cause so called. Accordingly Locke confines himself to its consideration.

The account that he gives of it, however, is far from satisfactory. Causality is 'the most comprehensive relation, wherein all things that do or can exist are concerned'.² Since this is so one might have expected a very full treatment of it. In II. xxvi, however (a chapter which is entitled 'Of Cause and Effect and other Relations'), only two meagre paragraphs are devoted to its examination. It is true that other passages are also relevant, for instance, the discussions of *power* in Book II, and of our knowledge of causes and effects in Book IV. But Locke's teaching on causation would have been easier to understand if he had discussed all these together (as was in fact his first intention, if we are to judge from the early Drafts). In the *Essay*, however, Locke has ever in mind the demands of his scheme. Power is a simple idea; cause and effect a relation; consequently, the two must be considered apart. (Oddly enough, as we have seen, he says most about power when dealing with modes, but it is first introduced as a simple idea.) Consideration of the knowledge of causes and effects, being part of the main epistemological problem, has to be postponed to Book IV. Consequently, there is nowhere in the *Essay* a satisfactory and adequate treatment of the problem of causation as a whole.

When, moreover, we do piece the scattered fragments together, the theory of causation that emerges is vague and incomplete. Locke does not write in ignorance of the difficulties. Sometimes his position is made to look much more naïve than it really is, and he is charged with taking more for granted than he actually does. People occasionally talk as if there was no problem of causation prior to Hume. This is certainly not the case. The difficulty about

¹ § 15.

² II. xxv. 11.

our knowledge of causal relations had troubled philosophers for a generation or more before Hume's *Treatise* appeared. One of the clearest statements of the regular sequence view ever put forward is already to be found in the pages of Berkeley's *Principles*.¹ What we know is a regular sequence of phenomena; we only assume causal relations. Moreover, the fact that in any single observation of a causal relation between bodies I see no causal activity as such had also been made perfectly plain. Géraud de Cordemoy in 1666 published his *Discernement du Corps et de l'Âme*, a work of genius. It is written in six discourses and deals with the mind-body problem in a highly original manner. We are concerned here with the fourth discourse, *De la première cause du mouvement*, where Cordemoy seeks to prove that movement is spiritually caused. It is true we usually think that bodies cause each other to move. But here we go beyond the evidence given us in experience. 'When we say, for example, that the body *B* has caused the body *C* to move from its place, if we examine carefully what we know with certainty here, all we see is that *B* moves, that it meets *C* which was at rest, and that after this meeting the first ceases to move and the second commences to move. But to say we know that *B* gives movement to *C*, is in truth, mere assumption.' Thus Cordemoy had understood quite clearly that we never see *B*'s causal activity—if such activity exists. (He himself wished to deny it altogether.) We see certain movements of patches of colour only.

Now Locke, also, understood this point. He may be indebted here to Cordemoy, whom he mentions twice in his journals. (Once, in 1678, he refers directly to this very book.)² There is no conclusive proof of such indebtedness, however, and it is well to remember that Locke puts forward his own doubts about our knowledge of the causal relation already in the Drafts of 1671. But whether his views are original or not, he certainly foresaw some parts of Hume's criticism. In sensation we do not directly perceive causality in the sense of perceiving the causal activity itself, the giving of movement to *C* in Cordemoy's example. This

¹ §§ 30–31. The same point is made, though not perhaps in so clear a manner, by Joseph Glanvill, *Vanity of Dogmatizing*, pp. 189–90. Cf. Gibson, *Locke's Theory of Knowledge*, p. 259.

² Aaron and Gibb, p. 110.

Locke fully understood. He differs from Hume, however, in the explicit assertion of the general principle of causality, that all things which have a beginning must also have a cause. When Hume questions this he is going beyond Locke's position; but when he denies that we observe causal activity directly in sensation, he merely reasserts a point already made by Locke and his contemporaries.

One need only read the opening paragraphs of Locke's chapter on power to see that this is so. 'Power' is Locke's word for that which is 'able to make or able to receive any change'. Active power is able to make and passive power to receive. That which makes is also the cause, and the power as acting is the causal activity. Now in describing how we come by the idea of power Locke carefully avoids any language that might suggest we observe this causal activity directly in sensation. 'The mind, being every day informed, by the senses, of the alteration of those simple *ideas* it observes in things without, and taking notice how one comes to an end and ceases to be, and another begins to exist which was not before, . . . and concluding, from what it has so constantly observed to have been, that the like changes will for the future be made in the same things by like agents, and by the like ways, considers in one thing the possibility of having any of its simple *ideas* changed, and in another the possibility of making that change; and so comes by that *idea* which we call *power*.'¹ This is of course the regular-sequence theory of causation, and the circuitous language that Locke uses in this passage is the outcome of his anxiety to avoid saying that we observe causal activity directly in sensation.

At the same time Locke does not accept the regular-sequence theory outright. He could see its weakness. The causal relation is not a relation of mere succession. He would not give up the further conception, namely, that the effect follows *from* the cause and does not merely follow it; it is *propter hoc* and not merely *post hoc*. If one studies Locke's words carefully one becomes conscious of a struggle in his mind between two views, first, that all we observe is mere succession, and, secondly, that we observe also some elusive, additional element, even though we never observe

¹ II. xxi. 1.

the causal activity as such. Yet he never makes up his mind as between these two views, and it is this fact which accounts for the vagueness and indefiniteness of his theory.

We might illustrate this by referring to the difficulties Locke finds in deciding whether power is indeed a simple or a complex idea. If it were a simple idea we should perceive it directly. Sometimes Locke seems to be saying this, and yet, at other times, he is clearly denying it. He might have spoken consistently had he definitely accepted or rejected the regular-sequence view, but whilst he plays with it and also wants to say that we do perceive something more than mere succession he can never give a straightforward account of power. The same point is made manifest also in the opening paragraph of II. xxvi. Here Locke seeks in carefully chosen language to explain the origin of our ideas of cause and effect, but however careful he is he cannot free himself from his fundamental difficulty. 'In the notice that our senses take of the constant vicissitude of things, we cannot but observe that several particulars, both qualities and substances, begin to exist; and that they receive this their existence from the due application and operation of some other being. From this observation we get our *ideas of cause and effect*. . . . Thus finding that in that substance which we call wax, fluidity, which is a simple *idea*, that was not in it before, is constantly produced by the application of a certain degree of heat, we call the simple *idea* of heat, in relation to fluidity in wax, the cause of it, and fluidity the effect.' The key-phrase here is obviously 'produced by the application of'. If Locke had adhered strictly to the succession theory—which does rule his thoughts here up to a point—'produced by' would be a synonym for 'preceded by' and 'application' would be a neutral word like the 'meeting' of *B* and *C* in the passage quoted above from Cordemoy. But it is clear that Locke wants these words to mean more than this. Hence the difficulty. He will not say outright that we observe a mere sequence, but he also finds it impossible to say what more we do observe. The consequence is the laborious and unsatisfactory language of II. xxvi. 1.¹

¹ Cf. further the changes made between 1685 (Draft C) and the 1690 text, cf. pp. 61–62 above.

So far we have confined our attention to the observation which is sensation. What has been said above, however, does not apply in exactly the same way to the other sort of observation possible to us, namely, reflection. For in reflection we gain, it seems, a deeper insight into causal activity. When Locke first introduces the idea of power—and that as a simple idea—it is obviously our experience of our own power that he has directly in mind. ‘Power also is another of those simple *ideas* which we receive from *sensation* and *reflection*. For, observing in ourselves, that we do and can think, and that we can at pleasure move several parts of our bodies which were at rest, the effects also that natural bodies are able to produce in one another occurring every moment to our senses, we both these ways get the *idea* of *power*.’¹ We observe that we can move our bodies, but in things perceived by the senses it is the effects that are said to be perceived and not the power in the causes. Thus we gain a clearer idea of power in reflection than in sensation. That this is Locke’s view is abundantly confirmed in the later chapter on power. ‘Bodies by our senses do not afford us so clear and distinct an *idea* of *active power*, as we have from reflection upon the operation of our minds. . . . The *idea* of the beginning of motion we have only from reflection on what passes in ourselves, where we find by experience that, barely by willing it, barely by a thought of the mind, we can move the parts of our bodies which were before at rest.’² Thus the idea of power is most distinct when we reflect upon our own power, and strictly speaking it is a simple idea only as an idea of reflection, though there is always some additional element in our observation of a causal sequence by the senses which Locke, as we have seen, never satisfactorily explains. Even as an idea of reflection, however, Locke does not claim that power is fully clear and distinct. All that he will permit himself to say is that power and causal activity itself are better understood by looking inwards than outwards. Indeed, he leaves bodily ‘impulse’ (which is the name he gives to the passage of motion from one body to another, or as he describes it ‘the continuation of the passion’) largely unexplained. He does not even say, as many of his contemporaries did, that all motion,

¹ II. vii. 8.

² II. xxi. 4.

even physical, is spiritual in origin, though he sometimes seems to be inclining to this view. On the whole he lapses into his accustomed agnosticism about the external world. We cannot properly know whether there are in it causal activities of exactly the same sort as the causal activity I experience when I will to move my arm. We do not know the true nature of physical causal relations, any more than we know the universal essence of the substances between which they occur.

And Locke does not hesitate to draw the only possible conclusion. Natural science cannot be certain, for it does not provide knowledge of the necessary causal connexions between things. It is a system built up of inductively established generalizations which at best are only probable. Locke never wavers on this point. We know causes and effects in the natural world only to the extent that they are revealed to us by the senses. I now observe heat applied to wax and see it turn fluid. 'I can have', Locke remarks in Draft A,¹ 'no other certain undoubted knowledge of the constant connexion of assigned causes and effects than what I have by my senses, which too is but a gross kind of knowledge, is no more but this, that I see when I apply fire to gold it melts it, a load stone near iron it moves it, that snow and salt put into a vessel of water in the inside hardens the water that touches it on the outside.' Precisely the same point is made in Draft B,² and again in the *Essay*.³ No universal propositions stating causal relations can have greater certainty than the particular observations have upon which they are based. Obviously their certainty is much less since they go beyond experience in the universality of their application. And since we do not know in the particular case in which we observe *A* produce *B* precisely how the cause brings about the effect, we cannot say that *A* must produce *B* universally. We are merely guided by the regularity with which this particular sequence has occurred in the past. All natural science, therefore, is ultimately uncertain, even though some of its generalizations are such that we can hardly bring ourselves to doubt them. '*Certainty* and *demonstration* are things we must not, in these matters,

¹ § 15.

² 135-7.

³ Cf. iv. iii. 13, 16, 26, 29, and elsewhere.

pretend to.’¹ This is the logical consequence of Locke’s position and he does not shirk it.

But while in this respect Locke carries out the full logical implications of his empiricism, there is another in which he does not at first view appear to do so, and with the consideration of this further point we may bring this discussion of causality to a close. For in the causal realm we can, according to Locke, affirm one generalization with apodeictic certainty, namely, that whatever has a beginning has a cause. This is asserted positively in the two Drafts,² negatively in the *Essay* in the proof of God’s existence,³ and again positively in the correspondence with Stillingfleet.⁴ It is, perhaps, in the latter passage that we find Locke’s best and most mature thinking on this subject. He first explains what statements he is and what he is not prepared to set down as apodictically certain. We cannot say that ‘Everything must have a cause’ is necessarily true, and we cannot suppose that anything just because it now exists must have had a cause. For we may certainly conceive a present existence as existing from and through eternity. ‘But “Everything that has a beginning must have a cause” is a true principle of reason or a proposition certainly true; which we come to know by the same way, that is, by contemplating our ideas, and perceiving that the idea of beginning to be is necessarily connected with the idea of some operation; and the idea of operation with the idea of something operating which we call a cause; and so the beginning to be is perceived to agree with the idea of a cause, as is expressed in the proposition; and thus it comes to be a certain proposition; and so may be called a principle of reason as every true proposition is to him that perceives the certainty of it.’ In contemplating its ideas the mind perceives that ‘the idea of beginning to be is necessarily connected with the idea of something operating which we call a cause’. If reason does perceive this then, of course, whatever we think of as beginning to be must also be thought of as having a cause.

But now, does reason perceive that the idea of beginning to be is necessarily connected with the idea of a cause? They are two

¹ iv. iii. 26.

² Draft A, § 16; B, § 140.

³ iv. x. 3.

⁴ *Works*, i. 388 (1801 ed., iv. 61–62).

different ideas, and Locke has not shown why we are compelled to admit that the one inevitably involves the other. There may be a beginning which has no cause. Locke here, however, would no doubt make his appeal to experience, to our experienced idea of a beginning. As experienced it is invariably connected with an operating. We have never experienced anything beginning to be without at the same time experiencing 'something operating'. The 'instructive' or synthetic kernel in the general proposition is thus the knowledge in experience of a something operating and a consequent beginning to be, and this is the relation we call causal. The difficulty is, however, that Locke has not made this relation clear, and the weakness in his theory of causality lies here. His analysis of what we experience when we say, for instance, that we have experienced *A* causing *B* is inadequate and vague. And until this becomes clear we cannot know whether the assumption that anything which has a beginning must also have a cause is valid. It may be the case that when we experience a beginning, part of our actual experience then is of something operating. And it may be true that this latter experience is the idea of a cause. So much may be given in experience and thus the generalization which reason makes—'Everything that has a beginning must have a cause'—may rightly be said to be deducible from our ideas. But Locke can only show that this is the case after an adequate analysis of our ideas of beginning, of operating, and of causing, and it is here that he fails. Locke's theory of causality fails because his analysis of our experience of the causal relation fails. He may be on the right lines. It may be possible to put forward a theory of causation which is consistently empiricist. But one thing is certain. The analysis of our experience of the causal relation must first be made adequate.

Other Relations. Locke considers certain other relations in addition to the causal. He has something to say about the relations of time and place, but since in the *Essay* he gives detailed attention to time and place under simple modes, what he says here is not important. He also thinks this the most suitable place to insert the chapter on identity (added in the second edition), and for this purpose regards identity as a relation, namely, a relation

between the thing and itself. But the language is strained and the chapter itself throws little light on the nature of relations. We have already dealt with this chapter elsewhere.

The twenty-eighth chapter concludes the discussion of relations. Of all the chapters in the *Essay* this one most faithfully follows the discussion of the early Drafts. Some of Locke's earliest thinking on these questions is contained in it. Four further groups of relations are now noted. First, there exist relations between simple ideas, for instance, hotter, sweeter, equal. 'These relations depending on the equality and excess of the same simple *idea* in several subjects, may be called, if one will, *proportional*.'¹ An interesting question arises here. Are these proportional relations simple or complex ideas? They should be complex being relations. And yet do we not directly observe that *A* is whiter than *B*? If we do, is not the idea simple? But Locke would argue that the idea is the result of comparing, and therefore not simple. In that case this conception of comparing needs more careful analysis and its relation to direct perceiving needs to be ascertained. For it is certainly difficult not to admit that I perceive directly that *A* is whiter than *B*, and yet, of course, there is a fundamental difference between perceiving white and perceiving that *A* is whiter than *B*. But Locke has not made this difference clear. The second sort of relations is the natural, for instance, that between father and son.² The third is the institutional, for instance, a general exists in a certain instituted relation to his army, a citizen to the township, a king to his subjects. 'All this sort depending upon men's wills, or agreement in society, I call *instituted*.'³ Unlike the second sort of relations, these latter are alterable; a general, for instance, may be deprived of his rank. The fourth and last type of relations are the moral, 'the conformity or disagreement men's voluntary actions have to a rule'. We may postpone consideration of this last relation to a later chapter.⁴

Locke concludes his account by again seeking to show that in all these cases the relations terminate in simple ideas. But by this

¹ II. xxviii. 1.

² Locke speaks loosely here, speaking of the relative, e.g. father, brother, as if it were itself the relation.

³ II. xxviii. 3.

⁴ Part III, chapter 1.

time the reader is a little bewildered as to what relation is, and is not in a position to decide whether relations do or do not terminate in simple ideas. And if he searches beyond Book II for an explanation of the term his confusion is increased rather than decreased. In Book III relations are grouped (and, to all intents and purposes, identified) with mixed modes.¹ In Book IV again the relation is the object in knowing, for of the four sorts of agreements between ideas which may be known, three are 'truly nothing but relations'. Locke admits in Book II that his account of relations is incomplete. "Twould make a volume to go over all sorts of relations."² This incompleteness, however, might very well have been excused him if he had made the main conception of relation itself clear—but this he never does.

Locke's examination of modes, substances, and relations in Book II, we must conclude, is far from being an adequate treatment of the matters under consideration. Its primary purpose is to demonstrate the empiricist thesis, but even here it fails, because its analyses are always inadequate and incomplete. In Locke one only finds the crude beginnings of analysis, and to establish empiricism finally analysis would have to be complete. Yet it is a beginning. Locke did 'banter' the traditional idea of substance, and that at a time when European thinkers, Spinoza in particular, were basing their whole systems upon it, although the conception was not wholly clear to them. He 'bantered' as well ideas of space, of time, of infinity, of identity, and of relation. It would be foolish to say that this criticism of traditional conceptions was without value. It was exceedingly valuable, since it challenged contemporary thought to clarify its central conceptions. But it would be equally foolish to argue that Locke's analyses were final. The merit of Book II lies in the new method of criticism which is suggested in its pages rather than in the completeness and exhaustiveness with which this method is applied.

¹ Cf. III. v. 16, x. 33, &c.

² II. xxviii. 17.

VI

THE NATURE AND USE OF WORDS, PARTICULARLY OF GENERAL WORDS

WE have followed Locke in his classification of ideas, a classification which, as we have seen, was never intended to be complete. It was meant to show primarily that all ideas terminate in simple ones, so that the empiricist position set forth at the opening of Book II might be consolidated.¹ This task once completed Locke's original plan was to proceed at once to the discussion of knowledge in general; 'but upon a nearer approach I find that there is so close a connexion between *ideas* and words, and our abstract *ideas* and general words have so constant a relation one to another that it is impossible to speak clearly and distinctly of our knowledge, which all consists in propositions, without considering, first, the nature, use, and signification of language.'² Accordingly, Locke changes his plans and adds a new book, the third, an examination of the nature of words and language.

Opinions are divided as to the value of Book III. Some assert openly that it is valueless; others ignore it almost completely; a

¹ At the end of Book II will be found four chapters which form a sort of appendix to that book and do not develop the main theme. The evidence of Draft C shows that they were late writings, cf. p. 73 above, and probably Locke wrote them after sketching Book IV. He then seems to have realized that he should have said something in Book II about a matter much emphasized at the time, namely, the clarity, distinctness, and adequacy of ideas. It is unnecessary to consider these chapters in any great detail. Their most noteworthy feature is that Locke tends to define these characteristics in terms of sense-perception. Simple ideas are clear 'when they are such as the objects themselves, from whence they were taken, did or might, in a well-ordered sensation or perception, present them'. Complex are clear 'when the *ideas* that go to their composition are clear' (II. xxix. 2). The distinct idea is 'that wherein the mind perceives a difference from all other' (II. xxix. 4). 'Adequate *ideas* are such as perfectly represent their archetypes' (II. xxxi. 1). In addition there are two chapters on real and fantastical, true and false ideas respectively. But, as Locke himself admits, we cannot rightly talk of a true *idea* but only of a true proposition. As might be expected, what is important in these chapters is repeated again in Book IV, and consideration of it need not now delay us.

² II. xxxiii. 19.

few praise it. Locke himself was aware of its defects, for he apologizes more than once for its verbosity; none the less he considered it a most important part of the whole. He worked at it diligently. 'Some parts of that third book concerning words,' he wrote to Molyneux,¹ 'though the thoughts were easy and clear enough, yet cost me more pains to express than all the rest of my essay.' He certainly thought the book worthy of attention. And in this belief he was surely justified. It would be foolish for us today to disparage one of the earliest efforts in the English language at a close analysis of words and their meanings.² Nor can we, when we recall how frequently the misuse of language leads us into error, condemn so serious an effort to remedy the imperfections and abuses of language. In both respects Book III is valuable even if it does little more than point the way. The study of language and of words was also directly helpful to Locke in his preparations for Book IV. Knowledge is expressed in propositions and propositions consist of words. We must then understand the nature of words if we would understand knowledge. Furthermore, as Locke meditated upon this problem, he came to realize that the question which he faced was one as to the character of general words. For, with the exception of the proper name in the strictest and purest sense, all words are general rather than particular in their application. Thus it comes about that the essential problem in attempting to understand words is the understanding of how we generalize. Locke touches on generalization and abstraction in Book II, but his fullest thoughts on this matter and his most mature are to be found in Book III. The latter, consequently, contains in addition to a theory of language an even more important theory of universals which involves also an examination of the nature of species and of essence. Now there is no more important distinction in the *Essay* than that between real and nominal essences. And whatever be said about the worth of the rest of Book III, it is certain that there is no understanding of Book IV without first understanding the distinction which Locke here makes. In this sense, at least, Book III is an indispensable propaedeutic for Book

¹ *Works*, iii. 527-8, 20 January 1693 (1801 ed., ix. 306).

² Cf., for instance, the analysis of the word *but* in III. vii. 5.

IV. The present chapter, accordingly, is concerned with two matters: first, Locke's theory of universals, and, secondly, his theory of language. I propose to deal with them in that order.

I

In dealing with Locke's theory of universals it is first necessary to show the falsity of one interpretation which is still prevalent. Many interpret Locke's theory entirely in terms of his statement about triangles in iv. vii. 9, a statement which comes as an aside when Locke is discussing a matter quite different from that of general ideas. Moreover, the interpretation put even upon this statement is, in my opinion, unfair and the theory of universals which emerges is an absurdity that ought not to be attributed to Locke.

In iv. vii of the *Essay* Locke attacks the view that at the base of all knowledge lie certain innate, self-evident, highly abstract 'maxims'. These we are supposed to know first; but their very generality, Locke thinks, is sufficient to overthrow this view. For nothing is clearer to Locke than that we begin with particulars and that general ideas come later. General ideas are not formed easily, they 'carry difficulty with them'. To illustrate the point he proceeds: 'For example, does it not require some pains and skill to form the general *Idea* of a Triangle (which is yet none of the most abstract, comprehensive and difficult) for it must be neither Oblique, nor Rectangle, neither Equilateral, Equicrural, nor Scalenon; but all and none of these at once. In effect, it is something imperfect, that cannot exist; an Idea wherein some parts of several different and inconsistent *Ideas* are put together.'¹ These words are commonly interpreted to mean that the general idea of a triangle is a complex idea containing within itself contradictory simple ideas, an idea, therefore, which is both absurd and impossible. And on the strength of this interpretation Locke's theory of general ideas as a whole is rejected.

Now, in the first place, it is obviously unfair to consider this

¹ The passage appears thus in the first edition of the *Essay*, iv. vii. 9, and is unchanged in the three other editions which appeared during Locke's life, except that the words 'general Idea of a Triangle' at the opening are italicized in the fourth.

passage alone and to neglect those others in which Locke explicitly expounds his theory of general ideas. But, secondly, even if we confine ourselves to this passage it is more natural to interpret the words Locke uses in another way. For he does *not* say that we put inconsistent ideas together, but 'some parts of them' (which parts may very well be consistent). And he surely does not mean that we ever have in mind an idea of a triangle which is at one and the same time, let us say, both right-angled and not right-angled. Why should we attribute so absurd a view to a great thinker? Surely all Locke wishes to say is that the general idea of triangle—whatever it be—stands for the oblique, the rectangle, the equilateral, the equicrural, and the scalenon triangles, without being any one of them in particular. Locke was anxious here to make the framing of general ideas appear as difficult as possible and the consequence is that the passage is particularly open to misinterpretation. Yet if we consider these words fairly and impartially, there is nothing in them to *necessitate* the usual interpretation. Another is quite possible which is less absurd, and more in accord with the theory of general ideas found elsewhere in Locke.

The chief responsibility for the misinterpretation must lie with the young enthusiast Berkeley. For reasons which we need not consider he was particularly anxious to reject Locke's theory of abstraction and of general ideas. But he appears to have found some difficulty in arguing against Locke, until he came across this chance passage in the chapter on maxims. Here he found what he required. Abstract ideas, he writes in the *Commonplace Book*, 'include a contradiction in their nature. v. Locke, lib. 4, § 9, c. 7'.¹ It will be seen that he has already interpreted the passage in what I hold to be the false way, and it is on this interpretation that he bases his criticism in the *Introduction* to his *Principles*. For, though it is not quoted until near the end,² the passage is in his mind from the start of his polemic and colours all his argument. This is made abundantly clear from a quaint jotting in the *Commonplace Book*:³ 'Mem. To bring the killing blow at the last e.g. in the matter of abstraction to bring Locke's general triangle at the last.' And in order to help his reader to interpret Locke's

¹ *Works* (Luce and Jessop), i. 70. No. 561. ² § 13. ³ *Works*, i. 84. No. 687.

theory in his own way Berkeley, in quoting the passage (both in the 1710 and 1734 editions), sets the words 'all and none' and 'inconsistent' in italics, though in none of the four editions of the *Essay* which appeared in Locke's lifetime are they italicized. Consequently, in the phrase 'an idea wherein some parts of several different and *inconsistent ideas* are put together', the hasty reader seizes the word 'inconsistent' and interprets the passage in Berkeley's manner. (If any words of the phrase need to be stressed, however, in view of centuries of misinterpretation they are the words 'some parts of'.) Berkeley attacked a theory of abstract ideas which, I believe, Locke never held; but he attacked it so vigorously and so brilliantly that Locke was much discredited, and a prejudice against abstraction was created, not only in England but throughout Europe. Recent writers have found it necessary to remind us that abstraction is valid, useful, and fruitful in its consequences, and have sought to dispel the prejudice against it. If we wish to find one, at least, of the sources of that prejudice we need only turn to the *Introduction* to Berkeley's *Principles*.

My point is that Berkeley attacks a theory of general ideas, which is certainly absurd, but not Locke's in any sense. In what follows I shall try to set forward a more accurate account of Locke's theory. It is possible to distinguish at least three strands in Locke's argument, which he himself never explicitly distinguishes and never wholly disentangles. This fact accounts for the ambiguity of his theory, and makes it open to criticism from more sides than one. Sometimes, however, the critics in criticizing one strand are blind to the presence of others—while Berkeley criticizes a theory of abstraction not to be found, as I believe, in Locke.

The first interpretation is the one which Locke seems to have held before he devoted serious attention to the problem. A universal is a particular idea which 'represents' many other particulars.¹ In the *Essay* Locke is never wholly satisfied with this view and so it is not easy to find an explicit statement of it. But there are constant traces of it when he deals with general ideas. Perhaps the nearest approach to an explicit statement is found in Book II

¹ Cf. Draft C (pp. 64-65 above) and observe the changes between C and 1690.

of the *Essay* in the paragraph on abstraction. 'Ideas taken from particular beings become general representatives of all of the same kind.'¹ But if the whole paragraph be read, it will be seen that it would hardly be correct to describe the theory of universals there set forth merely in these terms. The other strands I propose to mention are already present in the paragraph. Indeed, one finds a much more explicit statement of this first position in Berkeley. For instance, in the *Introduction* to his *Principles* he remarks: 'An idea, which considered in itself is particular, becomes general by being made to represent or stand for all other particular ideas of the same sort.'² That is a more precise expression of the position than anything to be found in Locke's *Essay*. But I take Locke's ambiguity in this connexion to be a sign of his dissatisfaction with the theory. It is his first crude thought on the subject and he never sufficiently outgrows it to deny it openly, so that it remains a permanent element in his account of universals although he is never wholly satisfied with it.

There was ample ground for Locke's dissatisfaction. To say that we make a particular stand for many particulars and so achieve a universal or general idea is no explanation of the universal as such. It is no explanation because it misses the crucial point entirely. It does not explain how we determine what particulars are represented by the one particular—admitting for the moment that the universal is a particular standing for many other particulars of the same sort. In other words, the account presupposes that we already know the 'sort' of which the particular ideas are instances. But it is just this knowledge that we need to explain, and no satisfactory account of the universal is given until this is explained. For the universal according to this view is not the mere particular idea as such, it is the particular idea in its 'representative' capacity. To content oneself, therefore, with the explanation that a universal is a particular idea standing for many of the same sort, even if this be so far true, is to miss the real problem connected with universals in its entirety. Again, in the second place, is it correct to argue that the universal is a particular idea which has this specific representative function of standing for all particulars

¹ II. xi. 9.

² § 12.

of the same sort? Berkeley, at one stage of his philosophical career, would have held that it must be correct, since any idea in the mind is a particular concrete image, given in sensation or recalled in memory, and therefore the general idea, if it exists, is of necessity some such particular image, though it stands for many other images. But for Locke 'idea' is not identified with the concrete image. His definition of 'idea' permits him to include the image within it, but it is also wider. It is 'the object of the understanding when a man thinks'. Consequently, there is nothing in the term as he used it to compel him to think of the universal as a particular image; and though he began, no doubt, by identifying the universal which stood for the many particulars with a particular image, or 'appearance', as he sometimes called it,¹ he also found it possible later to think of the universal in other terms without contradicting his definition of 'idea'. Thus his second position to which we now turn does not involve the view that the general idea is a particular image as such. At most, it is something abstracted from that particular image, though its real importance does not lie in the fact that it is an abstraction of this sort, but elsewhere.

The second and third strands are seen most clearly in Book III, when general terms are being discussed. A general term is the symbol in language for a general idea. Locke never does away with the idea, so that it is wholly incorrect to describe him as a nominalist. The fact that Locke teaches that we only know nominal essences of things has misled some to class him with nominalists, but this is a mistake. The view that the universal is the *name* which can be ascribed to more than one particular, and that the concept or general idea is unnecessary, is not to be found in the *Essay*. The general name stands for the general idea.²

The second strand consists in the view that the universal is the resultant of a certain process of elimination carried out according to the guidance of experience. We eliminate all qualities except

¹ Cf. II. xi. 9, particularly the last sentence.

² Cf. the following emphatic statements: (1) First Reply to Stillingfleet (*Works*, i. 369; 1801 ed., iv. 25). 'For he must think very oddly, who takes the general name of any idea to be the general idea itself: it is a mere mark or sign of it, without doubt, and nothing else.' (2) Second Reply to Stillingfleet (*Works*, i. 574; 1801 ed., iv. 430-1). 'You again accuse the way of ideas, to make a common nature no more than a common name. That, my Lord, is not my way, by ideas.'

only those which are common. Thus the general term 'man' stands for what remains when we have eliminated every quality possessed by James or John or Peter or any other individual man but not by all men, every quality that is peculiar. The universal in this case is not a particular 'appearance' in its concreteness, chosen to stand for many; it is a particular 'appearance' from which many qualities have been abstracted. In other words, it is no longer the particular 'appearance' as such. It is an idea made by abstraction; but made wholly, it should be added, by omission. As Locke explains, in framing such universals, we 'make nothing new, but only leave out'.¹ 'Words become general by being made the signs of general *ideas*; and *ideas* become general by separating from them the circumstances of time, and place, and any other *ideas* that may determine them to this or that particular existence. By this way of abstraction they are made capable of representing more individuals than one; each of which, having in it a conformity to that abstract *idea*, is (as we call it) of that sort.'²

The second element in Locke's theory cuts deeper than the first. Even so, it fails to satisfy. For, in the first place, it does not make clear the precise character of what remains after the process of elimination has taken place; the universal, as such, is still left unconsidered. In the second place, as has often been pointed out, doubts must arise, on reflection, as to whether we can possibly discover the universal by means of an elimination on purely empirical lines and be certain that we have discovered it. For though all the instances of *X* observed by us heretofore possess a quality *Y*, the very next instance may lack it; and so, if we include *Y* in our universal *X*, we shall have acted wrongly. In other words, the empirical method would compel us to examine every instance of *X* before we could be sure that *Y* was common; and since we cannot possibly examine every instance subsumed under most of the general terms which we need to use, there will always be uncertainty as to whether we have discovered the true common qualities which frame our universal, or whether some impurities in the shape of qualities not shared by all may not have entered into it. In the third place, as against both the first and second strands in

¹ III. iii. 7.

² III. iii. 6.

Locke's thought, there is room for this further criticism. On the first account the universal is identified with a particular idea, an 'appearance', synonymous with Berkeley's 'idea' as meaning sensation or image; on the second, it is identified with what is still part of a particular idea. In both cases, therefore, the universal is a particular idea, either as whole or as part. And yet, surely, a universal is nothing of the sort. A universal is no 'idea' as equivalent to image or appearance, or picture, and no part of such an 'idea'.

But now there remains still a third strand in Locke's *Essay*, which marks yet a further effort on his part to find a satisfactory theory of universals. The universal, in this third sense, is neither a particular idea nor a part of a particular idea. It is a meaning. It is a character or group of characters shared by particulars of the same sort. This character (or these characters) frames (or frame) the 'essence' of the sort, although the 'essence' in question may not be the 'real essence' of a species, as we shall see. The universal, therefore, is the 'essence' of a sort or species, and in its light we recognize to what species any particular belongs. Locke never really faces the difficult question as to whether the characters in the various particulars are merely alike, or whether they are truly identical. He talks of the 'sort' as being based on 'the similitude of things',¹ but this should not be interpreted to mean that the 'common agreements' in particulars of the same sort are mere likenesses. What is meant is that it is their presence which finally makes the particular objects alike. His position, however, seems rather to involve the view that the *characters* are identical in the various particulars and not merely alike. It is one and the same character (or group of characters) in the various particulars that enables us to class them as members of a species. For this view, accordingly, the universal is not at all what is left over after the empirical process of eliminating the peculiar. It is the essence meant when the general term is used, an essence whose nature is wholly clear to us. In Spinoza's language, it is no *idea summo gradu confusa*, resulting from the imagination's failure to form a determinate and concrete image of, for instance, man, in its attempt to get one image that shall stand for many men.² It is no

¹ Cf. III. iii. 13 and elsewhere.

² *Ethics*, II. xl, schol. i.

composite, 'generic image' that cannot possibly portray all the particulars. It is an *idea adequata*, a concept whose meaning we understand precisely. This meaning is fixed. It is, as Locke explicitly points out, an essence 'ingenerable and incorruptible'. 'Essences being taken for *ideas* established in the mind, with names annexed to them, they are supposed to remain steadily the same, whatever mutations the particular substances are liable to. For whatever becomes of *Alexander* and *Bucephalus*, the *ideas* to which *man* and *horse* are annexed are supposed nevertheless to remain the same, and so the *essences* of those species are preserved whole and undestroyed, whatever changes happen to any or all of the individuals of those *species*. By this means the *essence* of a *species* rests safe and entire, without the existence of so much as one individual of that kind.'¹ The universal is the essence, fixed and immutable, that without which true science would be impossible. For Locke (in this phase) the universal is an unchangeable, permanent, and eternal meaning.

Now at least these three strands—there may be more—are present in Locke's thought concerning universals. They are never wholly disentangled and there is no consistent theory of universals in the *Essay*. As one reads Book III and compares it with the drafts one cannot but feel that the theory is being developed in the very act of writing the book. In this sense the thought of Book III is fresh and alive to a marked degree. Perhaps, if he had delayed the *Essay's* publication still further, he would have developed in time a perfectly consistent theory, possibly putting all the emphasis on the third strand. And yet one may seriously doubt whether this could ever have happened. In his three later editions of the *Essay* Locke does not change his theory of universals substantially. To the end he prefers to present it in a hesitant and ambiguous form. He comes nearest to the position most consistent with the third view of the universal in his account of mathematics, but even here there is room for doubting whether he adopted the extreme rationalist standpoint sometimes ascribed to him. For an element is present in his thoughts which constantly clashes with rationalism. This will become clear if we now bring forward certain

¹ III. iii. 19.

further considerations in connexion with his theory, particularly those having to do with the kind of existence and of objectivity that Locke's universals possess.

We may deal, first, with the universals of the natural sciences. There are, Locke assumes, real individual things or substances in nature. We have complex ideas of these which more or less accurately represent them. The complex ideas are made by us under the guidance of our experience and observation. 'Men, observing certain qualities always joined and existing together, therein copied nature.'¹ Having gained these complex ideas, we now notice that several of them are alike, that is, they share some qualities in common. And as a result of this further observation we select, of our own free will, certain qualities, and frame therewith an essence. Thus I find the qualities *abc* in *X*, in *Y*, in *Z*, and in many other complex ideas. I accordingly decide to form a class of all those ideas which possess the essential features *abc*. My universal or general idea possesses a fixed content, namely, *abc*, and whatever complex idea possesses *abc* is an instance of my universal.

Now this view of the way in which a universal is framed leads to certain novel consequences. In the first place the fixity of the universal is determined from within rather than from without. Whereas for the orthodox Aristotelian standpoint we apprehend *abc* to be essential features of real objects external to and independent of us, so that our universal depends entirely on the nature of the objects outside us and is *discovered* by us, for Locke the universal is 'a creature of our own making'. It is we who decide that *abc* together frame what *we* mean by the general term (which we may call *M*). So much is this so that Locke expressly (in the case of universals of the natural sciences) holds *abc* to be the 'nominal' rather than the 'real' essence.² The essence *abc* is what we decide the name *M* to mean. It is not the real constitution of certain things in nature. From the commencement Locke has held that we have access to physical objects only through sensation, and

¹ III. vi. 28.

² Cf. III. iii. 15-18, vi. 3, and elsewhere. Cf. the interesting discussions in the *Stillingfleet controversy*, *Works*, i. 398-403, 575-7. I have no space here to discuss the historical origins of this distinction between real and nominal essences, but it seems to be present implicitly in the works both of Gassendi and of Boyle.

sensation, he has also held consistently throughout, does not give us the inner constitution, the essence, of anything in nature. While, therefore, the occurrence of certain uniformities in our sensory experiences leads us to frame the conception of a 'sort' or species having a certain essence, and so enables us to provide ourselves with the type of fixed and permanent object indispensable for the gaining of knowledge and for the communication of thought, that sensory experience does not reveal to us the essence of real things in nature, so that we cannot argue to the necessary existence of any 'sort' in nature. Nature may have its 'sorts', and this seems likely in view of our experience, though the existence of monsters and changelings and 'border-cases' between the various species suggests that nature is not quite so regularly ordered as might at first appear.¹ But the fixed set of characters in things pertaining to their inner constitution, and composing their real essence, is not revealed to us; and Locke, accordingly, rejects the Aristotelian view of the universal.²

In other words, Locke could not subscribe to the opinion that to know the universal in natural science is to know a natural species existing externally; for he could not identify the universal which we conceive with anything in the world of nature. But neither did he find it possible to adopt the other, more Platonic, view that the universal is 'a form or mould' never wholly embodied in any thing in nature (though natural things may more or less conform to it) but remaining apart in a pure ideal world of its own. This view Locke explicitly rejects.³ If we do not know the real essence of things, we certainly do not know such ideal patterns or forms. Now both these interpretations of the universal are defective in Locke's opinion because they give the universal a kind of objectivity which, if his view of the universal is sound, it cannot possibly possess. If the term *objectivity* connotes fixity and permanency in meaning, then Locke has room for such objectivity—

¹ Cf. iv. iv. 14, and elsewhere. Cf. also Molyneux Correspondence, *Works*, iii. 523, 527.

² Ordinarily Locke talks as if knowledge of the real essence of a thing would be wholly adequate knowledge of that thing, but we should note the curious relativism of iv. vi. 11-12.

³ Cf. iii. iii. 17; vi. 10, 24, &c.

at least when the third strand of his theory is uppermost in his mind. But in dealing with universals, he never has room for objectivity in the further sense, as meaning what is not created by the mind but is merely apprehended and discovered, and pertains to a world of realities wholly independent of the mind. The universal cannot possess such objectivity, because, in Locke's view, it is I myself who frame the universal. It is I who select *abc* and refuse to include *d* in my universal *M*. This was proved conclusively for Locke by the fact that the term *M* may mean something different to you from what it means to me. Your experiences may have been different from mine and they may have led you to include *d* with *abc* in framing the universal. What *M* signifies is as fixed for you as it is for me. In that sense it is a permanent, 'objective' (i.e. fixed) meaning. But we do not mean the same essence by it, and you would refuse to subsume certain complex ideas under *M* even though they possessed *abc*, because they did not also possess *d*, which, of course, I should never do. Thus the universal for Locke is neither the real essence of the Aristotelians as forming 'the very being of anything whereby it is what it is',¹ and as shared by all things of the same sort or pertaining to the same species, nor again is it the 'ideal' object of those who adhere to the doctrine of moulds or patterns. For Locke the universal is simply what we decide the term *M* to mean, using experience as a guide.

While, therefore, the *universals of natural philosophy* are objective, in Locke's opinion, as permanent, fixed identities, whatever variations may occur in experience, they do not exist 'without the mind', neither in the world of nature nor in an intellectual world of 'substantial forms' independent of the mind. In other words, they are not apprehended as independent existences. They are framed by the mind. The sensory experience does not *give* them: intellect does not apprehend them. At the same time they rest upon experience; they are framed by abstraction from the *given* of experience, and according to the relations and similitudes observed in the *given*. But they are none the less 'creatures of our understanding'. In one sense of the term they are objective, but

¹ III. iii. 15.

their objectivity is not the sort that rules out mind-dependency. And in the light of this we may understand why Locke hesitates to set forward his theory of universals wholly in terms of its third strand. He cannot admit that we ever apprehend an objective, independent universal, for a universal is a creation existing only 'within the mind', that is, within the individual mind of the person who frames it, and it has no further objectivity than that it is fixed and permanent in meaning. It is no mere image, but yet its source is one with the image. As the mind frames its images, so also does it frame its universals.

If we now turn from the realm of natural science to that of mathematics we find that here again the universal is what we decide it should be. Again we select the qualities, for instance, *abc*, and mean by *M* whatever possesses *abc*. But in the case of mathematical objects Locke notices a still greater freedom and arbitrariness in our choice. Whereas, when dealing with substances, we have always to keep one eye, as it were, on the experience given, we may in the mathematical realm, once we have gained our fundamental conceptions, close our eyes on experience and proceed merely according to the demand made upon us by a certain inner necessity of consistency in thought. From the point of view of following experience, therefore, we now proceed still more arbitrarily than before. Here 'the mind takes a liberty not to follow the existence of things exactly. It unites and retains certain collections as so many distinct specific *ideas*, whilst others, that as often occur in nature and are as plainly suggested by outward things, pass neglected without particular names or specifications.'¹ Thus we are still freer with regard to these ideas than with universals of substances. We need no longer try to think what the real actually is; we may forget it entirely and proceed to inspect our general ideas, intuiting relations between them and putting them out in such an order that the intuitions are more easily made. The universal here, the object of the mathematician, is certainly no actual thing in nature. Figures in the real world may help, but he is not dealing with them. He deals with abstract ideas. His object is not a real entity in the sense in which this table is a real entity.

¹ III. v. 3.

But neither is it for Locke some sort of intellectual entity independent of the mind. It is the mind's own creation as all other abstract ideas are. In a sense it is more completely 'in the mind' than is the abstract idea of a species of things, for it is not intended to represent anything beyond itself; it is its own archetype. Thus it cannot possibly be objective as being independent of the mind. Mathematical objects are not, for Locke, entities existing in an intellectual world of their own, and discovered there by the mind. It is true that they are not completely independent of experience—for the fundamental conceptions of space and number rest, in his opinion, on experience. Yet the mathematical object itself is an abstraction and a universal which is the mind's own creation. It is objective, like all other universals, but not as being mind-independent, but as being a meaning fixed by definition.

Thus we are able to conclude that Locke's theory of universals never involves that type of rationalism for which there exists a pure intellectual world with its own objects, objects that are independent of the mind and discovered (or not discovered) by it. This sort of rationalism is foreign to Locke, for the only reality that he recognizes is the reality revealed, so far as it is revealed at all, through experience. In other words, his theory is consonant with his empiricism. None the less, it must also be admitted that it is never clearly thought out, and that there are elements in it which might, by others, be developed in non-empiricist ways. His vagueness makes it at least easier for him to maintain his empiricist standpoint.

II

We have now to consider (a) Locke's theory of language, including his account of definition, (b) his examination of the imperfections and abuses in the use of language, and his suggestions for remedying these where remedy is possible.¹

¹ Others in seventeenth-century England had concerned themselves with the philosophy of language, particularly Burthogge, *Organum Vetus et Novum* (1678), and John Wilkins, *Essay towards a Real Character and a Philosophical Language* (1668). I thank Mr. J. W. Yolton for these references. It is interesting that Wilkins uses the word 'particles' in the same way as Locke does. On Wilkins's use of the term cf. J. Cohen, 'On the Project of a Universal Character', *Mind*, 249 (January 1954), p. 58.

Man, Locke holds, is by nature a social being, and the first purpose of language is a social one. It facilitates communication of thought. 'God having designed man for a sociable creature, made him not only with an inclination and under a necessity to have fellowship with those of his own kind, but furnished him also with language, which was to be the great instrument and common tie of society.'¹ Now Locke recognizes another possible use of language, namely, in the recording of our thoughts for our private use. In this case, as Locke points out, we may choose whatever word or whatever sign pleases us best.² The mathematician, for instance, in his calculations, may choose any language and any system of signs. As long as they are intelligible to him no one else needs to be consulted. But if he wishes to communicate his thoughts he must make his language intelligible to others as well. In actual practice, both in mathematics and in daily intercourse, he uses a language long since agreed upon, which he has learnt rather than made. In conversation, for instance, he accepts and uses the language of the society around him, and he must speak it if he is to be understood.³

All languages are, however, conventional. The fact that they may be handed down from generation to generation makes no difference in this respect. They are all arbitrary in this sense, that there is no natural connexion between the sign and that which it signifies. The word, for instance, does not resemble what it signifies. It is simply accepted as the sign arbitrarily chosen by 'a voluntary imposition'. In support of this important principle Locke only brings forward one argument. Were there a natural connexion between words and what they signify 'then there would be but one language amongst all men'.⁴ The fact that languages are many proves their arbitrary character. Unfortunately, Locke does not here examine those words which are obviously onomatopoeic,

¹ III. i. 1.

² III. ix. 2

³ Locke does not include here a third use of language, the expressing of emotion. But that such a use is possible is implicit in much that he says. No more explicit statement of the emotive use of language can be found than in Berkeley's *Introduction* to his *Principles* (§ 20), which shows the influence of Locke. The fact that Locke deals with individual words and ideas rather than with sentences and propositions limits his discussion considerably.

⁴ III. ii. 1.

nor again words derived from an onomatopoeic source (as Leibniz did in discussing this passage). Indeed, he makes no attempt to examine the historical origins of language, though this would have been in accordance with his own expressed method of procedure. It is true that etymology was in its infancy at the time, but Locke does not make use even of the limited information then available.

A word is an arbitrarily chosen, conventional sign. Words are not the only signs—certainly spoken words, which Locke seems here to have most in mind, are not.¹ There are also mathematical signs, pictures, gestures, and so forth. Locke does not attempt to make a complete inventory of the kinds of signs in use. But he does face the more important question: What does the sign signify? To this question he puts forward an answer which he knew to be unusual, but to which none the less he consistently adheres. The word *table* is usually thought to be the sign of the physical object. Words it is usually supposed signify things, at least some words do. This Locke categorically denies. The word, he thinks, signifies the idea. It is true that the idea has frequently a reference to something beyond itself, and in this way, no doubt, the word may signify a thing, but directly it signifies the idea. Moreover, *my* word signifies directly *my* idea and *my* idea only. Here again we usually think of the word which I now use in conversation as signifying the idea in the mind of another person as well as that in my own mind. But to do so is to invite confusion. 'Words in their primary or immediate signification stand for nothing but

¹ The *Essay* does not perhaps sufficiently distinguish between spoken and written words. But Locke is quite explicit that words (being signs) are part of the study of philosophy. In iv. xxi σημειωτική is said to be that part of philosophy which is logic. With Gassendi and in accordance with the traditional division Locke divided knowledge into three parts: logic, physics, and ethics. Logic is the study of ideas (as they are signs for things) and of words (as they are signs for ideas). The use of the word σημειωτική by Locke in this connexion is strange. According to the new Liddell and Scott the word is a medical term meaning a diagnosis, an examination of symptoms. Did Locke come across it in his medical studies and convert it to his own uses? Or again is it linked with the Epicurean doctrine of *signification* and the Epicurean criticism of the Stoic logic? Did the Gassendists use it as a term for logic? I cannot find it used in the works of Gassendi. (On the Epicurean theory of signification, cf. J. L. Stocks, 'Epicurean Induction', *Mind*, April 1925, republished in *The Limits of Purpose* (1932), pp. 262 ff. Cf. further L. J. Russell's note in *Mind*, July 1939, pp. 405-6, who links it with musical notation. Also P. Romanell, 'Locke and Sydenham', *Bulletin History of Medicine*, July 1958.)

the *ideas* in the mind of him that uses them.¹ Locke stresses this point in order to bring out another which he regards as most important. The word I use is clear in so far as *my* idea is clear. We may illustrate the point by referring to the word *table*. The table itself as a physical object is what it is. It has its own positive character. But I cannot, therefore, assume that the meaning of the word *table* is altogether clear to me when I use it. For the word's clarity depends not on the thing but on the idea. Likewise the idea may be wholly clear in another's mind and not clear in my mind. My word is as clear as my idea but never clearer. We must not, therefore, be misled by this 'secret reference' to things and to other men's ideas. Of course, Locke adds, it is also true that we may and do use words without any signification whatsoever, that is to say, without having in mind any idea which the word signifies. We can learn sounds parrot-wise and repeat them. In that case, however, we are not using language significantly. Words may be names of simple ideas, of simple modes, of mixed modes and relations (here significantly grouped together), and of substances respectively. The main distinction as between these is set forward explicitly enough by Locke himself in III. iv. 17. Names 'of mixed modes stand for *ideas* perfectly arbitrary: those of substances are not perfectly so, but refer to a pattern, though with some latitude: and those of simple *ideas* are perfectly taken from the existence of things'. That is to say, words vary according as their ideas do. Mixed modes refer to nothing beyond themselves and the names of mixed modes, therefore, signify the ideas solely. But ideas of substances and simple ideas refer to things and qualities of things and so their names, though they also refer directly to the ideas only, refer indirectly to things and qualities, and they are as correct as the ideas are correct representations. Now in the case of substances we know that our ideas are at best nominal essences only and cannot represent adequately the real essence. Thus the name *table* as used by me never adequately signifies the thing table, but it does adequately signify my idea of table, namely, its nominal essence, which is framed as far as possible in accordance with nature, but not entirely so, since we do not know

¹ III. ii. 2.

real essences. Locke's theory in this respect is open to criticism. For if the word *table* has any reference whatever to something beyond the idea, so also has the word *justice* or *beauty*. But this concerns the general distinction which Locke makes between ideas of mixed modes and ideas of substances rather than the words which signify such ideas. Of the names of simple modes Locke has little to say.¹

Locke remarks further that some words do not stand for, or refer to, any idea but rather signify the mind's own activity or operation in grouping ideas or propositions together. 'Besides words, which are names of ideas in the mind, there are a great many others that are made use of to signify the connection that the mind gives to ideas or propositions one with another.'² Such words are 'is' and 'not' and 'particles' such as 'and', 'but', 'therefore', 'of'. These are not words that can be used to refer to ideas and through them to things as can common nouns. They signify rather linguistic and logical operations. 'To think well, it is not enough that a man has ideas clear and distinct in his thoughts, nor that he observes the agreement or disagreement of some of them; but he must think in train and observe the dependence of his thoughts and reasonings one upon another; and to express well such methodical and rational thoughts, he must have words to show what connection, restriction, distinctness, opposition, emphasis, etc. he gives to each respective part of his discourse.'³ Locke has in mind here an important difference between words that are used to refer to things and words that signify connexions in the thinking, operational or logical words as they have sometimes been called. This distinction, he thinks, has scarcely been noticed, though such words are greatly in need of attention. As an illustration he analyses the use of the word 'but'. Had he proceeded with these analyses he might have come across much of great philosophical and logical interest, but he excuses himself. 'I intend not here a full explication of this sort of signs.'⁴

A noteworthy feature of the discussion of the names of simple ideas is the account of *definition* contained in it. Here Locke frees himself from the traditional standpoint and prepares the way for

¹ But cf. III. ix. 19.

² III. vii. 1.

³ III. vii. 2.

⁴ III. vii. 6.

a new view of definition which is only being made explicit in our own day. The importance and value of Locke's contribution to the theory of definition have not been sufficiently realized. To all intents and purposes he rejects the traditional theory and sets in its place a theory of his own, having a more general and comprehensive basis. It will be recalled that according to the traditional account definition is by genus and differentia. These two together make up the essence, so that definition and essence are synonymous terms. Apart from the essence there are also the properties and the accidental qualities. The properties are those qualities peculiar to the subject but yet not its essence, the accidents are those others which happen to belong to it in this case, although the subject can without contradiction be imagined as lacking such qualities. Now it will be seen that the distinction between essence and property is made with difficulty. In effect, it is only possible when certain metaphysical assumptions are made. The chief assumption is that natural substances form real species; that the universe of nature consists of so many real species each differing from the other absolutely. Instances of such species are man, horse, buttercup, and so on. If this be granted, it is then possible to distinguish between essence and property, for the essence is the fixed central core, as it were, which the species is. The essence of any species may be set out in terms of a genus (under which the species is subsumed) and a differentia (that which makes this species different from the other species subsumed under the same genus). A man is an animal, but he is a rational animal. Therefore, his essence is rational animal and that also is his definition. (A property would be his ability to learn grammar.) To define is to state the genus and differentia which is also to discover the essence, the real being of the fixed natural type or species under consideration.

Now Locke's view of definition is fundamentally different from the foregoing, for he will not admit that definition and real essence are one and the same. To begin with it will be recalled that Locke doubts the existence of fixed types. He believes that some division corresponding loosely to the specific divisions we have in mind is actually to be found in nature, and that we are guided by nature

in framing our species. But he doubts whether there is anything in nature corresponding precisely to the absolute division which we set up in thought between the species. On the contrary, the existence of monsters, changelings, and the like 'border-cases', suggests that nature may not be ordered into such fixed types. But even if it is, Locke would still hold that definition cannot be identical with real essence in every case for the simple reason that the real essence, according to him, cannot be known in every case. It cannot be known, for instance, in the case we have here in mind, namely, the case of natural substances. We do not know the real essence of things. How then can we ever define it if definition means stating its real essence? And yet, of course, definition is possible and does take place, so that definition is not necessarily the statement of the real essence.

What, then, is Locke's own view of definition? In the first place he makes it perfectly clear that definition is of words. To define is 'to show the meaning of one word by several other not synonymous terms'; it is 'to declare the signification of a word'. To show the meaning or declare the signification of a word is, however, merely to state what idea the word signifies. Or, as Locke himself puts it: 'The meaning of words, being only the *ideas* they are made to stand for by him that uses them, the meaning of any term is then showed, or the word is defined, when by other words the *idea* it is made a sign of and annexed to in the mind of the speaker is, as it were, represented or set before the view of another; and thus its signification ascertained. This is the only use and end of definitions.'¹ It follows from this that one never defines a substantial thing or natural object. At most one states what idea is meant by a word, and in the case of natural objects the word stands for the general idea, that is, the nominal essence which is not identical with the real essence. Thus definition and real essence are not synonymous. Again, it also follows that definition *per genus et differentiam* is one sort of defining, but not the only sort. Any form of words whose meaning is exactly equivalent to the meaning of another word can be held to be a definition of that word. Now it may very well be the case—and Locke does not

¹ III. iv. 6.

doubt that it frequently is so—that the most commodious way of defining is *per genus et differentiam*. But we are not bound to define in this way. As Locke remarks: ‘This may show us the reason *why, in the defining of words*, which is nothing but declaring their signification, *we make use of the genus*, or next general word that comprehends it. Which is not out of necessity, but only to save the labour of enumerating the several simple *ideas* which the next general word or *genus* stands for; or, perhaps, sometimes the shame of not being able to do it. But though defining by *genus* and *differentia* . . . be the shortest way, yet, I think, it may be doubted whether it be the best. This I am sure, it is not the only, and so not absolutely necessary. For definition being nothing but making another understand by words what *idea* the term defined stands for, a definition is best made by enumerating those simple *ideas* that are combined in the signification of the term defined: and if instead of such an enumeration men have accustomed themselves to use the next general term, it has not been out of necessity or for greater clearness, but for quickness and despatch sake.’¹ To say that man is ‘a solid, extended substance, having life, sense, spontaneous motion, and the faculty of reasoning’ is to say at least as much as that man is ‘a rational animal’, which is the traditional definition *per genus et differentiam*.

The latter is one sort of defining, not because it states the real essence, for that it does not do in the case of natural substances, but because the genus and differentia put together mean what the word means. But it is only one sort of defining, and many other sorts are possible. In this way Locke arrives at a far more general conception of definition than that prevailing traditionally.

It follows from Locke’s view that not all words are definable, and Locke explains why this must be so. (He claims that the point has not been explained by any one before him.)² If in defining one is merely enumerating the simple ideas contained *in the complex idea, the name of which is being defined, then the name of a simple idea itself cannot be defined. ‘The names of simple *ideas* are not capable of any definitions; the names of all complex *ideas* are.’³ And this because the simple idea cannot be further

¹ III. iii. 10.² III. iv. 4.³ III. iv. 4.

analysed into parts. Thus, if the idea is in no sense compounded its name cannot be defined. We are able to define only because we begin with certain indefinables already given; these cannot themselves be defined because, in Locke's opinion, they are simple in the sense of being indivisible.¹

Having now considered Locke's general theory of language we may turn to the highly interesting chapters which close Book III, wherein Locke attempts to show what imperfections in the use of language are almost inevitable, what abuses creep in because of the folly and carelessness of men, and, lastly, what remedies are possible.

Language, as we have seen, may be used for the private recording of one's own thoughts, in which case the individual is entirely free in the choice of his language symbols, the sole requisite being consistency in their use; and again for communicating them to another, where agreement as to symbols is necessary in addition to consistency. We communicate our thoughts in conversation, a communication which Locke calls 'civil' communication, or again in the statement of scientific fact, 'philosophical' communication. The latter demands the greater exactitude. To secure complete precision we should need to know (*a*) that the word signifies precisely the same idea whenever it is used, (*b*) that it signifies precisely the same idea to the speaker on the one side, and to the hearer or hearers on the other. This is the ideal which, for reasons which Locke now explains, is hardly ever attained. Locke suggests four reasons: (1) Where the idea symbolized by the word is very complex it is easy for the hearer to omit a part of its content which the speaker includes, or to include something which the speaker omits, and so they would not be using the word in the

¹ One finds an interesting corollary to the above in III. iv. 16. Since simple ideas are indivisible, and supposing that the general idea is made by the elimination of elements which are not common to the species brought under the genus, it ought to follow that no simple idea can be a species of a genus, for it has no elements. Yet we do talk of red, blue, pink as species of the genus colour. Locke has to explain this in a circuitous and novel way: 'Therefore when, to avoid unpleasant enumerations, man would comprehend both *white* and *red*, and several other such simple *ideas*, under one general name; they have been fain to do it by a word which denotes only the way they get into the mind.' Thus the common element, in this case, is extrinsic to the simple idea as such.

same way and would not be able to communicate their thoughts properly to each other. (2) The idea may have 'no certain connexion in nature' and, therefore, no 'settled standard' by which the hearer can test his idea to see if it is in conformity with the speaker's. For after all, in Locke's opinion, the complex idea of table, though framed by us, is not framed by us arbitrarily, and the external influences causing us to frame the idea in the way we do are, Locke assumes, alike for both speaker and hearer. But this, Locke thinks, is not true of certain other ideas, particularly of mixed modes, for instance, *grace*, *perspicuity*, *beauty*, and the like, which are created by us in a more arbitrary fashion and point to nothing concrete outside them. Accordingly, it is in connexion with ideas of mixed modes that confusion arises most easily as the result of the above two reasons. Some of these are very complex ideas, and there is no standard beyond them by which to test them. (3) The idea may refer to a standard, but the standard may be difficult to know. (4) The idea may be identical with the nominal and not with the real essence. It is these two points which help to explain errors of communication in connexion with the signification of names of substances. If the speaker means by the word *gold* merely the nominal essence which he himself has framed—and he cannot mean more on Locke's theory—what he means must be entirely clear to the hearer if he is to communicate his thoughts with exactitude. Very frequently, however, this is not the case. Of course, in 'civil' communication such exactness is not necessary and language, as it is, is well fitted for the purposes of everyday conversation. But in the communication of scientific information, where precision and exactness are indispensable, these defects in the use of language become very serious. In the communication of scientific facts the use of words signifying the ideas both of substances and mixed modes (including also relations) needs to be most carefully examined. The difficulty is not so acute in the case of names of simple ideas or again of simple modes. Indeed, of all names those of simple ideas are most free from the foregoing imperfections. For what they signify is simple and they refer immediately to a perception. Thus the word *blue* is immediately understood in its full significance

by any one who has seen blue and who knows that the word refers to that colour. (The issue, however, is not so straightforward as Locke makes out. Is my sensation of blue exactly the same as yours? Moreover, the word *blue* needs to be more precisely defined if it is to stand for the simple idea in its bare simplicity, for instance, this blue here now.) The names of simple modes also are usually unambiguous, for the meaning of *seven* and *triangle*, for instance, is perfectly clear. These ideas are, of course, created by us, but they are carefully defined and are clear and distinct. In their case, Locke thinks, so long as we stand by the definition, there is little likelihood of mistakes. It might be objected that in the same way the names of mixed modes might be made clear and distinct by careful definition. Locke does not deny this. His point is that precise definition of them is not so easy as is the case with mathematical terms.

Certain imperfections, then, in the use of words, particularly those which signify ideas of mixed modes and substances, are almost inevitable. But there are other imperfections in the use of language which might easily have been avoided and are due to men's 'wilful faults and neglect'. Locke sets forward seven such imperfections: (1) We use words when we have no ideas corresponding to them, or, again, no clear ideas. We may learn to repeat sounds parrot-wise. (2) We use words 'inconstantly', making the same word stand now for one collection of simple ideas and now for another. (3) We affect a jargon. We make ourselves purposely obscure, in order to give our words an appearance of subtlety or, perhaps, to veil the ambiguities which our thoughts contain. Locke does not mince his words in attacking this abuse which he finds all too prevalent in the works of logicians, scientists, and lawyers. (4) We 'take words for things', that is to say, we fall into supposing that if there is a word there must be a thing (not merely an idea) corresponding to it. 'Who is there that has been bred up in the peripatetic philosophy . . . that is not persuaded that *substantial forms, vegetative souls, abhorrence of a vacuum, intentional species*, etc. are something real?'¹ Again, we tend to suppose that there is something real corresponding to the word *matter* as

¹ III. X. 14.

opposed to body and distinct from it.¹ (5) We make words stand for things they cannot possibly signify, as, for instance, when we make the word *gold* stand for the real essence. (6) We use words, whose meaning is clear to us, without making their meaning clear to others. (7) We use figurative speech. In conversation, or in poetry, this is a venial fault, since it increases pleasure and delight. But in the pursuit of 'dry truth and real knowledge' the use of figurative speech is dangerous. Herein lie the chief defect and error of eloquence and rhetoric, as Locke makes clear, although he adds characteristically enough: 'I doubt not but it will be thought great boldness, if not brutality in me, to have said thus much against it. *Eloquence*, like the fair sex, has too prevailing beauties in it to suffer itself ever to be spoken against. And 'tis in vain to find fault with those arts of deceiving wherein men find pleasure to be deceived.'²

Such being the defects of language, both those natural to it and those for which the wilful folly and carelessness of men are responsible, Locke in a final chapter considers possible remedies. He suggests: (1) That care should be taken to use no word 'without a signification'. In using a word one should know what idea it signifies. (2) That this idea should be known precisely and distinctly. If the word signifies a simple idea this latter should be clear; if a complex idea it should be 'determinate', that is, we should know what simple ideas it contains and each of these should be clear. If the complex idea is one of substance it should also be 'conformable to things as they exist'.³ (3) That we should respect the conventions in the use of language, and, whenever possible, use words in strict conformity with the common usage. (4) That if we deviate from the common usage we should show in what way we do so. So also, where there is some doubt about the appropriate use of a word we should make its use plain. In the case of names of simple ideas this can be done by pointing to an instance, in that of mixed modes by defining, while, finally, in that of substances we need to combine both methods. (5) Thus, as far as possible, we should 'use the same word constantly in the same sense'.⁴ Unfortunately, we

¹ III. x. 15. Locke here foreshadows an important point in Berkeley's argument.

² III. x. 34.

³ III. xi. 10.

⁴ III. xi. 26.

are frequently forced to use the same word in slightly different senses, but as far as possible it is well not to vary the signification of any one word if we would avoid ambiguity. If we observe these rules of procedure, Locke thinks we may avoid many of the pitfalls in the use of language into which we too readily fall.

KNOWLEDGE AND PROBABILITY

AFTER the long and laborious work of preparation in the first three books of the *Essay* Locke now finds himself at the opening of Book IV free to face the main problem, namely, the determination of the nature and extent of human knowledge, 'together with the grounds and degrees of belief, opinion, and assent'. I propose in this chapter to consider Locke's theory of knowledge, dealing, first, with the nature of knowledge as such; secondly, with its limitations; thirdly, with existential knowledge; and, lastly, with probability and error.

I

Locke's most explicit teaching on the nature of knowledge is to be found in the opening chapters of Book IV. Now it is a highly interesting point that these chapters have no counterpart in the Drafts of 1671 and were not, apparently, part of the original scheme. They are the product of Locke's reflections between 1671 and 1690. Locke, at first, seems to have taken knowledge itself for granted and merely inquired into its limitations. Gradually, however, he came to see that these could not be properly determined until a precise description of knowledge had been given. This accurate description of knowledge was no doubt one of the problems which concerned him during his stay in France and it was there that he found the solution he needed. He had been vaguely assuming the traditional position, that the mind possesses the power of distinguishing truth from falsehood, is an *intellectus agens* able to know. But on the Continent in Cartesian circles he found a more explicit form of this same doctrine, set out in the language of his day. It was the intuitionism of Descartes, made most explicit in his *Regulae ad Directionem Ingenii*. This work was not published until 1701, but copies of it circulated amongst the Cartesians long before this. There is no evidence to show that Locke had actually seen a copy of the *Regulae*, though this is not

at all impossible. But whether he was directly acquainted with it or not, he had certainly learnt its contents fully from the Cartesians, and had made the theory set forth in its pages his own. The resemblance between iv. ii of the *Essay* and some sections of the *Regulae* is remarkable.

For the source of iv. ii, then, it is not necessary to look further than to Descartes's *Regulae*. Locke's intuitionism on the subjective side is identical with that of Descartes. With him Locke holds that the best instance of knowing is intuiting and that non-intuitive knowledge, for instance, demonstration or indirect knowing, in so far as it is certain, contains also of necessity an intuitive element. By *intuition* is meant here a power which the mind possesses of apprehending truth. Though itself non-sensory, this power is analogous in many ways to seeing. It is direct and immediate. 'In this the mind is at no pains of proving or examining, but perceives the truth, as the eye doth light, only by being directed towards it.'¹ Intuition is the mind's immediate insight into the truth. Furthermore, it is infallible. Just as I cannot doubt that I now see brown, so my intuition is 'irresistible' and 'leaves no room for hesitation, doubt, or examination'. 'This kind of knowledge is the clearest and most certain that human frailty is capable of. . . . Certainty depends so wholly on this intuition that in the next degree of *knowledge*, which I call *demonstrative*, this intuition is necessary in all the connexions of the intermediate *ideas*, without which we cannot attain knowledge and certainty.'²

Here is as explicit a statement of intuitionism in the theory of knowledge as is to be found anywhere. The mind has the power to know truth with absolute certainty. This thesis Locke set in the forefront of his theory. To put anything else there, he would urge, would be entirely to misrepresent the nature of knowing. For instance, he resolutely opposes the view that in any account of human knowledge the chief stress should be put on syllogism or again on argument from 'maxims', *ex praecognitis et praecognecessis*. These are, of course, genuine methods of procedure and Locke does not deny their worth, although he thinks that logicians in the past and the school logicians in his own day had put

¹ iv. ii. 1.

² Ibid.

too great a value upon them. He does, of course, hold that it is a very grave fault in logicians to seek to confine the knowing mind to the use of these methods and of these methods alone. Any method which helps the mind in its effort to know is valid, any method which succeeds in freeing our intuitive powers and enables them to function is of equal value with syllogism and argument from 'maxims'. Nevertheless, none of these methods deserves the central place in our account of knowledge. That place must be reserved for the intuition itself. And, accordingly, in the opening chapters of Book IV Locke gives chief attention to intuition.

One fundamental difficulty, however, faces any theorist who adopts the position Locke is now adopting. Intuition (or perception, for Locke uses the two terms synonymously) carries with it conviction. We know that we know. 'For what a man sees, he cannot but see; and what he perceives, he cannot but know that he perceives.'¹ But a difficulty arises when we recall the fact of error in human experience. For men also feel convinced when they err. As Locke himself points out in discussing the claims of 'enthusiasts' to indubitable knowledge: 'The strength of our persuasions is no evidence at all of their own rectitude: crooked things may be as stiff and unflexible as straight; and men may be as positive and peremptory in error as in truth.'² But in that case what guarantee have we of our conviction in intuition? Locke sometimes plays with the idea that the guarantee lies in the object. It is self-evident. But he is speedily driven from this position; for after all what we mean by a self-evident object is an object about whose truth we feel convinced, and it is this conviction which guarantees. Locke falls back on the only possible view, namely, that the conviction of intuition is unique in being wholly trustworthy. Although we fail frequently, and although we are constantly reminded of our fallibility, none the less there are occasions when doubt is entirely out of the question. Over and over again, in the controversy with Stillingfleet, Locke insists that there is no appeal to anything beyond intuition. Stillingfleet wishes to fall back on syllogism, on argument from known and indubitable principles, on reason. Locke replies that, in so far as these give us knowledge, that know-

¹ IV. xiii. 2.

² IV. xix. 11.

ledge is intuitive. Reason itself, as meaning the act of knowing, is intuition; and the cognitive core of reasoning as inferring is also intuition. We cannot, therefore, appeal from intuition to reason. We must either grant that the intuitive faculty is, indeed, infallible, or be for ever sceptical of all knowledge. Locke himself puts his trust in intuition.

A word should be added about demonstration. Having shown that the knowing present in demonstration is itself intuitive, it is necessary to ask what differentiates it from intuition. Demonstration, also, may give absolute certainty. But it is not always so reliable as intuition. The intuition in it is, of course, completely certain. But there is more in demonstration than merely intuition. The additional factor which Locke finds present (again following Descartes) is memory. Intuition is a flash of illumination; demonstration is a process involving 'pains and attention' and frequently 'a long train of proof'. And in this long process memory is essential in order that the mind can recall the steps which enable it to pass to the desired conclusion. Now, where intuition is infallible, memory is notoriously fallible. Consequently, demonstration is not as reliable as intuition. So long as we remember the series of steps properly there can be no doubt about our conclusion. But our memories are frequently defective and so we err. Locke seems to trace every error in reasoning to a defect of memory. It is necessary to add that as an account of reasoning in general *iv. ii* is very inadequate. The importance of system, for instance, in reasoning and of logical relations within the system is here entirely neglected. Locke, however, in this chapter offers no final analysis of reasoning. What he really desires to show is that throughout demonstration an intuitive element is present, and he is content to make this one point clear.

The ideal of knowledge, then, has been shown to be intuition. And before we proceed to discover the extent of knowledge (in this strict sense) of which human beings are capable, we must first refer to the objective side of the knowing experience in order particularly to meet a difficulty of which the reader must by this time be conscious, namely, that of the relations between Locke's intuitionism and his empiricism. Is Locke inconsistent? Has he thrown

his empiricism overboard and become a Cartesian rationalist? I do not think so. For while Locke's teaching is identical with Descartes's as to the subjective side of the experience, it is not so with regard to the objective. Here he is, I believe, in conscious opposition to Descartes. For Descartes the object of intuition is a pure non-sensuous object; for Locke it is a relation between certain *givens* of sensation or reflection or between complex ideas derived from the *given*. Intuition consists for Locke in the perception of a relation between ideas ultimately derived without exception from sensation or reflection. The object of intuition is never wholly intellectual and purely non-sensuous. In this sense Locke's position differs fundamentally from that of Descartes. Those early readers who like Leibniz classed Locke with the Gassendists must have been surprised at the remarkable likeness between iv. ii and the Cartesian teaching. But Locke no doubt felt that he was still a good Gassendist and was in no way deserting that school. He was merely completing its teaching and making it more explicit.¹ He accepts intuitionism but only as part of his empiricism. Locke himself does not seem to have felt that there was any inconsistency between the standpoint of Books II and IV of his *Essay*.² We must return to this point later.

The object of intuition, then, is no purely intellectual non-sensuous object. Locke defines knowledge as '*the perception of the connexion and agreement, or disagreement and repugnancy, of any of our ideas*'.³ These ideas are ultimately derived from sensation or reflection, so that the definition of knowledge is still perfectly consistent with the empiricist theory of the origin of ideas. While this point is clear, however, the definition as a whole is ambiguous, for the meaning of the phrase *connexion and agreement* is never made completely clear. The examples of agreements given in iv. i are all propositions. And if we assume that he has the proposition in mind his analysis of the sorts of agreement is an

¹ For intuitionism is alien neither to Gassendi nor to English philosophy. Cf. pp. 10-11 above.

² Nor between Book IV and that account of the relation between sensation and reason which he gave as early as 1664. Cf. the fifth Latin Essay in the Lovelace Collection and J. W. Gough, *Locke's Political Philosophy*, pp. 13-14.

³ iv. i. 2.

analysis of propositions. Unfortunately, in Locke's day the theory of propositions was not well developed, as a glance at the contemporary logics will show. So that Locke could not turn to the logicians for the types of propositions. Moreover, the proposition is not the only 'agreement' between ideas which Locke actually does recognize. For he also uses the phrase 'perceiving an agreement between ideas', where he obviously means apprehending an implication. In other words, to perceive an agreement may mean perceiving a relation *within* propositions or, again, it may mean perceiving a relation, namely, implication, *between* propositions. Demonstration or inference is as much perception of agreement as is judgement. So that the vague term *agreement* covers the relation perceived between the terms of a proposition and also the implication apprehended in inference.

In spite of this ambiguity iv. i provides the most complete analysis of the forms of propositions to be found in Locke's works. Here Locke sets forward four ways in which ideas may agree or disagree, where ideas now obviously mean constituents of propositions: (1) Identity and diversity. The mind perceives the agreement between an idea and itself, and a disagreement in this respect between it and all others: e.g. White is white and not black. To perceive this is genuine knowledge but it is, of course, tautologous or, as Locke prefers to call it, 'trifling'. (2) Relation. The mind perceives a relation between its ideas: e.g. Two triangles upon equal bases between two parallels are equal. (3) Co-existence. The mind perceives a 'co-existence or non-co-existence in the same subject': e.g. Gold is fixed. (4) Real existence. The mind perceives 'actual real existence agreeing to any idea': e.g. God is.

In connexion with this analysis the following remarks must be made: (1) In one sense all the agreements are relations, for an agreement *is* a relation. Thus, it is only in a special sense that one sort of agreement can be called relation and the others not. 'Though identity and co-existence are truly nothing but relations, yet they are so peculiar ways of agreement or disagreement of our *ideas* that they deserve well to be considered as distinct heads and not under relation in general.'¹ But what this special sense is in

¹ iv. i. 7.

which we are to talk of relation in this context is not wholly clear from the text. The example given is mathematical and presumably most mathematical propositions would be included in this class. (2) The agreement which Locke calls *co-existence* is of great importance. Locke remarks of it in iv. i. 6: 'This belongs particularly to substances. Thus when we pronounce concerning *gold* that it is fixed, our knowledge of this truth amounts to no more but this, that fixedness or a power to remain in the fire unconsumed is an *idea* that always accompanies and is joined with that particular sort of yellowness, weight, fusibility, malleableness, and solubility in *aqua regia*, which make our complex *idea*, signified by the word *gold*.' Thus, to perceive this agreement is to perceive that the quality *d* always goes along with the qualities *abc* in the substance *X*. It is a knowledge of the co-existence of qualities. From the two examples which Locke here gives, 'Gold is fixed' and 'Iron is susceptible of magnetical impressions', one might think he had in mind propositions expressing predication, where a quality is predicated of a subject. And this might have been the case. But the agreement which is co-existence is clearly not the substance-attribute relation. Locke's emphasis is on the co-existence of this further quality *d* with the qualities *abc*, and not on the attribution of *d* to the substance *X*. (3) Locke does not confine propositions to the subject-predicate type, but recognizes three other types: the relational, the identical, and the existential. In this respect his theory of propositions accords better with the modern theory than with the traditional. (4) The fourth agreement presents special difficulties of its own. Can an existential proposition be analysed into two related ideas? On the whole, Locke would seem to be analysing it in this way. We perceive the agreement between our idea of God and our idea of existence. But this analysis of the proposition *God is*, it will be agreed, is highly artificial. And Locke actually *means* more than this, as we shall later see in considering his general account of existential knowledge. But it is already obvious that if all knowledge is the perception of the agreement between ideas, then the problem of existential knowledge is likely to present very grave difficulties. (5) We may add two points of a more general character. First,

Locke's account of knowledge implies that the object of knowledge is always a proposition or an inference. This means that we never know an idea in isolation. Locke teaches this quite explicitly in Book IV, and it is only those who confine their reading to Book II who misinterpret him on this point. (6) Secondly, we should note that while Locke considers that the above fourfold division exhausts the sorts of agreements or disagreements which we can possibly perceive, he does not mean to assert that we actually do have certain, intuitive knowledge of all such agreements. On this point, again, his language is not unambiguous, but since he has not yet determined the limitations of human knowledge, it seems obvious that we cannot assume that there are instances of actual intuitions in each of the four cases mentioned. And in the sequel it becomes clear that our certain knowledge of co-existence, for instance, is very slight.

But if we know at all with absolute certainty our knowledge is perception or intuition. This is the central theme of Locke's epistemology. His solution of the epistemological problem is an intuitionism, set forward in Cartesian language, though differing fundamentally from Cartesianism in its teaching as to the nature of the object. Locke's intuitionism is one which accords, in its author's intention, with his own empiricism, and in no way contradicts it.¹

II

The question with which we are concerned in this section is the very question which gave rise to the *Essay*. After the famous meeting of friends mentioned in the *Epistle* Locke had set himself the task of determining the extent and limitations of human

¹ Some paragraphs at the end of *rv. i* on 'habitual knowledge' if developed in certain ways might have led Locke to a radical revision of his theory of knowledge. For they might have led him to consider the dispositional elements in our knowledge. The pressure of our physical and social environment upon us creates certain habits of behaviour, and the knowledge involved is very different in character from the intuitive knowledge which Locke has been describing. But the extent to which the intuitive theory rules Locke's thought at this point is made clear by these paragraphs themselves, for he deals in them only with the retention in memory of items of intuited truths, for instance, the storing up of the conclusions of complicated mathematical proofs even when the details of the proofs are forgotten.

knowledge. At first he seems to have thought that an adequate solution could be found speedily, and he apparently attempted to set it out in a short paper. He must have been dissatisfied with this paper, however, for a little later in the summer of 1671 we find him at work on Draft A. In this draft it is possible to see how what seemed at first sight to be a fairly straightforward problem developed into one of the most intricate, and how Locke was driven to give up his first conception of knowledge and to search for a new one. This new conception was not formulated explicitly until 1690, but the early drafts prepare us for the new position.

It is illuminating to follow the development of Locke's thought as it is revealed in Draft A. He begins by assuming that knowledge must be, first, absolutely certain, and secondly, of the real, that is to say, of real physical or mental existences. The conclusion to which he is then driven is that, in this sense of the term, very little knowledge is possible for the human mind. The source of his scepticism is revealed in the opening sections of the draft. The immediate object of mind is idea. If, then, we know the real physical object we know it mediately through idea. But our idea is complex, and to know the external object fully, even in this mediate manner, we should have to know that the complex idea in the mind represents it completely and adequately. But this we can never know. As Locke himself says: 'He that frames an idea that consists of a collection of all those simple ideas which are in any thing hath a perfect knowledge of that thing, but of this I must forbear an instance till I can find one.'¹ He might have gone further. From the nature of the case it is only too evident that no such instance could ever be found. For to know that the idea is adequate we should have to go beyond the idea, we should need to know the external object directly, and this *ex hypothesi* is impossible.

Scepticism is thus inevitable on this first view of knowledge. But even in Draft A a new view gradually emerges and in it Locke finds relief. Knowledge is still certain and to be distinguished from belief or opinion, but it is no longer of real objects but of relations between ideas.² The first instances of such knowledge which came

¹ § 7.

² Cf. § 27, 20 and also § 9.

to his mind were identical propositions. 'White is not black.' 'The whole is greater than the part.' These and the like are obvious instances of knowledge and no propositions could be more certain. Unfortunately, they are merely 'trifling'. To assert them is to trifle with words; 'or at best [it] is but like the monkey's shifting his oyster from one hand to the other and had he but words might no doubt have said, oyster in right hand is subject and oyster in left hand is predicate, and so might have made a self-evident proposition of oyster, i.e. oyster is oyster, and yet with all this not have been one whit the wiser or more knowing.'¹ Such propositions as these, though they are certain, can hardly be put forward as *the* instances of knowing. Is there anywhere a set of propositions as certain as the above, but also instructive? From the first it is clear that Locke looked to mathematics for an answer. But in 1671 his treatment of mathematical propositions was crude and the test of their validity was correspondence. 'Mathematical universal propositions are both true and instructive because as those ideas are in our minds so are the things without us.'² Nor is there advance in Draft B. But between 1671 and 1690, inspired no doubt by his frequent contacts with Cartesians, Locke re-examined mathematics (as various passages in his journals go to show)³ and evolved a new theory which he found more satisfying. The emergence of this theory at the same time marks the completion of the change from one view of knowing to another. Thus, when we turn to the *Essay*, the opening chapters of Book IV are essentially an exposition of the kind of knowledge which Locke now thought mathematics to be.

It is a noteworthy fact, however, that the older theory was not wholly discarded. It suddenly reappears in the chapters dealing with our existential knowledge.⁴ The explanation of this reappearance is bound up with the account which the *Essay* gives of the extent of human knowledge. If we now examine that account we

¹ § 28, cf. *Essay*, iv. viii. 3.

² § 30, cf. §§ 11 and 12. These latter sections reveal Locke in the very effort of finding empirical bases for geometry and arithmetic. In § 30, however, Locke argues (in spite of the passage quoted above) that mathematical propositions are analytic. Yet they are also instructive.

³ Cf. 3 July 1679, 26 June, and 19 August 1681.

⁴ iv. ix, x, xi.

may hope to discover why Locke was compelled to retain the old alongside the new, and why these two apparently contradictory theories of knowledge are both to be found in his final exposition.

Book IV begins with the new view, that knowledge is the perception of relations *between ideas*. The first limitation of human knowledge is then obvious. 'We can have *knowledge* no farther than we have *ideas*.'¹ And since ideas are either given directly in sensation or reflection, or are derived from one of these two sources, the above statement means that we cannot know what lies completely beyond our sensory and reflective experience. Now we have grounds for believing that sensory and reflective experience is, as a matter of fact, most decidedly limited. The very experiences we do gain make us conscious of our ignorance. For instance, we have some faint notions of God and infinity, notions derived ultimately from the senses; but we are well aware that our idea of God is not a clear one nor have we a positive conception of infinity. Again, from what we do experience we cannot doubt that numerous objects whose nature may very well be identical with those with which we are acquainted, on account of their remoteness or minuteness, are never revealed to us. Thus, there are doubtless worlds around us in this vast universe which are too remote to be perceived; while, on the other hand, extreme minuteness veils, and will apparently for ever veil, the inner corpuscular nature of those bodies which are nearest us, and which we do experience in the mass. This of itself explains why an exact and complete physical science will never be possible for the human mind. We can never experience the minute motions of the corpuscles which, in Locke's opinion, explain the movements of bodies and their operations on other bodies. 'I am apt to doubt', he remarks, 'that how far soever human industry may advance useful and *experimental* philosophy in *physical things, scientific*, will still be out of our reach; because we want perfect and adequate *ideas* of those very bodies which are nearest to us and most under our command'.² Moreover, just as we are confined in our sensory experiences, so are we also in reflection. The full and complete nature of our minds is certainly not revealed to us in

¹ IV. iii. 1.

² IV. iii. 26.

introspective experience. Thus, the narrow scope of both our sensory and our reflective experience seriously limits our knowledge from the outset. For where experience fails to provide us with ideas, knowledge cannot possibly occur.

But, secondly, we may have ideas and still lack knowledge. 'Our knowledge is narrower than our *ideas*.'¹ To have an idea is not to know. To know is to perceive agreements or disagreements between ideas. And we may have ideas before us between which we can perceive no agreements and no disagreements. We have seen that Locke recognizes four kinds of such agreement. Can we now make any general statement with regard to the extent and limits of knowledge in terms of this fourfold distinction? Locke thinks we can.

First, in the case of identity or diversity, 'our intuitive knowledge, is as far extended as our *ideas* themselves'.² Of every idea we may say that it is itself and not another. But such statements are trifling. Now Locke distinguishes between two sorts of trifling propositions. In the first place, trifling propositions may be verbal. 'White is not black' may mean that the word white is not the word black, and if this is all it does mean it is merely verbal. Verbal also, in Locke's opinion, is the proposition in which we predicate of a subject the whole or part of its nominal essence. That is to say, if there is a set of words which together are equivalent to the word *gold*, and if *metal* is one of this set, then 'Gold is a metal' is a verbal proposition.³ But if there are trifling propositions of this sort which are purely verbal, there is another kind in which we assert the identity of an idea with itself (rather than of a word with itself). 'White is white and not black' may mean that the idea of white is that idea and no other. The proposition would not then

¹ iv. iii. 6.

² iv. iii. 8.

³ Locke also thinks that if we affirm one abstract word of another our proposition is verbal. 'All propositions wherein two abstract terms are affirmed one of another are barely about the signification of sounds. For, since no abstract *idea* can be the same with any other but itself, when its abstract name is affirmed of any other term, it can signify no more but this, that it may or ought to be called by that name; or that these two names signify the same *idea*' (iv. viii. 12). To say that 'parsimony is frugality', merely makes clear the use of the word parsimony by asserting that it is used in language in precisely the same way as the word 'frugality'. This seems to be Locke's meaning, though the words *signification* and *signify* in the passage are not without ambiguity.

be verbal (for Locke, it will be remembered, does not identify idea and name), but it is still trifling.

All propositions stating identities of ideas are certain but trifling. And the only limit to knowledge in this case is the number of ideas we experience. But identity is not the only sort of necessary relation which we can intuit. Indeed, it appears to be but one instance of a group, which Locke terms by the general name, relations. In iv. iii, again, as throughout the *Essay*, the term 'relation' is used ambiguously. The one clear instance which Locke sets before us is that expressed in the mathematical proposition. But he is also anxious to show that absolutely certain knowledge of relations is not confined to mathematics, but can be found in at least one other sphere, namely, in morality. At the same time it is significant that Locke never works out this apodictically necessary system of morals, though he was pressed to do so by certain of his friends, as the Molyneux correspondence shows. None the less he believed that such a system could be worked out, and that the objects of moral knowledge were analogous to those of mathematics. It is clearly mathematics, however, which he has primarily in mind, and it is his account of this science which deserves our serious attention.

A mathematical proposition, in Locke's view, is in one respect like the identical proposition already considered, but unlike it in another. It is like the identical proposition in so far as it states a relation arising necessarily from the nature of the ideas expressed in the proposition. In mathematics we do intuit necessary relations between ideas. But it is unlike it as being 'instructive' rather than 'trifling'. There is no doubt that Locke taught this. He makes the point explicitly on many occasions. We may quote iv. viii. 8, where he is expressly distinguishing between trifling and instructive knowledge: 'We can know the truth and so may be certain in propositions which affirm something of another, which is a necessary consequence of its precise complex idea, but not contained in it; as that the external angle of all triangles is bigger than either of the opposite interior angles, which relation of the outward angle to either of the opposite internal angles, making no part of the complex idea signified by the name *triangle*, this is the real

truth, and conveys with it instructive real knowledge.' According to Locke, we do more here than affirm of a triangle what pertains to it through definition. Our knowledge is not trifling. Yet it is certain as arising from a perception of a necessary relation involved in the ideas themselves.

For Locke mathematics is instructive yet wholly necessary. So much is clear. But if we think in terms of subsequent theorizing and ask whether in Locke's view mathematics is analytic or synthetic, it is not possible to give an unambiguous answer. There are passages, including the one quoted above, in which he might be held to argue that mathematics is *a priori* synthesis. We intuit relations which could not be deduced from the definitions of the terms related. But then Locke also seems to mean that these relations are the outcome of the nature of the mathematical objects themselves. They are already involved in the objects as such. Mathematics is a deduction, even though its propositions are not trifling and are not deduced from the definitions of the terms related. From this point of view, Locke seems to hold that mathematics is a purely analytic science but yet also instructive. His account of mathematics certainly does not make the ultimate nature of that science clear.¹

He does, however, make four points about the inquiry, each one of which is important and worthy of notice: (1) Mathematics is wholly certain. It is demonstration in which every step is perceived intuitively. But it is demonstration of such a sort that it is as certain as a single intuition, and nothing can be more certain. This complete certainty is the outcome of the mathematician's method. The mathematician proceeds by easy stages, which he is able to record precisely (since he possesses a system of precise symbols), and which he can check repeatedly. He is thus safeguarded against any failure of memory, which, in Locke's opinion, is the

¹ There is, in fact, a deeper ambiguity which would first have to be removed before he could make his theory explicit, namely, the ambiguity in his general account of universals and of abstraction. For mathematical objects are, in Locke's view, essentially the fruit of abstraction, even though some of them are first suggested to us in experience. And no final theory of mathematics could be offered by him until the nature of universals and abstraction had been made clear. But, as we have seen, Locke's account of universals remains ambiguous to the end.

cause of error in demonstration. (2) Mathematical objects, if representative at all, are so only in a secondary sense. In their case the criterion of truth is not correspondence. The mathematical object is the shadow of nothing other than itself; it represents nothing beyond it. In Locke's language, 'it is its own archetype'. It is both real and nominal essence in one. In this respect it differs fundamentally from the object in the natural sciences, for in the latter case the idea is primarily representative, and the mind dealing with it can never free itself from bondage to the external. But in mathematics there is no need to ask: Do these ideas correspond to reality? Here intuition is able to play freely amongst ideas, the mind is not constrained by external fact. The only constraint upon it comes from the system of ideas itself. (3) There is apparently no limit to the knowledge which is possible within this field. For, in the first place, the mind, as we have just seen, is free to proceed without referring to anything beyond the mathematical system itself. Secondly, within this system there are apparently endless possibilities in accordance with the general laws of mathematics. (4) Mathematics is non-empirical. 'Mathematical demonstration depends not upon sense.'¹ It is a pure deductive inquiry and contains within it no inductive elements. It has achieved the ideal towards which the natural sciences also strive, but which they never attain.

A further word must be added, however, on this difficult matter of the relations between the mathematical object and sense-perception in Locke's philosophy. As an empiricist Locke holds that the ideas in mathematical propositions (as in all others) must be derived ultimately from experience, that is, from sensation or reflection. But how can this be if mathematics is non-empirical? The answer seems to be that though these ideas are derived from experience, they are now such that the knowledge of their nature and of the relations between them no longer depends upon experience. But then the phrase 'derived from' needs explanation. To begin with, it points at least to a psychological fact. Experience is first necessary before men come to conceive mathematical objects. The first suggestions and intimations of mathematical

¹ *iv. xi. 6.*

concepts come through empirical channels, and had these suggestions not been given, the human mind would never have conceived mathematical objects. Experience provides the first suggestions of equality, unity, duality, multiplicity, greater, less, space, triangle, circle, and so on. And without such experience mathematical knowledge would have been impossible. Whether more gifted intelligences begin in any other way we do not know. But human beings certainly begin in this way. So much is psychologically true. Difficulties arise, however, when we seek the implications of this position. For the derivation in this case is obviously not a matter of mere chronological succession, first the experience and then the concept wholly independent of it as regards content. The concept derives some part, at least, of its content from the experience. Locke does not deny this. He expressly holds that unity, space, and the like are simple ideas. They are given in experience, and apparently given as universals. It may be that the content is refined and purified through abstraction. But there can be no doubt that something essential is given from the outset. What precisely is given, however, is not made clear. On this point Locke could not be explicit until he had set forward an adequate theory of universals. In the meantime, however, he continues to hold that mathematics is non-empirical, whilst yet asserting that its objects are ultimately derived from sensory experience, although no longer immediate objects of such experience.¹

But though a considerable amount of ambiguity thus remains with regard to the exact relationship between sensory experience and mathematical thinking, Locke is quite sure that mathematical ideas are such that the mind on contemplating them can intuit necessary relations between them, and that there is no limit to the number of relations which may thus be known. On the other hand, if we now turn from relations to co-existences, the third sort of agreements considered by Locke, we shall find that our certain knowledge in this realm does not extend very far. Indeed, it is

¹ Locke recognizes that the mathematician continues to make use of sensible symbols (cf. iv. iii. 19, xi. 6, &c.). But in the *Essay*, at least, he never makes the mistake of supposing that the sensible symbol is itself the mathematical object. He might appear to be doing so in iv. iv. 13. But if the passage is read in connexion with the previous paragraph, it will be seen that this is not the case.

with difficulty that we find any single instance of certain knowledge of co-existences, in spite of the fact that herein 'consists the greatest and most material part of our knowledge concerning substances'.

The reason for our ignorance in this respect is not hard to find. To know the co-existence of the qualities of a thing with certainty we should have to know the inner corpuscular structure of that thing. But the details of this structure are so minute, as we have seen, that we can never hope to know them. Consequently, it is not possible to affirm that such and such qualities must co-exist in this thing. We can only wait on experience. Thus we observe that gold is yellow and malleable. But we do not know that these qualities must always co-exist in gold. Having always observed yellow and malleableness to go together in my experience of gold I assume that I shall always experience their co-existence. But I have no intuition of a necessary relation, and so no absolutely certain knowledge. Tomorrow I may experience gold which is yellow but not malleable. In other words, there is nothing in the simple idea of yellow to necessitate its co-existence with malleableness in gold. Our simple ideas 'carry with them in their own nature no visible necessary connexion or inconsistency with any other simple *ideas*, whose *co-existence* with them we would inform ourselves about'.¹ Moreover, to complicate things farther, yellow and malleable are secondary qualities and we do not know the primary qualities and the powers upon which they depend. But Locke does believe that an adequate explanation of our experience of co-existences is to be found in the nature of bodies, although this explanation, he perceives, is never likely to be known by us. He makes an interesting effort to find a few instances of certain knowledge in this sphere. 'Figure necessarily supposes extension' and 'receiving or communicating motion by impulse supposes solidity'.² These co-existences we know with certainty. But, on examination, the first seems to be tautologous, and the second so vague, the terms (for instance, solidity) so ill-defined, that the propositions do not carry conviction as instances. Even so, these are the only two instances of absolutely certain knowledge of co-existences as

¹ iv. iii. 10.

² iv. iii. 14.

universal and necessary relations which Locke can find. He adds that one 'in-co-existence' may be known, namely, that no opposite qualities will co-exist in a thing at one and the same time and in respect to the same part of it. But of particular concrete 'in-co-existences' we have, apparently, no certain and necessary knowledge. Thus, to all intents and purposes, we have no necessary knowledge of the co-existences of qualities in material substances. We are wholly dependent on experience. And the case is precisely the same in our knowledge of spiritual existences. We experience ourselves in reflection, but we do not intuit within ourselves co-existences which are necessary.¹ Thus there is little, if any, universal and necessary knowledge of co-existences.

Locke has now arrived at the following position in his attempt to determine the extent of human knowledge: we are limited, in the first place, by experience itself; where we have no ideas we cannot have knowledge. But even when experience provides us with ideas, we cannot always intuit necessary relations between them. We can always know that an idea is itself, and that it is not another. We can also know certain necessary relations between ideas, when through abstraction we free them from their reference outwards and deal with them as ideas which are their own archetypes. There is then no limit to the knowledge obtainable, particularly in mathematics. But when we consider ideas as representing the external world the mind can know few, if any, necessary relations between them. No science (in the strict sense) of the natural world, nor again of human nature, is possible for us. In these spheres the human mind must perforce wait upon experience, and here no exact system of necessary knowledge will ever be gained by us.

III

Having come to this position it is impossible to avoid a question which Locke found most difficult to answer. Admitting that a science of natural objects in the above sense is impossible, can we then *know* (in Locke's sense of the term) that these natural objects exist? Indeed, can we know with certainty that anything exists?

¹ iv. iii. 17.

According to his theory, knowledge is 'the perception of the connexion and agreement, or disagreement and repugnancy, of our ideas'. How then can we know that things (which are neither ideas nor relations between ideas) exist? Now in *iv. i. 7* it might appear that Locke wished to argue that even the knowledge expressed in existential propositions is a perception of a relation between ideas. To say 'The table exists' is to affirm a relation between two ideas, namely, the idea of table and the idea of existence. But Locke himself very quickly realized that an answer of this sort was completely unsatisfactory. It is obvious that when I say 'God exists' or 'The table exists' I do not mean to assert a relation between two ideas in my mind. My reference is not at all to ideas but to entities whose existence I assert. I go beyond ideas. Yet if knowledge be invariably the perception of relations between ideas, how is such a reference beyond the ideal realm possible? Locke himself faces the difficulty squarely in the dramatic opening paragraph of *iv. iv*: 'Of what use is all this fine knowledge of men's own imaginations to a man that inquires after the reality of things?' If we are confined within our ideas, how can we ever know (what we obviously need and desire to know) that which transcends our ideas, that which is real rather than ideal?

The first interesting and significant point about Locke's reply to this objection is that he makes no attempt to save himself by adopting any sort of idealism, that is to say, by denying the reality of the distinction between idea and thing. On the contrary, he reasserts this distinction in the most explicit manner. The rest of *iv. iv* is a desperate, but unsuccessful, effort to bridge the gulf between idea and thing. Our knowledge is real if ideas conform to the real, which we know mediately through ideas. But in what way can we test their conformity? Or as Locke himself asks: 'How shall the mind, when it perceives nothing but its own ideas, know that they agree with things themselves?' He admits that the application of the correspondence test in these conditions 'wants not difficulty'. The plain truth is that it can never be applied, as Locke himself recognized in another passage,¹ and his attempt to apply it in *iv. iv* was doomed to failure from the start.

¹ *Examination of Malebranche*, § 51.

For this reason it is not necessary to devote much space to the consideration of iv. iv. Locke tries to show that there is a sense in which we can say that both simple and complex ideas may be real. Simple ideas are real in the peculiar and unusual sense that, though for practical purposes we may think of them as if they were real, actually they are real only as being products of the real. They '*are not fictions* of our fancies but the natural and regular productions of things without us really operating upon us; and so carry with them all the conformity which is intended or which our state requires'.¹ As for complex ideas, they are of two sorts; those which are, and those which are not, their own archetypes. The former need not correspond to anything outside them. None the less there is a sense in which they also can claim to be real. If amongst real things there happen to be circular or square objects then all we say of circles and squares in geometry applies with equal force to such objects. So that in this sense geometry (and mathematics) is a knowledge of the real. With regard to ideas of substances, they are not their own archetypes, and these ideas are real only if they conform in every respect with the real facts in the external world. But here again Locke does not reveal how we are to know whether they do or do not conform. Hence iv. iv provides us with no true answer to the objection that human knowledge on his showing is confined to ideas and so can never be of the real.

Locke's real answer, however, is to be found in those later chapters of Book IV in which he discusses our knowledge of self, of God, and of things. Now if we examine these chapters we shall see that in them Locke breaks away completely from the theory set forward in the earlier chapters. Within the terms of the definition of knowledge set out in iv. i he could not explain existential knowledge. He tried to do so in iv. iv but failed. To explain it he finds himself compelled to assert that knowledge, on occasion at least, is a direct apprehension of the real without the intervention of ideas.

This new view of knowledge is essentially different from that first set forth in the *Essay*. It even goes further than the first crude thoughts of Draft A, for although in the draft Locke had once

¹ iv. iv. 4.

thought that knowledge was of real objects and not of relations between ideas, he still vaguely supposed that such knowledge would be gained somehow through ideas. Now, however, our knowledge of the self, at least, is direct intuition without the intervention of ideas, and there seems to be some element of direct intuition also in our knowledge of physical objects. Locke understood well enough that he was introducing new views which did not accord with his definition of knowledge in iv. i. But he sought to save himself from the charge of inconsistency in this respect by pointing out¹ that in the first eight chapters of Book IV he had been dealing with universals and relations between universals, whereas from the beginning of the ninth he proposes to deal with particulars. The definition of iv. i, he appears now to be saying, applies only to knowledge of universal propositions. We may note in passing that no such reservation as this was made in iv. i when the definition was first put before the reader. But it is now set forward as the justification of the sudden change of theory which had become necessary if existential knowledge was to be explained.

Locke had been considering this distinction between general and particular knowledge for some time. In his journal for 26 June 1681 there is an entry beginning: 'There are two sorts of knowledge in the world, general and particular, founded upon two different principles, i.e. true ideas and matter of fact or history.'² In this entry he limits certain knowledge to the knowledge of generals while knowledge of particulars is held to be probable only. But in the *Essay*, in the chapters now to be considered by us, he has realized that some certainties are possible even in our knowledge of particulars and that such knowledge cannot be defined as the perception of the agreements or disagreements between ideas. When he grasped this point he ought no doubt to have retraced his steps and rewritten the earlier chapters of Book IV so as to bring them into line with the later chapters, which would not have been an impossible task. But he lacked either the energy or the time or possibly the interest. When he returned to England from Holland there were other more exciting things to

¹ iv. ix. 1.

² Aaron and Gibb, p. 116.

do in the realm of practical affairs, and Locke was ever ready to sacrifice speculation to practice.

Hence Locke left the two theories of knowledge standing side by side with little effort to make them consistent. Knowledge is the perception of relations between ideas: but we also know particular existences directly, and in this case knowledge is not the perception of relations between ideas. What now do we know with certainty of particulars? 'We have the knowledge of *our own existence* by intuition; of the *existence* of God by demonstration; and of other things by sensation.'¹ In the first place I know with certainty that I myself exist. Locke concerns himself here merely with the existence of the self; the reader who expects an analysis of the concept of self will be disappointed. All Locke does is to point to the fact that whenever I experience anything I am aware of myself at the time as experiencing it. All consciousness is also self-consciousness. He terms this consciousness of self an intuition. It is not reflective knowledge (in Locke's sense) of a state of the mind or of operations of the mind. It is intuitive knowledge of a single concrete existent, an 'internal infallible perception'. Any experience, whatever it be that I experience, is at the same time an experience of myself. Descartes's *Cogito ergo sum* is used by Locke as an illustration of the general point. 'If I doubt of all other things, that very doubt makes me perceive my own *existence*, and will not suffer me to doubt of that.'² Throughout my waking experience I constantly intuit my own existence.³

I thus know that I exist intuitively. From this knowledge I can prove God's existence demonstratively. The proof is to be found

¹ iv. ix. 2.

² Incidentally, it is very wrong to suppose that Locke borrowed the argument from Descartes to *prove* the existence of the self. For Locke says explicitly that our own existence 'neither needs nor is capable of any proof' (iv. ix. 3). He does not use the *Cogito* in the way in which Descartes uses it. For him it is merely one further illustration of the general principle that we intuit our own selves when we are conscious of anything.

³ We thus know our own selves immediately. Our knowledge of other minds, on Locke's showing, seems to be mediate. In iv. iii. 27 he remarks: 'That there are minds and thinking beings in other men, as well as himself, every man has a reason from their words and actions to be satisfied.' Angels and higher spirits may have a more immediate knowledge of each other Cf. ii. xxiii. 36, iii. vi 11, iv. ix. 9, 12.

in the famous tenth chapter of Book IV. The argument of that chapter is not very original; the influence of Cicero, Cudworth, and Nicole, to mention these only, is very apparent.¹ Nor, as we shall try to show, is it wholly cogent. But Locke had thought the matter out for himself, and even though the argument was deficient, it had a certain strength of its own and was not without its influence on subsequent English thought.

Locke's proof of the being of God is a form of the cosmological argument. He rejects the ontological. In the *Essay* he does not disprove the latter, but holds it to be too slight a foundation for a philosophical theology.² But he explicitly rejects it as false in a paper entitled *Deus*, which he wrote six years after the appearance of the *Essay*, and which was published by King.³ In this paper he forestalls the central criticism of Kant. The idea we have of a perfect being may carry with it the idea of necessary existence. But this does not prove that the perfect being exists. 'Any idea, simple or complex, barely by being in our minds, is no evidence of the real existence of any thing out of our minds answering that idea. Real existence can be proved only by real existence; and therefore the real existence of a God can only be proved by the real existence of other things.'⁴ 'Our ideas alter nothing in the reality of things.' Consequently the ontological argument, on Locke's view, rests on no solid foundation.

He himself begins his argument with real existence, namely, his own existence. I myself exist, that is to say, something exists. Now nothing cannot produce being. 'If therefore we know there is some real being, and that non-entity cannot produce any real being, it is an evident demonstration that from eternity there has been something; since what was not from eternity had a beginning; and

¹ In iv. x. 6 Locke refers explicitly to Cicero's *De Legibus*, but the argument is also reminiscent of the *De Natura Deorum*. He repeats in substance some parts of iv. x in iv. xx. 15, and here he is fairly certainly borrowing from the *De Natura Deorum*, ii. 37. His journal for 18 February 1682 reveals the extent of his debt to Ralph Cudworth's *The True Intellectual System of the Universe*. Cf. also 'Locke and Nicole: Their proofs of the existence of God and their attitude towards Descartes', by Wolfgang von Leyden in *Sophia*, January 1948, pp. 41-55.

² iv. x. 7 and cf. the First Letter to Stillingfleet on this point.

³ *Life of Locke*, ii. 133-9.

⁴ *Ibid.* ii. 138.

what had a beginning must be produced by something else.'¹ This is the first step in the argument by means of which he attempts to prove the existence of God.

A criticism which has been urged against the cosmological argument cannot be urged against it in the above form. It cannot be argued that Locke is assuming that an infinite series of causes is impossible and that, therefore, the series must end in a First Cause. For the above argument permits of the possibility that what exists at present is the effect of an infinite series of causes. Nor does it rule out the other possibility that what exists at present has existed from eternity. It merely argues from the existence of anything at the present moment to the existence of something from eternity. But the criticism can be made, if we are prepared to make it, that Locke is assuming that anything which had a beginning must have had a cause. Locke, as we have seen, sets this down as a fundamental principle which could not be doubted, even though he admitted that the concept of causality itself was not entirely free from ambiguity. Again, it must also be admitted that Locke uses the term 'from eternity' loosely. Eternity was no positive concept in Locke's mind, and, since this was so, could he say anything truly significant about it in a positive sense? In particular, had he a right to say that something must exist from eternity? On the other hand, it might be held that the real point of Locke's argument is that real being cannot be conceived by us as coming into being from nothing, the present existence of real being necessarily presupposes the existence of real being in the past from eternity. But what does this mean? Nothing other, it would seem, than that the idea of real being carries with it the conception of its necessary existence. In other words, the cosmological argument, by a sudden twist, has become the ontological. Kant argued that this was inevitable.² Locke might have answered that he began not with the *idea* of real existence but with real existence itself. This is true, but the question remains: Is the step from present existence to necessary existence from eternity anything more than ideal? And if it is merely ideal, has not the

¹ IV. x. 3.

² *Critique of Pure Reason*, A. 607.

cosmological argument revealed itself to be in essence the ontological, an argument which Locke himself rejected?

Thus even the first step in Locke's argument is not above suspicion. The next, however, makes still bigger assumptions. These are (1) that what exists at present has not always existed, but is the effect of a limited series of causes. In other words, a First Cause exists. (2) The First Cause contains all that the effect contains either *formaliter* or (as is actually the case here) *eminenter*. These assumptions can be justified neither by reason nor by experience, although they satisfy reason's demand for an ordered universe. But Locke assumes both points. And once they are granted Locke then shows that the Eternal Being, whose existence has now been proved, cannot be material. A world in which we find intelligence cannot possibly be explained by a materialistic naturalism, for this would be putting more into the effect than the cause contains, that is to say, contradicting the second of Locke's assumptions. Hence the Eternal Being is of necessity a thinking person: 'incogitative being cannot produce a cogitative'. The Eternal Being must also be the source of wisdom, of power, and of strength, and so he is omniscient and omnipotent. In this way Locke claims to have proved the existence of the God of Christian theology.

But the self and God are not the only existents which Locke claims we may know with certainty. There are also the 'other things' of iv. xi, that is to say, natural physical objects in the external world. The existence of these we know by sensation. Now the claim that we know in sensing seems at first sight to contradict two principles set down earlier in the *Essay*. For, first, sensation, according to Book II, merely provides materials *for* knowledge but is never itself knowledge. Secondly, knowing according to Book IV is intuiting, and this is a purely intellectual activity, wholly independent of sensation on the subjective side.¹ None the less we now find Locke asserting that sensation is itself knowledge, for we know in it the existence of things.

One may well understand why Locke felt it necessary to make this claim, even though it contradicted his principles. Throughout he was a realist. He was as convinced of the existence of tables

¹ Although not on the objective side, cf. p. 224 above.

and chairs as he was of his own self, and he was convinced that their existence was no merely ideal existence. Certainly, my complex idea of a table is in my mind, but there also exists the table itself which is no construct of mine. And in seeing I know that this real table exists.

Now this might be an inconvenient fact for Locke's general theory of knowledge, but it had to be faced, and Locke faces it boldly. He considers the matter in iv. xi, but he had introduced it earlier in the opening chapters of Book IV. For at the end of the second chapter which deals with the degrees of knowledge, he adds an important section entitled 'Sensitive Knowledge'. In addition to intuitive and demonstrative we must also recognize the existence of sensitive knowledge. The manner in which he introduces this third kind of knowledge reveals his uncertainty as to its precise nature. 'There is, indeed, another *perception* of the mind employed about *the particular existence of finite beings* without us; which going beyond bare probability, and yet not reaching perfectly to either of the foregoing degrees of certainty, passes under the name of knowledge.'¹ He explains that in our knowledge of general truths we can say outright that the only certainty comes by way of intuition and demonstration. But in the knowledge of particulars we must also reckon with a third sort of knowledge, which is more than probable, and yet has not that transparent assurance which belongs to intuition and demonstration. When Locke attempts to give further details of sensitive knowledge both in iv. ii. 14 and in iv. xi he speaks in the most uncertain tones. It is a conviction, a feeling, which cannot be further explained. 'I ask any one whether he be not invincibly conscious to himself of a different perception when he looks on the sun by day and thinks on it by night.'² Sensation carries with it a tang of reality in a way in which imagination does not. However many doubts may arise from reflection on illusion, hallucination, and the like, I still feel convinced that the sun I now see exists and that the table I see and touch exists, and that they both exist not as ideas in my mind but as real physical entities. This is sensitive knowledge. It is to be noted that Locke does not say that seeing a

¹ iv. ii. 14.

² Ibid.

colour or hearing a sound is knowing. In that sense it is still correct to say that sensation merely provides materials for knowledge. But whenever we sense we also know the existence of a physical world independent of us which contains many objects. Locke cannot bring himself to deny this additional element in all sensory experience. In iv. xi he seeks for confirmation of the conviction that things exist in such facts as that we cannot choose what we would see but appear to be dependent on something outside us, and that the view that things do exist externally is a satisfactory explanation of our sensory experience. But the existence of objects independent of us is no inference for Locke, nor is it a hypothesis. Whenever we sense we are directly assured that things exist independently of us.

We thus know that particular physical objects exist in addition to the self and God. Do we know more of these objects in sensation than the mere fact of their existence? The answer Locke makes is important. We do know more, and on this extra knowledge is based the whole of our natural philosophy. We know particular co-existences, that is to say, we know the co-existence of certain powers which produce in us the sensations we enjoy. We do not know those powers directly, but we enjoy sensory experiences of secondary qualities which come together in regular patterns, and these experiences enable us to gain such insight as we possess into the structure of things themselves. Thus we not merely know that things exist in sensation, but we also know particular co-existences in things.¹

We may conclude then that the fact of existential knowledge has caused Locke to introduce thoroughgoing alterations into his account of knowledge. He opens Book IV of the *Essay* with a theory of knowledge applicable, as it proves, merely to knowledge of relations between abstract ideas, a universal, hypothetical, and highly abstract knowledge, best typified in mathematics. Another theory becomes necessary for knowledge of particular existences. Consequently, Locke's whole account of knowledge is far from consistent, for he does not even try to remove this dualism or to relate the two theories. The knowledge of God is attempted

¹ Cf. iv. iv. 12.

demonstration and it is not different in its nature from demonstration elsewhere, for instance, in mathematics. But the knowledge of the self and again of the existence of things could never be defined as 'the perception of the agreement or disagreement between ideas'. Precisely how much importance is to be attributed to the fact that Locke terms both the perception of relations and the knowledge of self *intuition* is not clear. Apparently, they possess certain likenesses in their nature, but Locke never discusses their relationship. At the same time he is obviously not at all clear in his own mind as to the exact description he should offer of sensitive knowledge. By way of explanation of the dualism in his theory he does suggest that we ought not to expect knowledge of universals to be the same as knowledge of particulars. But this is little more than a hint, and is never developed adequately. Thus we must conclude that Locke's theory of knowledge is defective in being both incomplete and incoherent. But it would be wrong to assume that it is without value. On the contrary, his views on the extent and limitations of human knowledge are extremely valuable and have been confirmed by subsequent speculation, while his very failure to present a finished theory is clearly the consequence of his strong desire to do justice to all the facts.

IV

The remaining chapters of the *Essay* are chiefly concerned with the examination of probable knowledge. Locke recognized the importance of probability, and it is to his credit that he did so. Perhaps the main lesson he has to teach us is that human life is ruled for the most part by probability rather than by certainty. The extent of our certain knowledge is slight and we cannot live by it alone. 'He that in the ordinary affairs of life would admit of nothing but direct plain demonstration would be sure of nothing in this world but of perishing quickly.'¹ It is so also in the systematic pursuit of knowledge. Certainty may be found in highly abstract realms, such as mathematics, but elsewhere one must be content with probability. In view of these assertions one might

¹ iv. xi. 10.

have expected to find the examination of probability given a very prominent place, indeed the central place, in the theory of knowledge of Book IV, but in this expectation we are disappointed. Locke's treatment, it must be admitted, is superficial; his analysis of probability is far too slight; he offers us no logic of induction and no examination of the presuppositions of induction. It is not at all to be wondered at that Leibniz, in discussing these chapters in the *Nouveaux Essais*, was led to remark that a precise logic of probability was much to be desired. The want of it in Locke is so plain. The fact seems to be that the struggle to think out the opening chapters of Book IV, and to explain the certainty which pertains to mathematics, had exhausted Locke's mental energies. If the *Essay* and Draft A be compared on this point it will be seen that in writing up his final account of probability he simply returned to the first Draft and restated the theory he found there, with little attempt at development or elaboration. He thus missed a golden opportunity, that of being the founder of the modern logic of probability. But he seems to have been more anxious to finish the *Essay* as quickly as he could, than to make fresh fame for himself in its final chapters.

Actually, he sets before himself two problems in connexion with probability, namely, (a) how to distinguish it from certainty, and (b) how to measure the degree of probability which pertains to a proposition.

With respect to the first point, Locke contents himself for the most part with stressing the subjective difference. Each man experiences knowing and opining in himself as fundamentally different states of mind. In opining I am aware that I may be mistaken, but in knowing I have certainty. The difference is not one of degree but of kind. Knowing is an infallible intuition; opining is coming to a conclusion after weighing the evidence, but without having attained certainty. It is, to use Locke's own word, judgement. Judgement or belief, he says, is given us 'to supply the want of clear and certain knowledge, in cases where that cannot be had'.¹ Knowledge intuits relations; belief or judgement presumes them; they are thus wholly different faculties. To

¹ iv. xiv. 3.

confirm this distinction Locke points to certain objective considerations. Some ideas, we know, are such that our intellects can never perceive a necessary relation between them. In such a case probability alone is possible. On the other hand, we are not to assume that the mind actually does gain intuitive knowledge on every occasion upon which the object is such that intuitive knowledge might have occurred. For instance, I am capable of having intuitive knowledge of such and such a geometrical truth, but I may instead accept the geometrician's word for it, and believe rather than know. Thus the distinction we have in mind cannot be set out wholly in objective terms. Locke himself makes this point clear in contrasting knowledge and probability from the objective side: 'As demonstration is the showing the agreement or disagreement of two ideas by the intervention of one or more proofs, which have a constant, immutable, and visible connexion one with another; so probability is nothing but the appearance of such an agreement or disagreement by the intervention of proofs, whose connexion is not constant and immutable, *or at least is not perceived to be so*; but is, or appears for the most part to be so, and is enough to induce the mind to judge the proposition to be true or false, rather than the contrary.'¹ When I intuit I perceive a necessary connexion; when I believe I presume a connexion, not because I perceive it to be necessary, but because of some extraneous reason, for instance, that so and so, whom I think reliable, affirms the connexion.²

The next question concerns the degree of probability. Some propositions are more probable than others. How are we to measure this probability? Locke suggests two criteria: (a) the measure of agreement between what the proposition suggests and the rest of one's experience, (b) the character of the evidence adduced in its favour. The first test is a sort of coherence test; although as the argument develops it becomes clear that Locke

¹ IV. xv. 1. (The italics are mine; I have omitted Locke's italics in this passage. He italicizes *ideas*, *probability*, and *judge*.)

² Cf. IV. xv. 3. 'That which makes me believe is something extraneous to the thing I believe; something not evidently joined on both sides to, and so not manifestly showing the agreement or disagreement of those *ideas* that are under consideration.'

has not in mind coherence in the sense of self-consistency or non-contradiction. (He does make use of this test in connexion with the examination of evidence, when he demands that every report of an occurrence should be consistent with itself.) But the coherence of the first test is an 'agreeableness' with the rest of our experience, and the principle on which it rests is not non-contradiction but uniformity of nature. Now implicit in Locke's teaching about natural philosophy is the view that the principle of the uniformity of nature is established empirically. We believe that nature is orderly, that the universe is one piece, and so we demand that our experience should be throughout consistent. Our ground for making this demand, however, is that we have always observed things happening 'after the same manner', and we find that the reported experience of others confirms our own observation. That iron sinks in water is 'agreeable to our constant experience' and never once controverted.¹ If any one were to say that he saw iron float in water we should find the statement difficult to believe, because it would be inconsistent with our own experience. But our belief that nature is uniform in this and in every other case is merely an empirically established expectation. Hence it could never be a test of certain knowledge if we ever needed such a test. (Locke himself would say that a test of certain knowledge would be unnecessary.) But it remains an exceedingly useful test of probability. Thus consistency with the rest of what we opine is one test whereby to measure the probability of any proposition.

The other test consists in the careful examination of the evidence in favour of the proposition. Locke suggests that we should carry out this examination bearing in mind the following six points: (1) the number of witnesses who attest to it, (2) their integrity, (3) their skill, (4) the design of the author (if the evidence is furnished in a book), (5) the consistency of the parts and circumstances of the relation, (6) contrary testimonies.

Now the highest degree of probability is attained when a belief accords with the rest of one's experience and with the testimony 'of all men in all ages'. We accept such beliefs as, for instance, that iron sinks in water, with complete assurance, although we realize

¹ iv. xvi. 6 and cf. iv. xvii. 17.

that theoretically they may be doubted. Where a belief accords with part only of our experience and not with the whole of it, or again when it is only partially confirmed by the testimony of others, our doubt is greater. In matters of which we ourselves can have no direct experience, for instance, matters occurring before our birth, we can only be guided by the evidence of witnesses. Wherever possible we try to get the evidence of the intelligent onlooker. We are more ready to doubt the evidence of a man reporting at second hand, and the greater the distance in time between his report and the event the more ready we are to doubt it. Incidentally, for this reason, if for no other, the pronouncements of historians cannot be held to be either completely certain or even as certain as are the statements of natural philosophers, for instance, that iron sinks in water. But this, Locke adds, in no way lessens 'the credit and use of *history*'.¹

Thus far we have dealt with probable knowledge of the observable. Where we seek to know what cannot be observed, analogy is said to be our guide.² By this means alone can we say anything at all about angels, or about those material things which are wholly beyond our ken. It is analogy also that helps us to conceive 'the manner of operation in most parts of the works of nature; wherein, though we see the sensible effects, yet their causes are unknown and we perceive not the ways and manner how they are produced. . . . Thus, observing that the bare rubbing of two bodies violently one upon another produces heat, and very often fire itself, we have reason to think that what we call "heat" and "fire" consists in a violent agitation of the imperceptible minute parts of the burning matter.' Unfortunately, beyond adding that 'a wary reasoning from analogy' is likely to be helpful, Locke does not further examine the nature of argument from analogy. Judging by the remarks he does make about this form of reasoning he might indeed be thought to be setting forward an unusual theory. Argument from analogy, in the usual sense, is an argument from the observation of like characteristics in *a* and *b*, let us say, to the presence in *b* of certain further characteristics which have already been observed in *a*. But Locke's language in this passage seems at

¹ IV. xvi. 10-11.

² IV. xvi. 12.

first sight to suggest that *b* is completely unobserved and unknown. In that case it is hard to see how analogy in the ordinary sense could be possible. A more careful examination of Locke's words, however, and of the examples given, will show that though he talks of *b* as being unobserved by sense (and unobservable) he does not mean that we are completely ignorant of it when we argue from analogy. We at least assume certain things; for instance, in the case of angels, we assume that they can think, communicate their thoughts, praise God, and so on. It is on the basis of these assumed common characteristics that we proceed to ascribe to them further characteristics which we know to belong to men. Locke's actual words do not make this point plain, but it is implied in what he says.¹

To complete our account of knowledge one further instance of it remains to be considered, a knowledge which is higher than probability, which is indeed certain, although its certainty is not demonstrative. This is revelation. A true revelation cannot, in Locke's opinion, be doubted. Acceptance of such revealed truth is faith, and Locke, like all his contemporaries, was greatly concerned about the relations between faith and reason. It is to this problem that he devotes most of his attention in these closing chapters of the *Essay*. He first makes clear what he means by reason, identifying it with reasoning or mediate thinking whether it lead to certainty or only to probability. The account he gives of reason contains three noteworthy features. First, in defining it he reasserts his empiricism. '*Reason*, therefore,' he remarks, 'I take to be the discovery of the certainty or probability of such propositions or truths which the mind arrives at by deductions [a term used here loosely] made from such *ideas* which it has got by the use of its natural faculties, namely, by sensation or reflection.'² Secondly, he launches a bitter attack on the logic of the schools, on the grounds of its narrowness and pedantry and its blind faith

¹ Whether Locke had also realized that argument from analogy involves a universal mediating concept so that it cannot proceed from mere particular to mere particular is not clear. It might be argued that he had not, and iv. xvii. 8, 'we reason about particulars', might be adduced in defence of this view. But iv. xvii. 8 needs to be used with the greatest caution, as I have tried to show elsewhere (cf. *Proc. Aris. Soc.*, 1932-3, 'Locke's Theory of Universals', pp. 184-5).

² iv. xviii. 2.

in syllogism. 'Reason,' he argues, 'by its own penetration where it is strong and exercised, usually sees quicker and clearer without syllogism.'¹ Lastly, he suggests a neat fourfold analysis of inference. It is (1) the discovery of 'proofs', i.e. of premisses; (2) the 'laying them in a clear and fit order to make their connexion and force be plainly and easily perceived'; (3) perceiving the connexion or apprehending the implication; (4) 'making a right conclusion'.²

Locke thus identifies reason with inferring or demonstrating, whether the inference yields certainty or only probability. How is this reason related to faith? It is related, Locke thinks, in the following manner: Faith, as we have seen, is the acceptance of revelation. We can rest content in this acceptance if we feel sure that the revelation is genuine. But not all alleged revelation is genuine. Many who claim to have enjoyed this supreme privilege have not really enjoyed it. Now it is reason that tests the genuineness of revelation. It does so in two ways. It examines the external circumstances. Who is it who puts forward the alleged revelation, and under what circumstances? Secondly, it inquires into the content itself, testing it by its own laws. Revelation may go beyond reason, but we assume that it never contradicts it. If it did we could not accept it, we should immediately doubt its genuineness. Revelation is 'reason enlarged'.³ The revolt against reason in religion is a sign not of true religion but of obscurantism and superstition. *Credo quia impossibile est* is 'a very ill rule for men to choose their opinions or religion by', however well it passes for a 'sally of zeal'.⁴ 'Reason', Locke holds, 'must be our last judge and guide in everything. . . . God, when he makes the prophet, does not unmake the man.'⁵ Thus the relations between reason and faith are very close. It is not reason that gives the revelation; revelation itself is independent of reason. But faith none the less rests on reason, for we can only accept as revelation what accords with reason and what is rationally acceptable. Faith is 'an assent founded on the highest reason'.

Before concluding the present chapter it is necessary to add a word on Locke's theory of error. A discussion of this matter will

¹ IV. xvii. 4.

² IV. xvii. 3.

³ IV. xix. 4.

⁴ IV. xviii. 11.

⁵ IV. xix. 14. 'Revelation must be judged of by reason.'

be found towards the end of the *Essay*,¹ but this discussion needs to be supplemented by many other passages elsewhere. Perhaps the most important point which Locke makes is one that Descartes had made before him, and one which every intuitionist must make, namely, that error cannot possibly be due to a defect of the knowing act. 'Knowledge being to be had only of visible certain truth, error is not a fault of our knowledge.'² This follows from the account given of knowledge. It is infallible intuition. It cannot, therefore, be the cause of error. Error, Locke thinks, is a failure not of knowing but of judging. We weigh the evidence and come to an opinion, and the opinion may be false. We 'give our assent to that which is not true'. Locke has explained elsewhere what he means by truth.³ Truth and falsehood pertain to propositions, and truth is to be defined as 'the joining or separating of signs, as the things signified by them do agree or disagree one with another'. The signs are the terms of the propositions and the 'things signified' may mean ideas, or again things in the natural world. In other words, the signs may stand for ideas which are their own archetypes, or again for ideas which have an archetype outside them, and in the latter case the signs of the proposition, if it is true, are joined or separated not only as the ideas are joined or separated but as things in the natural world are joined or separated. If this correspondence is not present, then the judgement is false.

There are many kinds of error, and we may now enumerate those mentioned by Locke. (1) In iv. xx he is mostly concerned with the error which consists in taking as probable what is really improbable. Since there are degrees of probability, we may hold a proposition to be more probable than it actually is. Lack of leisure for reflection, 'the hot pursuit of pleasure', laziness, or, again, mere stupidity—one or the other of these may account for an error of this sort, and indeed for most sorts of error. Sometimes prejudice and passion make a man over-ready to accept favourable evidence, whilst they blind him to the evidence on the other side. As a consequence he may sincerely accept as probable what an unprejudiced observer would at once perceive to be most

¹ IV. XX.² IV. XX. I.³ IV. V.

improbable. *Quod volumus facile credimus.* (2) But to accept the improbable as probable is not the only error into which we fall. Elsewhere in the *Essay* Locke mentions other kinds of error. There is the error which results from a defective memory. Even demonstration, as we saw, since it involves memory, does not possess the full measure of certainty which intuition possesses; although we may evolve a method in demonstration which frees us from dependence on memory. The mathematical seems to be such a method. (3) Again, we may easily confuse nominal with real essence. In that case we should be supposing that the object of our thought was a thing in the physical world when actually it was a mere idea. (4) The senses frequently deceive us. We certainly err if we suppose that the real is identical with what appears. 'We are quite out of the way when we think that things contain within themselves the qualities that appear to us in them.'¹ Too great a trust in the senses is a common cause of error. (5) Finally, there is the error which arises from the misuse of language. We have already dealt with this in discussing Book III.

These are the kinds of error into which we fall. Where we intuit we cannot err; and if we desire certainty it is wise to wait till intuition becomes possible. But in most cases intuition never is possible, and where it is impossible we must choose the most probable, weighing and testing the evidence with the greatest care, and suspending our judgement if the evidence before us is inadequate. Error is due to precipitancy, prejudice, and laziness; we ought not to regard it as inevitable. Locke believes that it is our duty to rid our minds of it. Much ignorance, however, would still remain, even though the ignorance which results from error had been removed. For man cannot hope to possess all knowledge; much is hidden from him. Yet, Locke thinks, he may, if he so chooses, know enough to live a happy and contented life, enough to fulfil his duties. All the knowledge his state requires is within his reach.

¹ IV. vi. 11.

PART III

I

MORAL PHILOSOPHY

LOCKE'S purposes were always practical. One of the aims of his philosophical work was to ascertain whether moral knowledge was within the reach of man. The *Essay*, it will be remembered, originated in a conversation between friends about 'the principles of morality and revealed religion'; and it is clear that one of its most important conclusions, in the eyes of its author, was that an exact science of morals was possible. In all his writings Locke assumes as a fundamental principle that man knows enough to live a good and righteous life if he chooses. His faculties are well suited for moral knowledge. But the moral knowledge of the ordinary man, although it is sufficient for his needs, is not exact. And the question which has to be faced is this: Is a science of morality possible which is comparable to the science of mathematics? Can one build a necessary, eternally true, system of morals? The *Essay* returns an affirmative answer. A *science* of morals is possible.

But though Locke thinks it possible and desirable, he does not himself furnish us with such a science.¹ To Molyneux he writes that the work would require a great deal of leisure and much careful concentration. Moreover, it could not be said to be an urgent task since Holy Scripture revealed an ethic entirely adequate for all practical purposes. But a deeper reason for Locke's failure to provide the system he visualized lies in an inner contradiction in his thoughts, a contradiction which becomes plain when we read the various statements he makes from time to time about morality. As was often the case elsewhere, so here in morals he

¹ Some of the Lovelace MSS. appear to be the first drafts for a projected work on a necessary system of morals, cf. Bodl. MS. Locke, c. 28, foll. 142-3, entitled 'Ethica B', and Bodl. MS. Locke, c. 28, foll. 140-1, entitled 'Morality'.

could feel the force of more than one tendency. Two theories compete with each other in his mind. Both are retained; yet their retention means that a consistent moral theory becomes difficult to find. The first is hedonism, which, in Locke's writings, assumes the form that the good is whatever produces pleasure, so that our judgement about good and evil ultimately rests on our feeling of pleasure and pain. The second is rationalism, the view that reason alone can determine what is truly good. Writers in the past have attributed the hedonism in Locke's writings to Hobbes and the rationalism to Ralph Cudworth, and have held that Locke was in the main influenced by these two writers. This view, however, can hardly be true. Cudworth's influence cannot be denied, although he was certainly not the sole rationalist influence;¹ but it is doubtful whether Locke's hedonism was ever derived from Hobbes. Gassendi and Bernier are undoubtedly the chief influences in this connexion. Locke's hedonism (and indeed his whole ethical theory) has much in common with that of Gassendi. Gassendi, as we have seen, was the main partisan of epicureanism in his day, but he reinterpreted it in terms of Christian theology, much as Locke did after him. Surely Locke's debt is to the Christian hedonism of the Gassendists rather than to the materialistic hedonism of Hobbes. But whatever be their source, hedonism and rationalism are both present in Locke's ethical teaching, and this fact makes it difficult for him to produce a science of morals. It is significant that Clarke, a decade later, first emphatically rejected hedonism, before attempting to formulate his science of morals. Locke tries to retain it, and yet plays with the idea of a purely rationalist system of ethics. The ensuing vagueness in his teaching is almost inevitable.

We may first examine Locke's hedonism. Hedonism for Locke does not consist in a simple identification of 'good' with 'pleasant' and 'evil' with 'painful'.² But it asserts that 'good' can only be understood in terms of what we feel to be pleasant; for that is good which produces pleasure and that evil which produces pain. 'That

¹ Nor was his influence entirely rationalist in character, to judge by his manuscript remains in the B.M. Cf. J. A. Passmore, *Ralph Cudworth*, C.U.P., 1951. Cudworth's influence on Locke's moral psychology would repay study.

² He appears to identify them in II. xxviii. 5, but immediately corrects himself.

we call *good* which is apt to cause or increase pleasure, or diminish pain in us; or else to procure or preserve us the possession of any other good, or absence of any evil.’¹ By stating the hedonistic theory in this manner he is able to find room within the class ‘good acts’ for those which are pleasant, not in themselves, but only in their consequences. When the pleasure is enjoyed immediately at the moment of action then the act is good, but the pleasure may not be enjoyed till later and still the act, since it procures pleasure, is to be classed with good acts. ‘Pleasure’ in this context is used widely to signify ‘whatsoever delights us’. ‘For whether we call it satisfaction, delight, pleasure, happiness . . . they are still but different degrees of the same thing.’² It need not be confined to bodily pleasure. Locke also expressly mentions pleasures of the mind. Some pleasures, both of the body and of the mind, are more lasting than others. Locke in an early paper³ mentions five lasting pleasures, namely, health, a good name, knowledge, ‘doing good’, and eternal bliss. These are pursued because they are pleasant and we judge that act good which helps to bring them about. Even ‘doing good’ is here regarded as a source of pleasure and interpreted selfishly. ‘I find’, Locke explains in this passage, ‘the well-cooked meat I eat today does now no more delight me . . . the perfumes I smelt yesterday now no more affect me with any pleasure; but the good turn I did yesterday, a year, seven years since, continues still to please and delight me as often as I reflect on it.’ It is in this sense that ‘doing good’ is a lasting pleasure. Locke talks almost entirely in terms of the individual’s rather than of the community’s pleasure. But he does hold that a sin against society is greater than one against an individual: ‘that being always the greatest vice whose consequences draw after it the greatest harm, and therefore the injury and mischiefs done to society are much more culpable than those done to private men, though with greater personal aggravations.’⁴ On the same principle, presumably, we might argue that an act which secures the happiness of one is not so good as that which secures the happiness of many. Thus the lastingness and the distribution of the pleasure must be taken into account in estimating the degree of goodness

¹ II. xx. 2.² II. vii. 2.³ Cf. King, ii. 120.⁴ King, ii. 95.

pertaining to an act. But an act is good always in so far as it promotes pleasure or happiness, whether individual or social.

So far the hedonism is plain, and it shares in the defects which usually belong to this type of thinking. Supposing it be admitted that the good is that which procures pleasure, who is to judge of the pleasant? Apparently the decision rests with each individual — 'according to every one's relish'. And since individuals vary in their opinion as to what is and is not pleasant, 'good' will be relative to each individual judgement. Furthermore, although the individual may be perfectly clear in his own mind as to what is pleasant and what unpleasant, he still cannot be sure that such and such an act is good. For his only test of the goodness of an act, on this theory, is the amount of pleasure it produces; and he can never say outright that an act is good, because he can never know *all* the consequences. Although the known consequences of an act may on the whole appear to increase pleasure, further consequences may yet come to light of an opposite nature.¹ It therefore follows that all moral judgement is probable only. A science of morals in the strict sense becomes wholly impossible on this basis. The universality and necessity essential for such a science are absent.

It becomes essential here, however, to note a very important modification which Locke makes in his hedonism. Not all good, he holds, is moral good. We need to distinguish between natural and moral good. Eating food when the body needs food is good naturally but not morally. Putting one's finger in the fire is naturally evil, because its consequence is pain, but it is not morally evil. For moral good, he now explains, is that which produces pleasure of a particular kind, namely, the pleasure with which God rewards certain acts which he considers desirable. In order to secure obedience to his laws God has attached pleasures to them, so that whoever obeys them enjoys these pleasures. Moral good is still to be recognized by the pleasure it produces, but the pleasure in the case of moral goodness is not the natural consequence of the act. It is divinely appointed. 'The difference between moral and natural good and evil is only this: that we call that naturally good and

¹ There is the additional difficulty of measuring and computing pleasures and pains.

evil, which, by the natural efficiency of the thing, produces pleasure or pain in us; and that is morally good or evil which, by the intervention of the will of an intelligent free agent, draws pleasure or pain after it, not by any natural consequence but by the intervention of that power.’¹ A like position is to be found in the *Essay*: ‘*Moral good and evil*, then, is only the conformity or disagreement of our voluntary actions to some law, whereby good or evil is drawn on us, from the will and power of the law-maker.’² Now God’s laws are immutable like himself. To discover them is to know what must promote man’s happiness in the most lasting manner. Here then, to some measure, is an objective good, independent of variations in our human judgements as to what is pleasant. Nevertheless, an element of contingency may still remain; for the good is that which God takes to be good, and if his choice of the good be held to be arbitrary and his will free, then a contingent, irrational element still remains in morality.

If, however, we connect this modified hedonism with Locke’s rationalism, certain other possibilities emerge. If God acts rationally and not arbitrarily, if he chooses those laws which reason perceives to be good in themselves, and good from the nature of the case, then Locke’s modified hedonism may also be a rationalism. For the rationalist may enter into God’s thoughts and himself see why these laws are the laws human beings should obey. But they who perceive the rational grounds of morality in this way will be few, and none can expect to perceive the whole explanation. Most men do not bother to inquire into the reason of things. They are hedonists, their end is happiness. And God, who understands man, joins happiness with virtue. Men do what is good because it brings happiness and, moreover, reckon it as good for this very reason that happiness follows in its train. The rationalist, however, also perceives that it is good in itself. Such is the view which seems to be behind Locke’s thought, synthesizing hedonism and rationalism. Yet it must be added that nowhere in Locke’s works is this view affirmed explicitly and nowhere are its implications worked out. Locke never says that the dependence of goodness upon pleasure is an illusion of the finite mind, resultant upon the fact that

¹ King, ii. 128.

² II. xxviii. 5.

God has so ordained things that good is always followed by pleasure. But this does seem to be the final outcome of his teaching.

If again we approach the problem from the rationalist side, we shall find ourselves coming to the same conclusion. In discussing the rationalist elements in Locke's teaching we begin naturally with the celebrated and interesting suggestion set forward in the *Essay*. This suggestion was the consequence of applying to the moral sphere the most important epistemological discovery which Locke had made. As we have seen, Locke demonstrated that mathematics was distinct from natural science and that, whereas in the first case certainty was possible, certainty was not possible in the second. Mathematics can be certain because its object (unlike the object of natural science) is 'the idea which is its own archetype', a mode whose real essence is one with its nominal essence. In mathematics we discover necessary connexions between abstract ideas whose precise definition we know. Now in the same sense, Locke argued, a science of morals is also possible. For such abstract ideas as justice, fortitude, temperance, and the like are also 'ideas which are their own archetypes', modes whose real essences are one with their nominal essences. We may therefore search in just the same way for necessary agreements and disagreements between these abstract ideas, and if we find any we shall have gained certain knowledge. Furthermore, as in mathematics, so in morals any such knowledge will be gained independently of our experience of the real world. If the real corresponds to the ideal, then connexions in the ideal will have corresponding connexions in the real. 'If it be true in speculation, that is, in *idea*, that *murder deserves death*, it will also be true in reality of any action that exists conformable to that *idea of murder*.'¹ But our knowledge is true independently of any reference to real events. Thus a necessary, certain system of morals is possible, in which knowledge is gained intuitively or demonstratively as in mathematics.² In one respect only is the science of morals likely to be

¹ iv. iv. 8.

² This system, however, is not known innately, nor does it rest on principles which are known innately. 'Moral principles require reasoning and discourse and some exercise of the mind to discover the certainty of their truth. They lie not open as natural characters engraven on the mind' (i. iii. 1). Nor is conscience

more difficult than the science of mathematics. The abstract ideas of morality are mixed (rather than simple) modes, and are frequently highly complex. Moreover, their only symbol is the word. They possess no further sensible symbols. On the other hand, geometrical concepts, for instance, are symbolized both by words and by figures on paper. This helps to make the precise meaning of a geometrical term clearer. Moral concepts are signified by words only, and so it is easier to fall into error and confusion in the use of them. Locke has referred previously to this difficulty in connexion with mixed modes, and he can only re-emphasize at this point the need for care in the use of language. But the difficulty is not fundamental; if the necessary care be taken, as exact a science of morals can be achieved as of mathematics.¹

Critics of the formalistic and rationalist ethics outlined above have been very many from Berkeley's time onward. Berkeley affirms quite bluntly that such a science would be wholly trifling: 'To demonstrate morality it seems one need only make a dictionary of words and see which included which.'² And this criticism has been frequently repeated since. Locke, it is said, reduced ethics to a game using as counters unreal and artificial abstractions of his own creation. To show the force of the criticism we may take one of the two examples which Locke himself gives us of the kind of knowledge he has in mind.³ 'Where there is no property there is no injustice.' This proposition, Locke holds, must be true because 'the idea of property being a right to any thing, and the idea to which the name "injustice" is given being the invasion or violation of that right', it follows that there can be no injustice as defined where there is no property as defined. Now obviously, if we define our terms in this way, the proposition cannot be denied. But clearly its truth depends on the truth of the definitions. It only refers hypothetically to the real world. And in this passage Locke is, in fact, merely informing us as to the way in which he uses terms, and the proposition is truly tautologous. The critics of

a unique kind of knowing, present only in morality. It is 'nothing else but our own opinion or judgement of the moral rectitude or pravity of our own actions' (i. iii. 8).

¹ Cf. iii. xi. 15, iv. iii. 18-20. This was a point he had seen at least as early as 1681; cf. Aaron and Gibb, p. 117. ² *Commonplace Book*, J. 702. ³ iv. iii. 18.

Locke seem justified. Locke himself in a paper entitled *Of Ethics in General* deprecates an ethical theory that concerns itself wholly with the analysis of terms. Ethics ought to consider 'species of action in the world, as justice, temperance, and fortitude, drunkenness and theft'; yet frequently it has become merely a dispute about words. 'But all the knowledge of virtues and vices which a man attained to this way would amount to no more than taking the definitions or the significations of the words of any language, either from the men skilled in that language or the common usage of the country, to know how to apply them and call particular actions in that country by their right names, and so in effect would be no more but the skill how to speak properly. . . . The end and use of morality being to direct our lives and by showing us what actions are good, and what bad, prepare us to do the one and avoid the other; those that pretend to teach morals mistake their business and become only language masters.'¹ This passage was probably written after the *Essay*, and we cannot rule out the possibility that Locke had in mind in writing it his own suggestion of a science of morals. Yet this is unlikely. It is more probable that Locke would have defended his theory against this kind of criticism. He would not have agreed that the science of morals, as he conceived it, concerned itself with terms only. For it had to do primarily with ideas and not with the terms which signify them. He might even have gone a step farther. These ideas, although abstract, and although they are their own archetypes, are empirically derived and so are connected with real existences, even though in our perception of relations between them we are wholly independent of such reference.

But it is exceedingly doubtful whether Locke could have saved himself from criticism in this way. If there is a reference beyond the ideas to real things, this reference is clearly irrelevant to moral science as he expounds it. In the same way, the stressing of a supposed difference between idea and term will hardly help him, for this difference also is not truly relevant. The science of morals, as explained by Locke, is possible because each term or idea is adequately defined, and the work of the moralist is to discover the

¹ King, ii. 125-7 and cf. p. 129, § 9.

further implications involved in a system of concepts defined in this way. Surely what Locke proposes is an elaborate analysis of terms in order that all their implications may be made clear. He could not defend himself against the view that the task he imposes upon moralists is one of analysis. But why should he try to do so? The analysis of ethical concepts is highly desirable. The discovery of new implications by analysis is well worth while. Can we not, therefore, say that Locke's demand for a science of morals is a demand for a close analysis of moral concepts? And will not this suffice to silence the critics?

But the critics are not so easily silenced. In the first place, it does not seem to be true that Locke meant his science to be *merely* analysis. Secondly, even regarded as analysis his proposed inquiry is exceedingly defective. It completely neglects to analyse the most important conception in morality, namely, obligation. Moreover, it is only because it neglects the analysis of this conception that the close comparison between mathematics and morals becomes possible. Locke assumes moral obligation throughout; he uses the terms 'should' and 'ought' constantly. Yet he treats morals as if its propositions were of precisely the same sort as those of mathematics. He does not ask how a science whose propositions express obligation can be like another whose propositions express logical relation. The resultant error is a serious one. There may certainly be likenesses between moral theory and mathematics, but any comparison of them which neglects the fundamental difference between moral obligation and logical relation is surely far too superficial. And Locke's comparison, on which his whole suggestion of a science of morals rests, does neglect this difference completely. For this reason alone, we must conclude, Locke's suggestion is defective.

But the formalistic rationalism of the *Essay* is not the only rationalist element in Locke's philosophy. He was well acquainted with, and accepted from his contemporaries, the concept of a law of nature. A law holds upon men independently of all institution whether human or divine. It is knowable by reason¹ and universal

¹ Though its material content is ultimately derived from sensation and reflection. Cf. the Latin essays on the Law of Nature in the Lovelace Collection.

in its application. We may consider this historic conception in greater detail in the next chapter, for it is in his political writings that Locke makes greatest use of it. It is sufficient here to notice that the law of nature might well have served as a basis for a rationalist system of ethics and that Locke on occasion, as we shall see, does seek to derive from it various ethical truths. But on the whole he seems to have found it too abstract a conception to serve as a ground for a science of morals. He prefers to rest morality upon a more concrete basis, namely, upon the being of God. The difficulty then, however, is to find an adequate place for the law of nature within this divinely ordained system.

God's will is 'the true ground of morality'.¹ This is the position to which Locke most constantly adheres. God sets his law before man and the moral life is obedience to that law. But why should man obey, and why should he feel obliged to live the moral life? Should he obey out of a sense of duty, because he knows that this action is good and that he ought to do the good? Or should he obey because God commands obedience, and because God has powers to reward the obedient and punish the disobedient?² Locke does not give any satisfactory answer to these questions. Nor does he face the greater difficulty which had bothered medieval theologians. Do the moral laws hold in human life simply because they are ordained by God, or does God see them to be good and so ordain them? Did God arbitrarily choose the laws we are to obey, or was he himself constrained by his knowledge of what was good in choosing them? From the rationalist point of view the second alternative is the better. The good is not God's capricious choice, but is determinable by reason. Yet to adopt this alternative and to suppose that God is constrained, is to limit his power of action and choice, and to deny his omnipotency. The point at issue can be put in another way. If God acts arbitrarily, then all moral law is his positive command, and its assertion a fiat of his will. There is no such thing as a law of nature. Our moral obligations cannot possibly rest on 'the eternal law and nature of

¹ I. iii. 12.

² For Locke's views on the morality of punishment cf. II. xxviii. 5. Cf. also *Works*, I. 229-30, and more generally *Treatise on Government*, II. 7-12, and *Works*, III. 539-41.

things'.¹ All law is positive; natural law, determinable by reason independently of God and holding necessarily for man, is a figment of the philosopher's thinking. This issue aroused considerable controversy in late medieval speculation, the nominalists on the whole tending to the view that law was positive, the realists affirming a law of nature. Locke finds it impossible to accept either view outright. He does not wish to deny the law of nature. He accepts it. When in Book I of the *Essay* he rejects innate moral knowledge, he expressly adds a warning that he is not to be taken as affirming positively revealed law to be the sole law and as denying 'a law knowable by the light of nature'.² He rejects innate law but affirms natural law. But he also cannot allow that God is determined. On the whole, it would seem, Locke would prefer to give up the concept of a law of nature rather than to deny the omnipotency of God. God is the final source of law. As Locke explains, there is no law without a law-giver, a being who has the power to punish those who disobey.³ And the sole universal law-giver is an omnipotent Deity. How then can we reconcile the two views? In a letter to Tyrell⁴ Locke suggests a possible compromise. The law of nature he there describes as 'a branch of the divine law'. Reason can perceive that it is good for man to obey the natural law, yet it *is* law, it is obligatory upon man, because it, like all other law, is divinely ordained. In this sense of being imposed upon us by God, we may say that the law of nature is also a positive law. This is the sort of compromise which Locke appears to favour.⁵

Thus we once more reach the conclusion, although now from an examination of the rationalist side of Locke's teaching, that moral law, whilst it is divinely ordained, is none the less consonant with human reason, so far as human reason goes. God acts not capriciously but according to reason, and yet he is free.⁶ Locke never solves the difficulties involved in this position, indeed, he never begins to examine them. It is in vain that we search in his

¹ II. xxi. 56.

² I. iii. 13.

³ II. xxviii. 6.

⁴ Cf. King, i. 368.

⁵ It is in no way original to Locke. For instance W. A. Dunning in his *History of Political Theories from Luther to Montesquieu*, pp. 137-8, shows how Suarez sought a like compromise and refers to the latter's *Tractatus de Legibus* (1613), II. vi. Cf. also Hobbes's *Leviathan*, I, ch. xv.

⁶ Cf. II. xxi. 49.

pages for a consistent ethical theory. We ought to obey moral laws, he teaches, because it is God's will that we should obey them. To enforce his will upon us God gives rewards for obedience and punishes disobedience. And yet, Locke also feels, the law we thus obey at the bidding of God is the one best suited to our nature, and the one to which our reason itself would ultimately guide us.

To complete this account of Locke's ethical theory we need to touch on two further points. Though God's law alone is universal, he is not the only law-giver. In a secondary sense the state enacts laws and compels its citizens to obey them. But also society or public opinion has its law, the 'law of fashion' as Locke terms it.¹ This law varies from age to age and it is not always consonant either with reason or with the divine law, and yet its power over men is very great. Its sanctions, loss of reputation and good name, unpopularity and social disgrace, are very effective—much more effective actually than the divine sanctions, since they are more immediate in their operation. But fashion, 'this common measure of virtue and vice', is no true guide in the affairs of life, and the truly good man finds his standard elsewhere.

The second point to which we must refer is Locke's theory of liberty as expounded in II. xxi of the *Essay*. Locke begins by correcting certain errors into which people fall. First, a man may act voluntarily and yet not be free. A lazy person in the stocks may enjoy sitting there. A student locked in a room may enjoy his study and not desire to leave. But neither is free. 'Voluntary, then, is not opposed to necessary, but to involuntary.'² Secondly, the question as to man's freedom is not rightly described as one concerning the freedom of the will. It is not the will which acts or does not act but the man. To say the will acts is to adopt the unfortunate faculty theory at its worst. '*Liberty*, which is but a power, belongs only to agents and cannot be an attribute or modification of the *will*, which is also but a power.'³ Willing is a power of an agent. It is not itself an agent, and so there is no sense in asking whether the will is free. The problem before us in discussing liberty is whether man is free.

When, then, is a man free? The first step in the answer, Locke

¹ Cf. II. xxviii. 10.

² II. xxi. 11.

³ II. xxi. 14.

thinks, is fairly straightforward. 'So far as anyone can, by the direction or choice of his mind preferring the existence of any action to the non-existence of that action and *vice versa*, make it to exist or not to exist, so far he is *free*.'¹ This is the *libertas a coactione* of the schools, freedom from external compulsion. I choose a certain line of action and there is nothing in the conditions in which I attempt to perform the act which restrains me in any way. In that sense I am free. But why do I choose this action rather than another, or rather than inactivity? Am I free in choosing? Am I free to will? This question is not so easy to answer. On the whole Locke feels that we are not free to will, that we are determined as to what we do will. In the first edition of the *Essay* he argued that we are determined by what we conceive to be the greatest positive good, so that in the second sense of liberty, *libertas a necessitate*, Locke is here a determinist.

In the second edition, however, he holds that this account of the matter is contrary to the facts and puts forward another theory, which, while still determinist in the main, does leave a loophole for freedom *a necessitate* and so makes moral responsibility a fact. We are determined, he now holds, not by the greatest good in view, but by 'the most pressing uneasiness'. We lack something and are uneasy, and it is this uneasiness which determines our will. This must be so, for we may know the good and yet not do it. But how could this be if we were always determined by the greatest good in view? Clearly, we are not so determined. We are determined by the desire to remove an uneasiness, by a pain, by the absence of a good, and until this uneasiness is removed we do not attempt to attain the greatest good even though we realize that it is the greatest good. Until our desire for the greatest good becomes stronger than all other desires, and the felt uneasiness consequent upon its absence becomes more powerful than all the other uneasinesses which influence us, the greatest good will be an ideal which we recognize but for which we do not strive. The mind is determined to will by the greatest uneasiness at any time. This new theory is still determinist, but Locke now adds one further consideration which somewhat modifies the position in

¹ II. xxi. 21.

respect to determinism and indeterminism. Generally it is true that we are determined by the greatest uneasiness, but it is not always true. There is an exceptional case of the highest importance for the moralist. The mind can 'suspend the execution and satisfaction of any of its desires'.¹ If it acts at all it will act to remove an uneasiness, to satisfy a desire. But it is not bound to act. It is determined still in not acting, but determined by its own judgement. And, Locke thinks, 'to be determined by our own judgement is no restraint to liberty'.² It is in this sense, it now appears, that God and the angels are free. However strong our desire, however great our uneasiness, we may yet suspend action. 'Nor let any one say, he cannot govern his passions, nor hinder them from breaking out and carrying them into action; for what he can do before a prince or a great man, he can do alone, or in the presence of God, if he will.'³ It is in this sense only that man may be free *a necessitate*. He is not bound to be ruled by mere desire; desire can be guided and controlled by judgement. And thus Locke shows how man may be free not only from external constraining forces but also from inner compulsion. But the argument establishing man's liberty and moral responsibility is not without its difficulties, as Locke himself acknowledges at the end of this chapter.⁴

¹ II. xxi. 47.

² II. xxi. 48.

³ II. xxi. 53.

⁴ II. xxi. 72. The Molyneux Correspondence is particularly interesting in connexion with this chapter. Cf. the 1692-3 letters. Apropos of this chapter it is also worth observing that Tellkamp has recently pointed out some interesting parallelisms between Locke's views on freedom in the Second Edition and those of the medieval thinker, Buridan. Cf. Tellkamp, *Das Verhältnis John Locke's zur Scholastik*, p. 107.

II

POLITICAL THEORY

LOCKE'S political theory is to be found in his *Two Treatises of Civil Government*, particularly in the second of these. The immediate aim of that treatise is apparent: to justify the Revolution of 1688 and to help 'establish the throne of our great restorer, our present King William'.¹ But this aim is achieved by securing in turn a great and fundamental political principle, true for the English nation in 1688 and true, in Locke's opinion, for all well regulated communities everywhere and at all times, that government must be with the consent of the governed, that a ruler who has lost the confidence of his people no longer has the right to govern them.

The principle involves a particular view of government and of political community. Locke set himself to refute two theories which were used to justify privilege, oppression, and political slavery. The first was the theory of the divine right of kings as put forward by Robert Filmer,² that the king is the divinely ordained father of his people, and that the relation between king and subject is precisely the same as that between father and child. Locke ridicules the comparison. In the modern state, a large, highly complex organization, parental or patriarchal government is no longer possible, and the claim that it is divinely ordained cannot be substantiated. The second theory is to be found in its most explicit form in the works of Hobbes, although Locke does not refer to Hobbes by name, at least in the *Treatise*. Government, in this theory, necessarily involves the complete subjection of the governed to the absolute will of the governor, for without such subjection no civil society is possible. Locke denies this theory categorically. The facts of human experience are against it and reason is against it. A political community is possible in which

¹ The Preface.

² On Filmer cf. the introduction to Peter Laslett's edition of *Patriarcha*, Basil Blackwell, Oxford, 1949.

the power of the governor is limited, in which sovereignty ultimately pertains not to the monarch, as opposed to those whom he governs, but to the people as a whole. Government becomes an instrument for securing the lives, property, and well-being of the governed, and this without enslaving the governed in any way. Government is not their master; it is created by the people voluntarily and maintained by them to secure their own good. Those who, because of their superior talent, have been set to rule by the community, rule not as masters over slaves, or even as fathers over children. They are officers elected by the people to carry out certain tasks. Their powers are to be used in accordance with 'that trust which is put into their hands by their brethren'.¹ For Locke government is a 'trust' and a political community is an organization of equals, of 'brothers', into which men enter voluntarily in order to achieve together what they cannot achieve apart.

Such was the view of government which Locke adopted, and the second treatise is an effort to discover a rational justification of this view. Locke might have appealed to experience and to history, or again he might have contented himself with showing the public utility of the theory he advocated. But the late seventeenth century was rationalist and would listen to no arguments other than rationalist ones, and so Locke analysed the notion of political society in order to prove rationally that it was from the first a community of free individuals and that it remained so throughout. He spoke in the language of his day and he made use of the theories of his day. In particular, he borrowed two concepts from earlier political theorists, the law of nature and the social contract, and it would be as well to give a brief account of these before proceeding to the details of Locke's argument.

The law of nature, as we have seen, provided a basis for the rationalist strand in Locke's ethics, and it reappears in a still more prominent form in his political writings. This fact need not surprise us, for the seventeenth century was the golden age of the Natural Law School. The concept of a law of nature is, however, much older than the seventeenth century. It can be traced back to Aristotle, and was put forward very explicitly by the Stoics. They

¹ ii, § 231.

held that men were citizens of a divine city, that one universal, immutable law held for all men, whatever other laws they might also be called upon to obey. This was the law of nature, discovered to man by his reason. The Romans, influenced profoundly by Stoic teaching, recognized a *jus naturale* as opposed to the *jus civile*, and Christianity also found the Stoic doctrine not incompatible with its own insistence on the brotherhood of man. In medieval literature the theory is present, and there was considerable dispute as to the relations between the law of nature, rational and universal, on the one hand, and the more positive laws, both secular and divine, on the other. Thus the concept was already old in the seventeenth century, but at no period was its use so extensive. In the writings of Grotius, Pufendorf, Hobbes, Spinoza, and of many lesser writers, it played a highly important part.¹ These authors were not all agreed as to the content of the law. It meant, for most, the equality of all men by nature: *omnes homines natura aequales sunt*. But as to its further content, or even as to the definition of equality, there was little agreement. Each author chose that which he himself regarded as most worthy of obedience and held this to be part of the law. As described by Locke the law of nature demands just such conduct as would be expected of any educated Christian gentleman. It was obviously a vague conception awaiting more careful analysis.²

The social contract theory was closely linked with that of the law of nature. In one sense, the former is the corollary of the latter. In nature all men are equal, but in political society some are rulers and others ruled. This difference needs to be explained and is explained by the theory of the social contract. According to this theory the difference is due to the fact that men entered into a pact whereby, in order to gain certain ends, some men allowed themselves to be ruled by others. At first there was a state of complete equality in which every individual was free, but then men came

¹ For an excellent study cf. Otto Gierke, *Natural Law and the Theory of Society 1500-1800*, trans. by Ernest Barker. Cambridge, 1934.

² Locke once apparently intended to write a book on the Law of Nature. Tyrrell in a letter to Locke (Lovelace Collection, 27 July 1690) upbraids him for not finishing the work. Possibly the first draft were the Latin essays, cf. J. W. Gough, *John Locke's Political Philosophy*, pp. 12 ff.

to an agreement and the outcome of this agreement was the political state. In making the contract the people would naturally safeguard themselves as much as possible, so that the powers of the ruler were likely to be limited from the first.¹ Thus on the whole the social contract theory proved most useful to radical and liberal theorists. It was part of the subtlety of Hobbes that he should have used a radical argument as a basis for his own absolutist theory, but such a usage was unusual.

The main points of criticism which can be directed against the social contract theory are familiar. As it stands, it is bad history. It is not true that political societies began in this way. History and sociology lend but little support to this theory of free men entering into a compact and so creating a political group. Usually, so far as can be seen, the more primitive the society the less free the individual, and the free individual of the pre-political state seems to be a mythical creation of the political theorist. It is also bad psychology. The free individual tends to be depicted as largely isolated, a *mere* individual with no social ties. But man is by nature social. The 'unsocial' individual of the pre-political stage is an unreal abstraction. Thus historically and psychologically the theory of the social contract is defective. Otto Gierke has criticized it in another way. A contract of necessity entails duality, whereas the true political society is one. 'The contractual relation must always involve a duality of persons; a personality of the Ruler must always emerge by the side of the personality of the People, equally essential to the existence of the State.'² Gierke, perhaps, overstressed the need for unity in the modern state. Even so the social contract theory can perhaps be interpreted in such a way as to meet his objection, and it is doubtful whether the criticism applies, for instance, to Locke's account of the social contract. For Locke does not conceive it as a contract between ruler and ruled. On his view the contract is between all the members of the society, as a consequence of which a trust is imposed upon one or more individuals. The ruler does not stand opposite to the people; he is

¹ Although the limitation of the monarch's power is not *necessarily* involved, since the people might think their best security to lie in an absolute government.

² *Natural Law and the Theory of Society*, p. 53.

one of them, but entrusted with exceptional duties. The contract theory modified in this way does not seem to be open to the criticism which Gierke makes.

We may now turn to the *Treatises*. Their full title adequately reveals their purpose: *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 Original, Extent and End of Civil Government*. The work was published in 1690. It was probably begun shortly after the appearance of Filmer's *Patriarcha* in 1680, and Locke no doubt carried the manuscript into exile with him in 1683. Later, realizing that James II was about to be overthrown, he completed the book with a second part in which the right of the English people to rebellion was demonstrated. In the meantime, however, a good deal of the manuscript of Part I had been lost, but since this was part of the refutation of Filmer, and since that refutation as it stands is adequate enough, Locke did not bother to rewrite the missing pages. The book is thus incomplete, although one can rest satisfied that nothing vital is omitted. Part II is complete, and this is by far the more important part.¹

The refutation of Filmer in Part I need not long detain us. Filmer had argued that Adam was divinely ordained master of Eve, of their children, and of the whole created world, and that all kingly power was inherited from Adam and was as absolute as Adam's was. Locke replied that, in the first place, Filmer had not proved that Adam ever was sovereign in any absolute sense. He had absolute rights neither over Eve nor over his children. It is true that children should honour their parents (although honour is due not to the father alone, but to both parents). But we cannot deduce from this that parents have complete authority over them. It is also true that for a long period a child is unable to reason for

¹ That the missing section was part of the reply to Filmer is clear from Locke's preface to the book. 'If these papers have that evidence I flatter myself is to be found in them, there will be no great miss of those which are lost and my reader may be satisfied without them. For I imagine I shall have neither the time, nor inclination, to repeat my pains and fill up the wanting part of my answer, by tracing Sir Robert again, through all the windings and obscurities which are to be met with in the several branches of this wonderful system.' The missing sections, no doubt, followed § 169, that is, the end of Part I.

itself, and then it is the right and duty of the parents to fend for it and to think for it, and the child must learn obedience. But when it comes to years of discretion this parental authority ceases. Parental authority, Locke insists, is fundamentally different in character from the authority of a ruler in a state and it is thoroughly misleading to confuse the two. But even if Filmer could show that Adam had received absolute powers over others, to complete his argument it would still be necessary for him to prove that the English kings had inherited these powers. It would still be necessary for him to trace the succession from Adam to Charles II, a task which, as Locke easily shows, is completely impossible.

Having dismissed Filmer's false principles of civil government Locke turns in Part II to the consideration of true principles, and I now propose to expound the main lines of Locke's argument—although without following his order. Civil government invariably begins with a contract, and this brings to an end a pre-political state known to Locke and his contemporaries as the state of nature. Now to understand the civil state it is necessary to understand why men left the state of nature. By nature all men are free, 'equal and independent'.¹ Within certain limits each individual has a right to anything he may desire; the sole restraining force within these limits is his own reason. But so far as he is restrained rationally his conduct will conform to the law of nature known by reason.² Thus he will not kill another; he will not destroy himself. He keeps his promises, and he deals honourably with those who come into contact with him. He respects other men, and does not regard them as so many instruments whereby he might secure his own ends. We are not made 'for one another's uses'. Consequently, though the individual in the state of nature is free, he is not unaware of his duties to others. And he cannot rightly, on Locke's view, be described as 'unsocial'. He enters into relations with other men from the first, and it is in these relations that the law of nature regulates his activity. Thus the state of nature

¹ ii, § 6.

² Locke does not say here how the law is known; his best account of this, inadequate as it is, is in the Latin essays, cf. p. 272, n. 2, above.

(as it ought to be) is a state in which men live together in peace, each one is free, and each one enjoys the fruits of his own labour.

Unfortunately, it is difficult to maintain such a state. Men are never wholly rational. And a man's rapacity and greed might lead him to action which is contrary to the law of nature and contrary to reason. He might covet his neighbour's property, and if he attempts to seize it forcibly his neighbour has a right to meet force with force and war ensues. Now the state of nature does not inevitably develop on these lines. Hobbes is wrong in holding that it *must* be a state of war. If it becomes a state of war it ceases to be the state of nature, that is, a state in which all men are obedient to the law of nature. But Locke has to admit that it may become a state of war, simply because men do not always obey the law of nature. The state of nature would be perfect if men conducted their lives in a perfectly rational manner. But they do not, and the consequence is that while it *is* a state of peace, it is (to use Pollock's language) a state of 'precarious peace'. Here is one reason why men leave the state of nature. Conflict and war are always possible and men cannot be secure in the enjoyment of their lives and property.¹

It is necessary here to deviate for a moment from the main argument in order to show how private property may belong to a man in the state of nature. Locke had accepted the traditional communism of medieval thought—in the modified and diluted form in which it was handed on to the seventeenth century. It was no longer held that men actually possess all things in common in a positive way and Locke did not teach this. But God had given all things 'to mankind in common', the earth, the air, the sunshine, and the rain, and man was to use them for his own convenience. Yet to use, one must possess, and possess absolutely and not communally. 'God gave the world to men in common,' says Locke, 'but since he gave it for their benefit and the greatest

¹ It is in this connexion that Locke attempts a half-hearted defence of slavery. The individual in the state of nature who acts contrary to the law of nature puts himself outside the law. If he fights and is conquered, his life is no longer his own. And if the conqueror so chooses, the conquered may become his slave and no injustice is done. At the same time, the children of slaves, it appears, should not be regarded as slaves, for they have not committed the sin against reason. Cf. ii, §§ 21-23, 85, 116, 182.

conveniences of life they were capable to draw from it, it cannot be supposed he meant it should always remain common and uncultivated.¹ Thus so long as a thing is possessed in common no one is using it. Land which is common is uncultivated. A piece of land taken and cultivated is the private property of the individual who has cultivated it. In this way, although starting with communism of a sort, Locke can none the less justify property.

Locke's theory of property runs as follows. In the first place, each man possesses himself, his own person, absolutely.² But in addition he also possesses anything 'with which he has mixed his labour'. 'Whatsoever', Locke explains, 'he removes out of the state that Nature hath provided and left it in, he hath mixed his labour with, and joined to it something that is his own and thereby makes it his property.'³ 'Though the water running in the fountain is every one's, yet who can doubt but that in the pitcher is his only who drew it out.'⁴ Thus it is labour which creates property. It is labour also which gives value to most things. 'It is labour indeed that puts the difference of value on everything. . . . Of the products of the earth useful to the life of man, nine-tenths are the effects of labour.'⁵ Locke here suggested a labour theory of value which was to be extensively developed by later thinkers, particularly by socialist writers.⁶ But neither his theory of property nor of labour is fully worked out. There are, it seems, certain limitations to the amount of property one may possess. One may only possess 'as much as any one can make use of, to any advantage of life, before it spoils'.⁷ Moreover, one may only take from the common stock when 'there is enough and as good left' in common for others.⁸ But Locke unfortunately does not develop these theories, nor does he face the very real difficulties which arise in connexion with them.⁹ He is content to show that the possession of private

¹ ii, § 34.

² A very doubtful principle, incidentally, according to the legal codes of most countries.

³ ii, § 26.

⁴ ii, § 28.

⁵ ii, § 40.

⁶ Cf. Max Beer, *History of British Socialism*: the theory 'was destined to be made into the main weapon of socialism', i. 57 (1929 edition).

⁷ ii, § 31.

⁸ ii, § 33. What if there is *not* enough to go round? Who is to arbitrate between the various claims and what are the principles upon which the arbitrator proceeds?

⁹ For instance, what precisely is the produce of *my* labour? It obviously

property is fundamental in human life and belongs to man in the state of nature.

Now, to return to the main argument, one of the inconveniences of the state of nature is that an individual who has gained his property honestly may lose it through the covetousness and greed of another, who has ceased to live the rational life. This possibility, as we have seen, produces a feeling of insecurity, which is one of the reasons why men leave the state of nature. But there is another reason. Even when men seek to behave in accordance with the law of nature, their judgement is not wholly reliable. In the state of nature each man is his brother's judge, and has a right to punish him if he break the law of nature. But he may frequently judge wrongly. The state of nature lacks 'an established, settled, known law, received and allowed by common consent to be the standard of right and wrong, and the common measure to decide all controversies between them'.¹ In this respect the law of nature is not definite enough. Moreover, in things which concern us closely it is most difficult to be impartial and unprejudiced. 'In the state of nature there wants a known and indifferent judge, with authority to determine all differences according to the established law.'² And even if our judgements are correct we frequently lack the power to enforce them. For all these reasons men decide to leave the state of nature. They make a solemn compact with each other whereby they found a new state. The terms of this compact are simple. Each individual gives up that power which was rightly his in the state of nature, of judging and punishing, and allows these functions to be performed by the state. 'Whenever, therefore, any number of men are so united into one society as to quit every one his executive power of the law of nature, and to resign it to the public, there and there only is a political or civil society.'³

includes what I produce by the labour of my own hands. But what of the wealth produced by my beasts of burden and by my machines? Even more, what of the wealth produced by my servants and my employees? In § 27 Locke writes: 'Thus, the grass my horse has bit, *the turfs my servant has cut*, and the ore I have digged in any place where I have a right to them in common with others, become my property without the assignation or consent of anybody.' (My italics.) How seriously should we take this sentence? Is it meant to be a justification of capitalism?

¹ ii, § 124.

² ii, § 125.

³ ii, § 89.

In return the individual gains security in the enjoyment of his remaining rights.

The new state is a state which wields political power, and Locke has defined political power carefully at the outset of his book. 'Political power, then, I take to be a right of making laws with penalties of death, and consequently all less penalties, for the regulating and preserving of property, and of employing the force of the community in the execution of such laws, and in the defence of the commonwealth from foreign injury, and all this only for the public good.'¹ Thus when the individual departs from the state of nature it is this right of judging and punishing his fellow man, the right of enforcing the law of nature, which he gives up. He does not relinquish all his rights. There is no suggestion that he is henceforward the puppet of the new state, deprived of all his rights. Only in this one respect, for his own better security, he allows the state to act and promises faithfully his obedience and support.

The compact thus made needs to be renewed in the case of each individual in the subsequent history of the state. Pufendorf had argued that the compact made by one generation would henceforward hold for all subsequent generations and need not be renewed. But in such a case, Locke thought, the individual might feel that the compact no longer held for him. Thus it must be renewed with each individual. At the same time, it was so obvious that individuals do not in fact enter into such a contract that Locke found it necessary to admit a distinction between open and tacit consent. The individual tacitly acquiesces in the social contract if, having reached years of discretion, he still remains in that community and does not depart from it. He is free to depart if he chooses. 'A child is born a subject of no country or government.'² If, when he has grown to manhood, he remains in the state, this can be taken as a sign that he has entered into the compact which binds the community into one.

So much for the origin of civil society. But in making its origin

¹ ii, § 3.

² ii, § 118. Pollock comments: 'Another opinion which no modern lawyer will accept.' *Locke's Theory of the State*, p. 24.

clear we have also revealed its purpose. Civil society exists to free individuals from the insecurity of the state of nature. Men unite voluntarily 'for the mutual preservation of their lives, liberties, and estates, which I call by the general name, property'.¹ This sounds true Whig doctrine, as no doubt it was meant to be. But there is no need to interpret it in too narrow a fashion. There is nothing to show that Locke regarded government as necessarily evil. Within its limits it can work beneficially for the human race, and much that Locke says about its functions would accord ill with any narrow *laissez-faire* doctrine. Yet the individual's rights must be jealously preserved. Locke would not tolerate the subjection of the individual to the government except only in the bare minimum described above which he conceives to be necessary. And even in respect to this minimum the individual himself agrees to relinquish his natural rights. It is not subjection; it is contract. The individual enters into the political society, and as a member he recognizes his responsibility and his duty. And the whole force and power of this community of free individuals are derived directly from that recognition.

What constitution is best fitted for a free people? Of the three forms, democracy, oligarchy, and monarchy, Locke felt that none was wholly satisfactory in itself, and he favoured a mixed constitution, namely, the constitutional or limited monarchy, which the Whigs were then establishing. In accordance with this constitution, the people elect the legislative assembly and grant it the 'legislative power', that is, 'the power . . . to direct how the force of the commonwealth shall be employed for preserving the community and the members of it'.² In the main, this direction will take the form of legislation, although apparently it need not always do so. Next, there is the 'executive', 'to see to the execution of the laws that are made'.³ As Locke explains the functions of this office it becomes clear that it contains both the judiciary and the executive in the modern sense, and it would have been well if he had distinguished between these offices. But he does not do so. The 'executive power', in Locke's sense, is usually placed in the hands of a single person, that is, the monarch. Finally, Locke

¹ ii, § 123.

² ii, § 143.

³ ii, § 144.

introduces the 'federative', the name he gives to the office which concerns itself with foreign affairs. Locke finds that the federative and executive offices are usually united in the same person, that of the monarch, and he thinks this to be the wiser course. But on the whole he prefers to see the legislative and executive powers in separate hands. He is not perhaps as zealous for this separation as some have made out. But he does bring forward two arguments in favour of the separation of powers. First, as long as government continues in being the executive must be in being, but the legislative need sit only whilst it legislates and this is unlikely to take up the whole time of the members of the assembly. Secondly, a more important argument: 'it may be too great temptation to human frailty, apt to grasp at power, for the same persons who have the power of making laws to have also in their hands the power to execute them.'¹ For these reasons Locke thinks that 'in all moderated monarchies and well-framed governments . . . the legislative and executive power are in distinct hands'.²

A question of considerable difficulty which now arises is that as to sovereignty. Who is sovereign in Locke's state? The monarch, having executive and federative powers, is none the less responsible to the legislative. Accordingly he is not supreme, except in a secondary sense. But the legislative again is responsible to the people and can be dismissed by the people. No doubt, the proper answer to the question is that the people are sovereign—although this answer would be clearer if we knew more precisely whom we are to understand by the term 'the people'. (Once the legislative is appointed, however, and a government comes into being the sovereignty passes from the hands of the people into those of the legislative. The supremacy of the legislative while in session is a point which Locke stresses. Moreover, the monarch, the chief executive officer, also shares in the sovereignty. He has the right to dissolve the legislative assembly and possesses other prerogative powers which make him, on occasion at least, truly sovereign. Consequently, Locke's political theory is devoid of any clear-cut theory of sovereignty. In this respect it compares unfavourably with Hobbes's. In the *Leviathan* there is no doubting the identity

¹ ii, § 143.

² ii, § 159.

of the sovereign; it is the absolute ruler. All the power of the state resides in him. Hobbes's theory is the more definite and logical and in that sense the more satisfying to the intellect. Yet it is logical at a price. It involves absolutism. Locke's problem is to find a constitution for a community which is determined to remain free, determined to avoid tyranny in any form. And he puts forward this system of check and countercheck wherein those who possess authority are limited in their powers and are throughout responsible for their actions.

As long as it sits 'the legislative is the supreme power . . . and all other powers in any members or parts of the society derived from and subordinate to it'.¹ 'In a very tolerable sense' the monarch also may be called supreme. He is the supreme executive and supreme federative officer of the state. But in both respects he is answerable to the legislative body. Other minor officers, of whom of course there must be many, 'are all of them accountable to some other power in the commonwealth'.² If, however, the government ceases to exist and is dissolved this does not mean the dissolution of the political society. It means that the sovereignty has returned to its original source, the people, who have the right and the power to set up a new legislative and executive. It is in this sense that 'the community perpetually retains a supreme power'.³

In this way Locke secures what he most strongly desires. If either the legislative body or, as Locke thinks more likely, the monarch, usurps its or his power in any way, then the people have a right to withdraw their support and to dissolve the government. Locke recognizes that the monarch has certain privileges. In a constitution of the kind sketched by him it will be necessary to leave many matters to the discretion of the chief executive officer. 'This power to act according to discretion for the public good, without the prescription of the law and sometimes even against it, is that which is called prerogative.'⁴ Locke admits prerogative as necessary for the proper functioning of the governmental system. It is part of the king's prerogative also to dissolve the legislative and to assemble it when he thinks this will best serve the interest of the public. But if a monarch seeks to rule without the legislative

¹ ii, § 150.

² ii, § 149.

³ Ibid.

⁴ ii, § 160.

body, if he interferes with its work and liberty, if he changes the method of electing the legislative without the consent of the people, if he 'delivers the people into the subjection of a foreign power', or, lastly, if he so neglects his executive duties as to cause the country to fall into a state of anarchy, then the people have a right to dismiss him. A monarch (or any other person) who seeks to become tyrant and to take absolute powers upon himself threatens the inner harmony of the society. He has put himself into a state of war with the people, and the people have a right to use force against him in order to rid themselves of him. Locke was not blind to the horrors of war. He particularly disliked the adulation paid to military men. 'We are apt to make butchery and rapine the chief marks and very essence of human greatness.'¹ And yet he could not bring himself to renounce 'war. Force must be met by force, lest the innocent should suffer for ever. And a people have a right to use force if necessary against their ruler. Locke admits the right of rebellion. He here touches on what had been for some time a thorny problem. Even the more radical thinkers had hesitated before ascribing this right to the people. But Locke does not hesitate. The people, being always the supreme authority in any state, have a right to depose; it is their sacred duty to overthrow any individual who seeks to make his power over them absolute and despotic. To the objection that this will make for unsettled government Locke answers that the people are usually very loath to rebel, that they will suffer much before they resort to force. But there are limits to their patience. What is of vital importance is that they should always retain their supremacy and sovereignty in the state. To retain this, rebellion is justified.'²

Such is the political doctrine which Locke sets forward in his second treatise. It is not free from defects. Locke is not thorough and does not exhaust his topic. He is too ready to set down general principles without considering all their implications. He neglects the details and brushes aside without sufficient consideration, or

¹ *Of Study*: King, i. 178-9; cf. *Education*, pp. 53-54.

² Locke does not consider the possible effectiveness of constitutional amendment without rebellion.

wholly neglects, many difficulties. Moreover, it cannot be denied that he deals too frequently in artificialities. His individual is artificial. He has no family ties. He tends to be conceived as a somewhat isolated being even when he enters into social relations with others. So also Locke's state is artificial. It is a community of free and independent individuals bound together by a compact into which they have entered freely for the better security of their lives, liberties, and estates—and it is nothing more. But surely a political or civil society is much more. For instance, Locke omits all reference to family and race. Racial or tribal sentiment, he thinks, may be neglected in discussing the origin of civil society. And yet to neglect race in this way is to commit as serious an error as is committed by those who see in a political society merely a racial group and who hold that race alone matters. Both views are artificial and over-simplified.

I may mention one further, and still more radical, defect. Locke is an individualist; yet his individualism is left undefined, for no definite solution is to be found in his works of the vexed problem of the relations between individual and community. There is one brand of individualism which can hardly be attributed to him, namely, that which would permit the individual complete licence. Locke's individual is never free without limitations. Even in the state of nature he is a rational being and so knows, even though he may disobey, the law of nature. And if he does disobey, other men punish him, so that an element of compulsion enters. In civil society he is bound by a positive legal code. Thus he is not free to do whatever he desires to do. None the less, we are not to suppose that his freedom is necessarily curtailed because he obeys the law. At least from the point of view of the more rationalist side of Locke's moral and political teaching, obedience to law is not bondage. Reason knows the law and delights in obeying it. This point is not altogether explicit in Locke, but in a tentative way it is present. To be rational is to know law, and to live under the law is to live the free life. 'Freedom of men under government is to have a standing rule to live by, common to everyone of that society and made by the legislative power erected in it, a liberty to follow my own will in all things where that rule prescribes not; and not to be

subject to the inconstant, uncertain, unknown, arbitrary will of another man: as freedom of nature is to be under no other restraint but the law of nature.¹ The individual is free in spite of certain restraints upon him.

This point is clear. But the defect in Locke's position is that he does not discuss the case of the individual who, for one reason or another, finds the restraints imposed upon him by the community unjust, a violation of what he conceives to be his individual rights. What if the dictates of a man's conscience and the civil law conflict? Is the individual free when he then obeys the civil law? Moreover, what if the civil law is enacted by a legislative body in whose election the individual has had no say? (Locke apparently would not grant universal suffrage, although this point is not wholly clear.) Is the individual then free when he obeys, perhaps contrary to his own choice? Locke might still hold him to be free, since he has entered into the contract which is the basis of the society. But in that case the artificiality of Locke's theory would be hiding the real problem from him. No doubt a contract would be implicit in the democratic society which Locke had in mind. It is implicit in the individual's recognition of his duty to the community, the recognition which gives strength to a democracy. But a civil society as described by Locke, this group of free individuals, who have explicitly entered into a compact, is very different from civil society in its concrete actuality. The latter rests on much more than contract, and to say that each individual who finds himself in the state is there wholly by contract is to misrepresent the truth.

It must be concluded that the problem of the relations between individual and community is one which Locke does not finally solve. Nevertheless, Locke's individualism is a fact and needs to be stressed. He is first an individualist in so far as he sets as narrow limits as are possible to the state's power. Government can demand the individual's obedience only in limited spheres. Within these spheres its authority is final. But outside them it has no authority. The individual is wholly free, for instance, in his family, or again in his religious life, as long as he does not

¹ ii, § 21.

interfere with the liberty of others. In the same way he can use his leisure in whatever way he desires, and choose whatever profession he desires. But, in the second place, Locke is also individualist in the further sense that he views government as itself an instrument to promote the individual's good. It is true that it seeks the greatest good of the greatest number, 'the public good', and so an occasional individual may find his own good sacrificed. But civil society does not exist to further any other purpose than that of the public good. Locke's individualism is largely a question of emphasis. He puts all his stress on the rights of the individual which should never be sacrificed except in the extreme case in which the freedom of one individual must be curtailed to give freedom to others. There is a sense in which Locke could accept the principle, *Gemeinnutz vor Eigennutz*. He is not afraid of governmental interference in the life of the individual. After all, he was mercantilist in his economic theories and admitted the need for governmental control in trade. And there are other spheres where Locke would consider government could profitably intervene. But if it does so, it intervenes to better the prospects of the greatest number of individuals. In a word, government is an instrument to be used for the good of individuals. The state is made for the individual and not the individual for the state. It is in this sense, more than in any other, that Locke is the champion of individualism.¹

¹ On this point and generally, compare J. W. Gough, *John Locke's Political Philosophy* (1950), and the introduction to his edition of *The Second Treatise of Civil Government* (1946). On influences upon Locke cf. in particular A. H. Maclean, 'George Lawson and John Locke', *Cambridge Hist. Journal*, 1947, i. 69-77, in which he asserts that a great deal of Locke's argument is to be found in Lawson's *Politica Sacra et Civilis* (1660).

III

EDUCATION AND RELIGION

THERE still remain to be considered Locke's thoughts on education and on religion. In both fields his thinking was widely influential, and what he wrote on education, in particular, remains fresh and valuable.

I

Locke realized the supreme importance of education. 'Of all the men we meet with, nine parts of ten are what they are, good or evil, useful or not, by their education.'¹ He himself had been led to inquire into the subject as the consequence of his interest in Edward Clarke's family. When in exile in Holland he wrote long letters to Clarke instructing him how best to educate his son. Later, in 1693, he gathered the drafts of these letters together and after modifying them in certain particulars published them as *Some Thoughts concerning Education*.² In reading the book it is well to remember that he is dealing with a limited problem: How best to educate the son of the squire who will one day be squire himself. He has before his mind young Edward Clarke, who showed little promise of great scholarship, or of greatness of any kind, but was plainly destined to live the life of the average English gentleman of good birth. Locke believed in the individual method in education, as he himself informs us. The details of educational procedure should vary with the idiosyncrasies of each pupil. And here he is outlining a system of education for Edward Clarke in particular, with the hope that its general principles will hold for the education of the normal boy of the squire class.

First, Locke deals with the health of the body. Children when

¹ *Education*, § 1.

² The first draft of the *Thoughts* has been published privately (1933) and differs considerably from the first edition. Cf. 'John Locke. Directions concerning Education, Being the First Draft of his *Thoughts Concerning Education* now printed from Add. MS. 38771 in the Brit. Mus. With an introduction by F. G. Kenyon.' Oxford. Printed for presentation to the members of the Roxburghe Club, 1933.

young are not to be coddled and spoiled, but their bodies are to be gradually hardened to withstand external changes. Their clothes should be light and loose-fitting. They should spend much of their time in the open and be given sufficient exercise. Locke recommends cold baths and leaky shoes as aids in the process of hardening. Sleep, 'the great cordial of nature', should not be neglected. Children should be given little meat and no strong drinks, and regular habits should be established. They should be permitted to romp and play to their heart's content. The theory that children should be seen, but not heard, finds little support in Locke's pages. Their 'gamesome humour, which is wisely adapted by nature to their age and temper, should rather be encouraged, to keep up their spirits, and improve their strength and health, than curbed or restrained: and the chief art is to make all that they have to do sport and play too'.¹ In this way, by obedience to rules of health, the body may be made strong and active.

In respect to the education of the mind, the first thing to emphasize, in Locke's opinion, is that a sound mind does not mean merely a well informed mind. A pupil may know all the scholastic philosophy, may write perfect Greek and Latin exercises, and yet be badly educated. Character, Locke thinks, is indeed more important than learning. Virtue, wisdom, good breeding—these are the marks of the sound mind. Learning is secondary. First comes the good life, based, as Locke thinks, on a knowledge of God. Then comes wisdom, not crafty cunning, but sagacity and prudence in the conduct of one's affairs. Thirdly, good breeding, which Locke neatly defines as 'not thinking meanly of ourselves nor of others', not being 'sheepishly bashful' on the one hand, nor 'negligent and disrespectful in one's carriage' on the other.²

Now virtue, wisdom, and good breeding cannot be taught directly as one teaches the multiplication table. And certainly they cannot be enforced. Nothing is more dangerous and nothing in the long run more ineffective than an attempt to compel a child against its will to a certain mode of life. Compulsion at best can only succeed in breaking the child, and so unfitting it for life. 'Dejected minds,' says Locke, 'timorous and tame and low spirits

¹ § 63.

² § 141 and cf. 142-6.

are hardly ever to be raised and very seldom attain to any thing'.¹ The successful teacher does not need to compel; and the use of force, for instance, in corporal punishment is a sign of failure on the teacher's part. A good teacher will teach much by example and by suggestion. Children, of course, with their readiness to emulate others, learn quickly from the example of others. For this reason, they should be reared in the company of virtuous, wise, and well-mannered men and women. Speaking generally, children should be as frequently as possible in the company of their parents, and although occasionally a maid may have greater virtue than her mistress—and then it is best to leave the child to the maid—in general a mother should rear her own offspring. On the difficult question of whether a child should be sent away to school or not, Locke thinks that in the majority of cases it is best for the child to remain at home in the care of its parents for as long as possible. It is foolish 'to hazard one's son's innocence and virtue for a little Greek and Latin'.² It is true that the child away from home will learn manliness and self-reliance more quickly, although this may develop into 'a forward pertness' not consonant with good manners. But these virtues can be learnt at home in a well regulated household, and it is easier there to learn the further lesson which boys find difficult to learn, that, whilst courage is good, cruelty is always evil. Accordingly, Locke would recommend for most gentlemen's sons an education at home carried forward under the watchful eye of the parent, but with a tutor from outside to help in the work.

The tutor will have to be carefully chosen, for much depends on the right choice. By precept, and even more by example, he will teach the child to control and discipline itself. He will discourage the desire for pleasure, never restraining forcibly, but carefully refraining from encouraging the natural desire for pleasure present in every child. For instance, he will not reward a good act with the gift of a sugar plum, lest the pleasure of winning the reward fill the child's mind. Wherever possible, and as soon as possible, he will appeal to the rational element. He will treat his pupil as a rational creature and encourage him to reason for

¹ § 46.

² § 70.

himself and to see the rationality and wisdom of the conduct suggested to him. Rules should be as few as possible, although it is well that these few should be obeyed.

In this way will virtue, wisdom, and good breeding best be taught. In addition, the child needs a stock of useful knowledge. And here the method of teaching is all-important. For the young child, at least, learning must be made another form of playing. Children cannot learn under compulsion; restraint paralyses them. The skilful teacher knows how to impart his information in so interesting a fashion that the children learn with the same zest as they play. He finds an ally in the natural curiosity of childhood. Children are very curious; they are full of questions about the things they see and hear. 'They are travellers newly arrived in a strange country, of which they know nothing: we should, therefore, make conscience not to mislead them.'¹

The child should first be instructed in its own tongue so that it speaks, reads, and writes that tongue correctly. Then as soon as possible it should begin to learn another language, for instance, the English child might learn French. In a year or two Latin also should be taught, and taught by the conversational or direct method. (Children should not begin with exercises in Latin grammar. Let the teacher talk to them in Latin and let them learn to read the language fluently, and then it will be time enough to turn to grammar.) When they have gained some mastery over these languages, Locke cannot recommend the practice of his age that pupils should then spend the rest of their time learning other ancient languages, Greek, Hebrew, and Arabic, together with rhetoric and logic. He recommends instead geography, history, and anatomy, subjects which require little reasoning powers but some memorizing. At the same time a beginning should also be made with the study of more abstract inquiries, arithmetic, geometry, and astronomy. Later, the growing youth should learn a little civil law and a little ethics. And his education might be completed with an introduction into the various hypotheses in natural philosophy, both physical and metaphysical. He will not, of course, be a specialist in any of these subjects. His knowledge

¹ § 120.

will be general and not very deep. But it will be enough for his needs.

For recreation, after more serious study, Locke will turn his pupil's mind to the arts and the crafts. The young gentleman, however, is not to take these too seriously. The enjoyment of poetry, for instance, is pleasant and so is its writing, but it is an art not to be encouraged in a young man. No father is anxious to see his son a poet: 'For it is very seldom seen that any one discovers mines of gold or silver in Parnassus. 'Tis a pleasant air, but a barren soil.'¹ Towards music Locke is somewhat more sympathetic, although he thinks proficiency at a musical instrument hardly worth the time taken to acquire it. Moreover, it engages a young man 'in such odd company'. 'Men of parts and business' do not commend it.² Nevertheless, some recreation is certainly necessary. Locke thinks sport rather a waste of time. His own recommendation is that young men, even young gentlemen, should learn a trade, such as gardening or carpentry, in their leisure hours. Finally, he thinks travel good, although not at the usual age, that is between sixteen and twenty-one. A youth travels for one of two purposes: to learn a foreign tongue, or to make acquaintance with men of note abroad and to understand the political and social conditions in which they live. For the first purpose the usual age for travel is much too late, and for the second it is too early.

No book of Locke's is more readable than his *Some Thoughts concerning Education*. Most of its teaching has long since become part of the generally accepted educational theory of this country, although in many places practice still lags behind theory. In his own day, however, to judge from the evidence to hand, it must have been regarded as highly heretical. His contemporaries must have been surprised by his assertion that the teacher's first task was to create character; while his suggestions that logic and rhetoric could be neglected, and geography, history, and anatomy substituted in their place, that English should be studied as thoroughly as Latin and that Greek could be entirely omitted from the curriculum, must have been regarded as revolutionary

¹ § 174.

² § 197.

in the extreme. But the pleasant, fresh style of the work, its forcefulness, and, at the same time, its general good sense, captured the imagination of men and also appealed to their intellect. *Some Thoughts concerning Education* is a very definite step forward in educational theory and few other English books have influenced educational thought so deeply.¹

II

Religion was Locke's dominating interest in the closing years of his life. The works he wrote on religious topics in that last decade, the *Reasonableness of Christianity* and its *Vindications*, together with the commentaries on the *Epistles*, make up a volume larger than the *Essay* itself. Earlier, he had been compelled to devote most of his attention to secular matters, but thoughts of God and immortality and of the religious life of man were never far from his mind. One of his first tasks had been to make his choice between Anglicanism and Dissent. He had decided to remain within the Church of England, first, because he disliked the wild rantings and the fanaticism of many nonconformists, and, secondly, because he regretted and feared narrow sectarianism. At the same time his Anglicanism was always very broad. He shared his views on church government and on the priesthood with many dissenters. A church is a voluntary institution of believers; if a church appoints one from amongst its members to minister in a special way to its spiritual needs, his authority is as great as the members of the church choose to make it. The opposite view that a priest, whether pope, bishop, or presbyter, has absolute authority over his flock in matters spiritual was as abhorrent to Locke as that other view that monarchs have absolute rights over their subjects. In the religious sphere, more than in any other, the individual must enjoy perfect freedom.

¹ It has been held that Locke was indebted for many of his educational theories to two earlier writers on education, namely, Rabelais and Montaigne. Cf. further (1) Arnstadt, F. A., *François Rabelais und sein Traité d'Éducation mit besonderer Berücksichtigung der pädagogischen Grundsätze Montaigne's, Locke's und Rousseau's*, Leipzig, 1872; (2) Villey, P., *L'Influence de Montaigne sur les idées pédagogiques de Locke et de Rousseau*, Paris, 1911; (3) Thiele, A. E., *Montaigne und Locke, ihre Stellung zur Erziehung und zur Selbsttätigkeit*, Leipzig, 1920. Locke's own influence on Rousseau's *Émile* is obvious enough.

Religion begins with communion between God and the individual in the solitariness of the inner life. And it is a communion into which the individual enters freely.

Holding such views as these it is not surprising that Locke advocated toleration.¹ He was not, of course, the first to argue for toleration. On paper at least the battle was wellnigh won before Locke wrote. The plea for freedom in religion was a plea with which Englishmen had long been acquainted, and by Locke's time it was obvious to the discerning that religious toleration was not only a primary necessity for the spiritual health of the individual, but that it also increased the national strength. It made for understanding and for an inner unity, even at the cost of sacrificing uniformity in worship. Moreover, the economic advantages to be gained from toleration, as the instance of Holland made abundantly clear, were many. But it was not upon arguments such as these that Locke based his case, although they were doubtless in his mind. He tried rather to prove his point by arguing from the essential nature of a religious community on the one hand, and from the inevitable limitation of man's knowledge on the other.

Locke's main arguments are three in number. In the first place, from its very nature no church has a right to persecute, nor has it a right to use the civil power for this purpose. A church is a 'voluntary society of men'. To that extent it is, in Locke's view, analogous to a state, but it differs from the state in one important respect. When a state comes into being the individuals composing it give up their own power of executing punishment, and entrust

¹ In 1660, influenced no doubt by the political situation at the time, Locke's tone had been more reactionary than usual, to judge from the paper on the magistrate's right of interference in 'indifferent things'. But after 1667 his point of view in all his private papers when discussing toleration is identical with that in his *Letters*. The *Epistola de Tolerantia* was written in 1685 in Holland and addressed to Limborch. It is he who seems to have been responsible for its publication in 1689. In the same year an English edition appeared, translated from the Latin by William Popple. (Who wrote the famous *Preface* to this edition? Probably William Popple, although we cannot be certain. Its last paragraph seems to imply that it was written by the translator. Nevertheless, Locke seems to have been in touch with Popple, and the latter may have prevailed upon him to write a preface.) In 1690 Proast 'considered and answered' Locke, and in the same year Locke replied. His *Third Letter*, again in reply to Proast, appeared in 1692.

this power to the state. Now when individuals join a church they do not give it any powers of this sort. A church has no power to use force; whereas a state has. But the state has no right to use its force in religious matters. The purely religious sphere is not political. The care of the citizen's body and of his property is the proper concern of the civil magistrate, but no one, neither God nor man, has entrusted the care of the citizen's soul to him. Accordingly, a church has no right to persecute through its own agents, nor again has it a right to persecute through the civil power.

In the second place, it is most unlikely that any church or any individual man possesses the full truth about human life and destiny. And this very limitation makes intolerance at once unjustifiable. For when two men genuinely disagree after a sincere search for truth, what possible justification can there be for intolerance and persecution on the part of one of these men? Surely no man has a right to persecute another because this other fails to see eye to eye with him. The persecuted party may be nearer the truth than the persecuting. All over Europe in Locke's day the differing sects persecuted each other. Not more than one of them could possess the full truth, and the extreme probability was that none of them possessed it fully. And yet one had the incongruous spectacle of men 'punished in Denmark for not being Lutherans, in Geneva for not being Calvinists, and in Vienna for not being Papists'. It will be time enough to be intolerant when the full truth is known.

But, thirdly, even though we did know the truth, little could be gained by intolerance. The use of force may certainly secure an empty outward conformity, but such conformity does not carry with it inward conviction. It breeds hypocrisy and false religion. Persuasion and example are the true weapons of a church. Persecution is not one of them. Intolerance is not merely evil; it is also ineffective.

These are the arguments upon which Locke bases his plea for toleration. He demands complete freedom for the individual in religious matters, and makes but one exception. If an individual as the result of his religion does positive harm either to another

individual or to the state, then he cannot be permitted to practise his religion. For instance, a religion having human sacrifice as part of its ritual could not be tolerated in any modern community. Locke includes as instances of this exceptional case two groups to whom he would not grant toleration. Atheists cannot be trusted, not having the proper basis for morality, namely, a belief in God. They are, consequently, very likely to do harm to their fellow citizens, and so should not be tolerated. Again, some religions demand from their believers allegiance to a foreign potentate. Locke instances the case of the Mahometans, although it is clear that he has Roman Catholics most in mind. The state can only permit such religions at considerable risk to itself. In all cases, however, where the state intervenes and suppresses, it does so not on religious grounds (for in this purely religious sphere it has no rights whatsoever) but on political and social grounds only.¹

But while Locke advocated toleration in the religious life, he could not but regret the disunion and schism which he saw around him. His ideal was a broad, comprehensive church which could contain within itself men of different opinions. He was convinced that the Latitudinarian position was sound, that belief in one or two essential tenets of the Christian religion should be sufficient for membership. Locke had been brought up a Calvinist, but under the influence of Latitudinarians, Cambridge Platonists, and Remonstrants in Holland he adopted a position in theology more consonant with the liberalism and rationalism of his politics. This becomes apparent in his *Reasonableness of Christianity*.

This book is the outcome of a critical study of the Gospels. Locke approached Holy Scripture with the reverence of a believing Christian, but this did not prevent him from studying it in an intelligent manner. In his historical and critical approach to the Scriptures Locke is a worthy forerunner of Schleiermacher; he is a pioneer of modern Biblical criticism, as is shown both by the *Reasonableness of Christianity* and even more by his commentaries on the Epistles of St. Paul. The introductory essay to the commentaries, *An Essay for the Understanding of St. Paul's*

¹ It is most doubtful whether Locke could successfully justify any exception to universal toleration on these grounds.

Epistles by consulting St. Paul Himself, is an exceedingly able plea for the critical method in the study of the Epistles.

Locke bases his thesis in the *Reasonableness of Christianity* upon an appeal to Scriptures, studied in the same careful and intelligent manner. He argues that if we read the Bible carefully we shall find that the theologians with their endless creeds and dogmas, their mysteries innumerable, and their tiresome articles, confuse the issue. Christianity in its essentials is a rational creed, natural and simple. It demands of the believer, first, that he should believe in Christ the Messiah, one sent from God to reveal his true nature; secondly, that he should live in accordance with the Christian morality, the morality based on this new revelation of God. These are the essentials, and any one who fulfils these is a Christian. The theologian's creeds, the priest's elaborate ritual, do not make a Christian. Christianity is something simpler, although it may very well be more difficult. 'Lustrations and processions are much easier than a clean conscience and a steady course of virtue; and an expiatory sacrifice, that atoned for the want of it, is much more convenient than a strict and holy life.'¹

Christianity is reasonable. It will be recalled that for Locke revelation must be tested by reason. This does not mean that we believe only that which reason gives us. Revelation may well go beyond reason; but it never contradicts it. Now, if we understand the core of the Christian religion properly we shall see that it also is no exception to this general rule. We may admit that the central doctrine of Christianity is that of Justification by Faith. If this were interpreted in the way in which many interpret it, for instance, the Calvinists, it might be difficult to make it rational. Justification by Faith does not, however, in Locke's opinion, involve Original Sin, and so it does not involve Atonement in the usual sense. Adam was immortal, but his disobedience deprived him of this immortal life. In due course he died. (The theologians say he descended into hell, but Locke thinks this non-scriptural and refuses to accept the belief in hell.) Adam's children also died, not because they were Adam's children, but because they could not live in complete accordance with the Law. Like Adam they

¹ *Works*, ii. 575 (1801 ed. vii. 139).

sinned and so lost immortality. Thus, the Jews believed that death awaited all who had fallen from the high standards of the Law and since no man could attain to those standards death awaited all. In the face of this despairing doctrine God in due course sent a messenger, the Messiah, Son of God, born of a virgin, to reveal a deeper truth. God is merciful; he does not demand complete fulfilment of the Law. It is enough if a man accepts Christ, that is, accepts his view of God, and repents of his sin, striving to live in accordance with Christ's teaching. Even though he then fails to attain the full perfection of righteousness he will be justified by his faith in Christ, and through God's grace will enjoy immortal life.¹

Now, if this is the true interpretation of Justification by Faith, the one essential doctrine of Christianity—and Locke thinks that it is—it is not difficult to show that Christianity is reasonable through and through. In the first place, the Law of Moses is the law of nature, the law of reason. Secondly, reason teaches us plainly that God must be one and supreme. Moreover, his mercy and grace are qualities which our reason also would have revealed to us in time. There is nothing irrational in the belief that God is merciful. Mercy in a human being is so clearly a virtue, that it is very rational to suppose the Source of all perfections to possess it as well. Thirdly, the morality of the New Testament is strictly in accordance with human reason. The Gospel is a revelation, but it is reasonable throughout. Its delineation of the Godhead as one Supreme Being, its description of him as merciful, its interpretation of man's duties and of the Law, and its doctrine of Justification by Faith (rightly understood), are all wholly rational. Nothing in Christianity contradicts our human reason.

This interpretation of Christian doctrine is clearly very radical.

¹ The immortality of the human soul is *revealed*, according to Locke, and not known by reason. He had examined the attempts at a rational proof of immortality, but was never satisfied with any of them. Cf. the important passage in his journal (Aaron and Gibb, pp. 121-3). A proof that the immaterial soul is indestructible is no proof of eternal *life*. For often the immaterial soul is insensible, for instance, in sleep, and if the immortality which pertained to it was that of eternal sleep this would not be the immortality of Scripture. Moreover, he points out in his correspondence with Stillingfleet (*Works*, i. 597) that the immortality of Scripture is not the eternal existence of the soul. The soul did not pre-exist its present state. It is an eternity as to the future only.

It is not altogether surprising that Edwards should have held the *Reasonableness of Christianity* to be 'all over Socinianized'. Its account of Justification by Faith could not but give offence to a large section of Protestant theologians. It was accepted gladly by most Arminians, and by Unitarians, then increasing in number. The Unitarian leader, the philanthropic merchant Thomas Firmin, was an old friend of Locke's, and undoubtedly influenced his theology. The *Reasonableness* does not deny the doctrine of the Trinity, but it does stress the unity of the Godhead, and it omits the Doctrine of the Trinity from the list of reasonable doctrines. The Atonement is also whittled away, and the Cross ceases to be central in Christian theology. The first Unitarians must have derived considerable satisfaction from reading Locke's works. None the less, he cannot be classed with them. In the *Vindications*, which he wrote in answer to Edwards's attacks upon him, he definitely states on more than one occasion that he is no Socinian, that he does not deny Christ's divinity, nor any of the main Mysteries of the Christian religion. If he was in agreement with Unitarians on some points he could not agree with them on others.¹

What of his relations with Deism? On more than one occasion he has been called the father of Deism. But this is a title to which he clearly has no right, since it belongs to Lord Herbert of Cherbury. Deism began with Lord Herbert, although half a century was to go by before it came to play a large part in the religious and intellectual life of the country. Toland, Collins, Blount, Tindal, Wollaston, Morgan, and Chubb are some of the more famous names in Deist literature. They ignored professed revelation and tended to reject entirely the mysterious and supernatural elements in the Christian religion. To all intents and purposes they identified the religious life with the moral. Their chief stress was on Natural Religion and on reason. Now Locke had much in common with theorists of this sort. He emphasized as much as they did the place of reason in the religious life, and the supreme importance of the moral life. He would not make the acceptance

¹ On this matter cf. also the interesting correspondence between Locke and Limborch during these later years.

of the Thirty-Nine Articles, or of any like body of creeds, essential to the religious life. He recommended a critical approach to the Scriptures. Moreover, one of the Deists, Toland, openly boasted that Locke was his inspiration, whilst another, Collins, was an intimate of Locke in his last years, and, as we have seen, Locke thought most highly of him. And yet Locke can no more be classed with Deists than with Unitarians. It is significant that though he was charged with Socinianism, none of his opponents ever charged him in his own day with being a Deist.¹ In the Molyneux correspondence when writing of Toland, and again in the Stillingfleet controversy, Locke emphatically denied that he was one of this school. And it is important to bear in mind that the most orthodox of Christians in Locke's time was quite as anxious as any Deist to make his religion appear rational and 'in accordance with nature'. Locke admittedly was not orthodox, but yet he was no Deist. He differed from the Deists in one most important respect. He held that whilst religion never contradicted reason, reason itself cannot take us the whole way. Since we are finite and limited beings, reason cannot reveal to us all we need to know in order to live the religious life. We do know how to live that life, but only because God has spoken his Word to man through Christ. That event was not merely rational and not merely natural. The supernatural remains in Locke's theology; the Mysteries remain. Locke believes in the Virgin Birth and the Resurrection from the Dead. The miracles remain; they are the sure testimony of the supernatural power and authority of Christ.² For reasons such as these Locke cannot be classed with the Deists.³

¹ Mr. J. W. Yolton informs me of one exception, John Edwards, *A Free Discourse Concerning Truth and Error* (1701), pp. 80-87. The charge was frequently made in the decade after Locke's death.

² On miracles cf. Locke's interesting *Discourse on Miracles*. They are the marks of the 'over-ruling power' of Christ. Locke meets with a difficulty in trying to define a miracle. We cannot hold that to be a miracle in which a law of nature is broken, for this assumes that natural laws are known to us as ultimates, laws which can never be broken. But Locke does not believe that any inductively established laws are ultimate in this sense. He, accordingly, defines a miracle caustically as 'a sensible operation, which being above the comprehension of the spectator and in his opinion contrary to the established cause of nature, is taken by him to be divine'.

³ On this whole question of Locke's relations to Deism cf. further: Ernst Crous, *Die religionsphilosophische Lehre Lockes und ihre Stellung zu dem Deismus*

Locke is radical and yet conservative; he is a rationalist and yet he finally puts his faith on what is not reason. That is why he differs from both Unitarians and Deists. This apparently paradoxical attitude of his is the outcome of a prudent realization of human limitations. Reason alone is inadequate. It is inadequate in the sphere of religion, just as it is inadequate in the sphere of natural science. There we have to wait on sense-experience. And it seems as if Locke recognizes in religion also a religious experience, a feeling and an intuition of God, Pascal's knowledge of 'the heart', which supplements reason. In the *Essay* Locke distinguishes between the revelation which comes from God through reason and that which comes through His Spirit.¹ For beings constituted as we are, children of the twilight, the former is not enough. And it is dangerous to erect a faith on it alone—as dangerous as it is to deduce a science of nature *a priori*. Locke does not analyse this second kind of knowledge, this consciousness of the presence of God in our life. He hardly ever talks of it. But he makes it none the less clear that it is an essential element in religion. Locke differs from Deists and Unitarians not because his faith in reason is less than theirs, but because he does not put his faith in reason alone.

And when we pass from the particular problems of Christian theology to the final problem of theology itself, that of the being and nature of God, it is clear that Locke does not expect reason to provide the full solution in this case either. He thinks we can prove God's *existence* by reason, and offers a proof in iv. x of the *Essay*. That proof, we have seen, is not beyond suspicion. But it is obvious in reading it that it is an attempted rationalization of what is already believed. Locke believes first, and then seeks rational justification for his belief in the cosmological argument. Why does Locke believe? His education and the custom of the age clearly account in some part for this fact. But the belief plays too great a part in his philosophy to be attributed entirely to these sources. Locke, no doubt, did feel that a First Cause was essential, and he also felt that we ourselves needed explaining. Surely the

seiner Zeit. (Phil. u. ihre Gesch., 1910, Abt. 3). Also Hefelbower, *The Relation of John Locke to English Deism*, Chicago, 1918.

¹ iv. vii. 11.

cause of 'cogitative beings' must itself be 'cogitative'. The First Cause must be Spirit. Again, the order in the universe—however we account for its disorder and its evil—is too great to allow us to suppose that it is the result of an accidental 'concourse of atoms';¹ it must surely be the work of an intelligent Creator. Moreover, man is not merely cogitative, he is also moral; and although Locke never presents us with an adequate analysis of the moral consciousness, he does vaguely feel something of what Kant made clear later, that morality (if we interpret it in the Kantian way) necessitates the being of God. Of all this and more Locke was aware. Yet one cannot but feel that his real ground for believing was no rational argument of any kind. It was the knowledge of God 'through His Spirit', this deep intuition of his presence. The piety and deep religious feeling of Locke's works forcibly suggest such a view.

As to the nature of God Locke has little to say. We cannot hope to know him fully as he is. We frame an idea of him as best we may, a complex idea, framed, as all complex ideas are framed, from ideas of sensation and reflection. We think of all the qualities that are worth possessing and attribute these to God—not, however, as they are to be found amongst us, but as they are in their perfection. God is one, enduring from eternity to eternity; in him is all true pleasure and happiness; he is omniscient, wholly good, and omnipotent. But ours is no positive idea of God. When we say that God is good what we mean is that he is better than anyone else, that his goodness is greater than the greatest goodness we have yet known. When we say that he is wise we mean that his wisdom surpasses all the wisdom we know positively. It is no positive conception. Our complex idea of God must fall far short of the reality; in his true nature he must be very different from our best conception of him. That this is so is not to be wondered at if we recall our ignorance even of finite things, even of our own selves. It is not strange if the infinite is almost wholly hidden from us. God is incomprehensible. And yet, Locke thinks, we are aware of him as a powerful presence in our life, and in this knowledge find strength and peace.

¹ Cf. *Essay*, iv. xx. 15.

CONCLUSION

LOCKE's contributions to his age were many and varied. In the first place, he led men to think more deeply over problems which had previously been handled superficially. He showed the inadequacy of much traditional teaching. He questioned where men had been apt to take for granted. In this connexion much of the credit which has gone to Hume really belongs to Locke. Secondly, certain sections of the *Essay* stand out as very valuable contributions to philosophy. Valuable in this respect are the account of primary and secondary qualities, the analysis of the idea of substance, the discussion of personal identity, the examination of words, the treatment of definition, the division of the sciences, the theory of knowledge, and the empiricism. The philosophical treasures which the *Essay* contains are still far from being exhausted. In the third place, Locke contributed to the political life of his day. In his political writings he supported the Whig cause and provided it with a rational justification for its epoch-making revolution. He also furnished that party with principles upon which to base its future programme. In the religious sphere he advocated far-reaching reforms and strengthened the hands of those pioneers who attempted an intelligent and critical interpretation of the Scriptures. Finally, his writings on subjects connected with finance and economics, and again his practical activities as Commissioner of Trade and Plantations, were of considerable importance. He certainly helped to prepare the way for the industrial and colonial expansion of this country in the century which followed.

If, however, we are asked for Locke's main contribution to his age and to subsequent ages we may perhaps best answer in this way: His writings secured for posterity the advances which had been made by the most radical and progressive elements of society in the seventeenth century. He consolidated the advanced positions. He did not accept everything which his radical predecessors had taught. Some of their teaching he considered impracticable. But what he saw to be living and important he retained, and in his

statement of these matters captured the public ear so completely that it was impossible for his contemporaries and for many subsequent generations to ignore him. Locke's works dominated the English mind in the first half of the eighteenth century, and his influence was almost as great in America and in France.

Locke was fortunate in his period. He came at the end of a century of intense intellectual activity and real advance. In politics there had been many significant and, sometimes, strange movements culminating (in this country) in the decisive struggle between monarch and parliament. As the century wore on the demand for a democracy and for political equality became definite. (Winstanley and his followers had gone even farther; they had demanded economic equality as well as political. But seventeenth-century England was not ripe for communism.) In the religious sphere a fierce battle had been fought. A new note of bold criticism had been struck. Radicals demanded complete liberty in religion and complete toleration. In the sciences also substantial progress had been made, and the main hopes of the century centred upon it. Here it was felt a new weapon of incalculable worth was being forged for man's use. The closer control of nature which was promised would increase wealth and prosperity, bring greater comforts, improve health, and so ensure a longer life. The Cartesian dream of a 'universal mathematics' which would provide man with a complete and certain knowledge of nature had captured the imagination of the century. How much might be achieved for the amelioration of the human lot through the complete conquest of nature!

Locke's sympathies were wholly with these progressives. In politics and religion he shared their dreams and hopes, and he was as eager a supporter of the 'new philosophy' as any. But he was also their critic. He had his standards. He would reform prudently.¹ He would accept all that could be accepted, but reject the imprudent. In this way he could best safeguard the real advance made by his predecessors. This clearly is his aim in politics. His observations in this sphere had led him to conclude that a

¹ Prudence in his case was a blend of experience and reason, the combination of long observation of human life with long reflection upon it.

monarchy was essential for seventeenth- and eighteenth-century Britain. Accordingly he dismissed republicanism. In the same way he had also concluded that the rights of individuals to private property had to be maintained in an age when British industrialists and British merchants needed to be encouraged to capture their full share of the world's expanding trade and increasing wealth. But once these reservations were made, the theory which then emerged in his political works was entirely radical. The true sovereign of his state was the people, which, however, delegated its authority to a legislative assembly. This assembly was itself elected by the people, and controlled by general elections. The power of the monarchy was hedged around in every possible manner. It was a constitutional monarchy deriving its authority explicitly from the consent of the people. The state, as conceived by Locke, was democratic in the most important sense that its unity and strength lay in the willing acceptance of law by a free people, whose legislative had itself framed the law it was to obey. Locke's *Civil Government* was the last word of the seventeenth century on the radical side and it made the issues clear to the eighteenth.

In respect to religion also Locke applied his standards rigidly. He accepted the views of Latitudinarians and other progressives that the essential beliefs which should be demanded for membership in a church ought to be as few as possible, that the blind acceptance of dogma was not to be recommended, that religion was first a way of life and then a creed. He was foremost in his demand for toleration. If he advocated certain limitations to complete toleration he advocated them, as we have seen, on political rather than on religious grounds. There should be, he argued, no interference in the private religious life of each individual. In this realm, more than in any other, the individual should be given complete freedom. No outside authority should be permitted to impose its will upon him. Reason and conscience alone should guide him. But although Locke accepted and himself advocated these liberal proposals, there was one extreme position which he would not accept. He would not accept the view that revelation was worthless, and that the only true religion was natural religion.

Reason in man was too narrow a foundation for the religious life. It must be helped out by revelation; although the final judge and arbiter as to the genuineness of a particular revelation must in each case be the individual's reason. But reason of itself is not enough. The extreme radical position which would reject revelation must itself be rejected lest true advance in religion be impeded.

In this way Locke attempted to consolidate the advances already made in the seventeenth century. And it is not overfanciful to regard the *Essay* also as consolidation in the field of knowledge and of philosophy. In philosophy the progressive party was the Cartesian. The pioneers were either confessed Cartesians or men linked closely to that school. (The Gassendists were exceedingly few, and counted for little.) And the main advance which the Cartesians claimed to have made was in physics. They had discovered afresh the certainty and fecundity of mathematical reasoning. With the aid of mathematics much greater advance had already been shown to be possible by the scientists of the Renaissance, particularly by Galileo, than the medievalists had ever conceived. The schools still confined themselves to their syllogisms. But the Cartesians argued that the mathematical procedure could be yet more extensively applied. They applied it to physics and intended to apply it to every branch of human inquiry. They aimed at a universal mathematics, a final philosophy in which all the problems which then vexed the human mind could be solved.

Now Locke realized that the Cartesians had set before themselves an ideal which they could never attain. He accordingly opposed them. But he did not oppose them in any reactionary spirit. He certainly did not defend the schools. He was as impatient of the restrictions they would have set upon reason, their syllogisms, their arguments from maxims, as was Descartes—perhaps even more impatient. But he opposed the Cartesians because, so he thought, they were too optimistic and their optimism endangered sound advance. They thought reason, working in the void, by proceeding in accordance with those 'high priori' methods which admittedly had succeeded so well in mathematics, could gain complete knowledge of the physical world of nature.

They had not realized that physics and all the other natural sciences were essentially different from the mathematical sciences, different because their objects were completely different. The object in the case of mathematics is an abstraction; in the case of physics, Locke held, it is the concrete physical thing. Descartes and his followers had neglected this distinction. They were not entirely unaware of it. They knew that the physical object as experienced was such that it could not be dealt with wholly in mathematical terms, but they neglected all its qualities except extension; they framed a new abstraction and a new object which could be handled by pure mathematics, and so erected a system which they called physics, but which was in reality a fanciful creation of their own imagination. But a true physics, Locke urged, must proceed and can only proceed through reasoning upon material provided in experience. And that material is not such that it can be handled entirely in mathematical terms. Nor again can it be handled deductively, for we do not know the inner and necessary connexions holding between qualities in a thing, so that we cannot deduce with certainty what qualities must pertain to the thing and how it will behave in relation to other things. We can only conclude, from frequent recurrences of a relation in our experience, and from our failure to discover a negative instance, that this relation probably holds universally. Never does physics and never do the other natural sciences become purely deductive like the mathematical sciences. They rest finally on induction. In the mathematical sciences reason, once it has gained its fundamental ideas, for instance, number and space,¹ can proceed independently of all reference to experience. But in the natural sciences reason must wait upon experience and be guided by it throughout, and this in turn means that it cannot gain complete certainty. (If we define 'science' in the narrow sense in which Locke defined it, as meaning certain knowledge, then the natural sciences are not truly sciences.)

Now Locke's criticism of the Cartesians is that they neglected this all-important division of the sciences and as a consequence

¹ How these fundamental ideas are gained is never satisfactorily cleared up in the *Essay*, as we have seen. Locke seeks for an empirical source.

sought to turn sciences which, from their very nature, had to be inductive into deductive ones having a full measure of certainty. They were bound to fail. As far as the natural sciences are concerned the only possible advance is by the careful observation of nature, by experimentation, and by following the guidance of experience. The main lesson of the *Essay*, although it is not its only lesson, is that the *historical, plain* method is the one method which can be used in our inquiries into nature. If we would advance in these inquiries, therefore, it must be by this method. Descartes and the Cartesians misled men; the true lines of advance are those laid down by Boyle, Newton, and the empiricists.

It is thus possible to conceive the whole of Locke's work as consolidation through criticism, and preparation for future advance. His aim was clear: to forward man's progress in material prosperity, in his social relationships, and in his religion. Locke, like most of his contemporaries, was severely practical and severely utilitarian. The real business of life and its true end was the increase of human pleasure and well-being. 'The business of men', he wrote in his journals, 'being to be happy in this world by the enjoyment of the things of nature subservient to life, health, ease, and pleasure, and by the comfortable hopes of another life when this is ended; and in the other world by an accumulation of higher degrees of bliss in an everlasting security; we need no other knowledge for the attainment of those ends but of the history and observation of the effects and operations of natural bodies within our power, and of our duties in the management of our own actions as far as they depend upon our will.'¹ Locke knew the value of recreations—games, good conversation, friendship, poetry, eloquence, the arts, even knowledge for knowledge's sake. But these were 'entertainments'. The true business of man was the improvement of his lot. There is no denying the thorough-going utilitarianism of Locke's philosophy and no denying also that occasionally its utilitarianism is both narrow and harsh. Yet it was in accord with the spirit of his day. It was the austere philosophy of an age inspired wholly by one great hope, that of progress. Locke viewed man as a child of twilight, the lowest intelligence

¹ Journal, 8 February 1677 (Aaron and Gibb, p. 88).

in that spiritual chain of being descending from the highest, God, to man. Man's ignorance is inevitably great. Yet his present ignorance is greater than it need be, and so also is his present unhappiness. He must bestir himself. He has faculties which properly used can advance knowledge and increase happiness. But this end will not be secured through wild experimentation in the political and religious life nor through wild speculation in philosophy. The end can only be gained by a cautious and diligent reflection upon experience. Man must learn the hard lesson, to wait humbly and patiently upon experience, and frequently to be content with probability.

APPENDIX

THE LOVELACE COLLECTION

It has been suggested to me that I might give some account of the rediscovery of Locke's papers in 1935.

The seventh Lord King in *The Life and Letters of John Locke* (1829) published many of the papers and letters which Locke had bequeathed to Peter King, but very little use was made of this collection in the nineteenth century. Benjamin Rand knew of it at the beginning of the present century, and in 1927 published 91 letters from it to Locke from Edward Clarke. In 1931 he published the early draft of Locke's *Essay* which we now know as Draft B, speaking of it as the 'original' draft. He makes no reference to the other papers in the collection and apparently had not studied them. Rand, whom I knew personally, was a very keen student of philosophical manuscripts and it is unthinkable that he could have studied these papers and not realized their worth.

It was not Rand's references to the collection, however, which aroused my curiosity, but rather what King had said a century earlier. In the Preface to his book King had described what was obviously a large collection, most of which was unpublished, consisting of letters, journals, common-place books, manuscripts, and printed books. He explained, too, that he was publishing part of the papers only. Most tantalizing was a reference (second edition, 1830, i. 10) to 'the original copy' of the *Essay*, the beginning of which was quoted. It was dated 1671, and the few lines quoted were enough to show that this was not the early draft of the *Essay* which Rand had printed.

I believe I assumed that the papers to which King referred were no longer in existence since Rand did not appear to know of them, but I wrote to the Earl of Lovelace, on the off chance, declaring my interest and asking if he still possessed any of Locke's manuscript remains and whether I could consult them. Some time elapsed before a reply came and when it did, it came not from the Earl of Lovelace but from Jocelyn Gibb, whose brother was married to the Earl's sister. The Earl was abroad in Africa at the time and Mr. Gibb, who held his power-of-attorney, invited me to stay at his family home in Hampshire to show me the Locke material which he was then putting in order.

He and his father, Sir Alexander Gibb, were most kind. I found there thousands of letters (most of them to Locke) and a great number of manuscripts. I spent some days working through the papers and well remember the most exciting moment when in turning over the leaves of a common-place book I came across that early draft of the *Essay* of which King had quoted the first paragraph. Such moments as these are the deepest and most satisfying rewards of scholarship. Later that day I discussed the draft with Jocelyn Gibb and we decided, if we could, to publish the work together, Mr. Gibb to be responsible for preparing the text, which I was to check, edit, and annotate. I wrote at once to Sir David Ross of Oxford asking, first, whether the University Press there might be interested in the publication and, secondly, describing the collection, pointing out its value and suggesting that its permanent home should be the Bodleian. (Mr. Gibb has informed me since that, on the suggestion of Sir George Clarke and Dr. R. W. Chapman, the Librarian of the Bodleian, Dr. (later Sir) Edmund Craster, was already in correspondence with him about the collection, but I knew nothing of this at the time.) In his reply Sir David told me that the Press was interested and that he had spoken to Dr. Craster. The latter agreed that the collection was most valuable; both he and Sir David would indeed be very happy to see it in the Bodleian.

These events occurred towards the end of 1935. Draft A was published by Oxford University Press in 1936, and Mr. Gibb deposited the collection in the Bodleian at the beginning of the war, giving the Library a form of option on its purchase, which eventually took place in 1947. A full and scholarly report was written on the collection for the Bodleian by Dr. von Leyden, and a brief account of the history and contents of the collection will be found in his *Essays on the Law of Nature*, pp. 1-7. I should add that the common-place book containing Draft A was not deposited with the other papers in the Bodleian but is now (1962) in America.

MANUSCRIPTS IN THE LOVELACE COLLECTION IN THE
BODLEIAN DEALING WITH PHILOSOPHICAL SUBJECTS

1. Notebook on Logic, 1652(?).
2. Notebook entitled 'Lemmata: ne'. c. 1660.
3. Treatise on the Civil Magistrate, in reply to a treatise by Edward Bagshaw. 1660.
4. 'An Magistratus civilis . . .' (essay in Latin on the right of the civil magistrate to interfere in things relating to religious worship). 1660.

5. Essays on the Law of Nature, in Latin. 1663.
6. 'An Essay Concerning Toleracōn 1667'.
[This is the final version of the essay. Three other manuscript copies are known:
(a) the earliest draft, in the Huntington Library;
(b) the version in the Shaftesbury Papers, Public Record Office, printed by Fox Bourne, *Life of John Locke*, 1876, i. 174-94;
(c) the copy in Locke's Commonplace book 1661, of which Lord King printed the end (*Life*, 1858, p. 156).]
7. 'Intellectus 1671 JL'.
[This is 'Draft B' of the *Essay Concerning Human Understanding* published by B. Rand (Harvard U.P., 1931). Two other manuscript versions written in 1671 are
(a) 'Draft A', written in Locke's Commonplace book 1661 (now in America, privately owned) and published by R. I. Aaron and J. Gibb (O U P., 1936).
(b) 'A(i)', a copy of part of Draft A in the Public Record Office.
A further manuscript, 'Draft C', in the Pierpont Morgan Library, New York, is a draft of the first two books of the *Essay*, dated 1685]
8. 'Sapientia' (map of knowledge). 1672.
9. 'Essay de morale. 77' (notes on Locke's translation of three of Nicole's Essays). Partly printed by King, *Life*, 1858, pp. 130-1. 1677.
10. 'Adversaria 19 Aug. 77' 1677
11. 'Adversaria 12 Nov. 77' 1677.
12. Notes on Stillingfleet's sermon 'The Mischief of Separation' (1680) and his treatise 'The Unreasonableness of Separation' (1681). Partly printed by King, *Life*, 1858, pp. 346-58. c. 1681-3.
13. Summary of the *Essay* 1687(?) Printed by King, *Life*, 1858, pp. 365-98.
14. (a) 'Thus I thinke' and 'of Ethick in General' 1689-90(?).
(b) 'Physica. . . .' 1689(?) (notes for *Essay*, IV. xx, in Latin and Greek).
15. 'Case of allegiance due to Sovereigne Powers.' 1691 (notes on a pamphlet by William Sherlock).
16. Criticisms of the *Essay* by William King, Bishop of Derry. 1692.
17. 'JL to Mr Norris' 1692 (unpublished reply).
18. Commonplace sheet. 1693.
19. 'JL Of Seeing all things in God 1693' (*Examination of Malebranche*).
20. 'Some other loose thoughts . . . in a perusal of Mr Norris's writings.' 1693.
21. Single sheet 'Recherche'. 1693(?).
22. 'Understanding A' (Additions to *Essay*, Book II). 1694. Printed by King, *Life*, 1858, pp. 323-5, 327-8, 359-60
23. Additions to *Essay*, III. x. 11. 1694. Printed by King, *Life*, 1858, pp. 361-4.
24. Draft of *Conduct of the Understanding*: Additions to the *Essay*. 1695; 1697.

25. 'Deus Des Cartes's proof of a god from the Idea of necessary existence examined 1696'. Printed by King, *Life*, 1858, pp. 313-16.
26. Three copies of Leibniz's Remarks on Locke's *Essay*. 1696-7 (first published as an appendix to Locke's letter to Molyneux, 10 April 1697, in *Familiar Letters*)
27. Fair copy of part of the draft of *Conduct of the Understanding*. 1697(?)
28. 'Ethica B' (notes on ethics). 1690's(?).
29. 'Morality' 1690's(?)
30. Table of knowledge. 1690's (?)
31. Draft of part of the *Fourth Letter for Toleration* 1704. (This, the last of Locke's writings, was written on the blank sides of old letters, one of which is endorsed 'P. King 8 Aug. 04')
(Cf 'Notes concerning Papers of John Locke in the Lovelace Collection', by W. von Leyden. *Phil. Quart.*, January 1952, pp 63-69.)

For a full catalogue of the Lovelace Collection, cf. P. Long: *A Summary Catalogue of the Lovelace Collection of the Papers of John Locke in the Bodleian Library*. Oxford Bibliographical Society Publications, New Series, Vol. 8 (1959). The above list of the philosophical manuscripts in the Collection I owe to Mrs. C. S. Johnston.

BIBLIOGRAPHY

The appended bibliography is in no sense complete. I have only included those books and pamphlets which I have found useful. A fuller bibliography is that of Christophersen, H. O., *A Bibliographical Introduction to the Study of John Locke*, 1930 (*Skrifter utgitt av det Norske Videnskaps-Akademi, Hist.-Filos. Klasse*, 1930, no. 8), although this also is incomplete.

I. LOCKE'S PUBLISHED WORKS

- 1654 In a book of poems published by John Owen in honour of Cromwell are two poems, one in Latin, the other in English, by Locke.
- c. 1661 *Two Treatises on the Civil Magistrate* (included in *Scritti editi e mediti sulla tolleranza* ed. by Carlo Augusto Viano, Taylor, Turin, 1961).
- 1662 *Domiduca Oxoniensis sive Musae Academicæ*. Poem by Locke: 'On the Marriage of King Charles II with the Infanta of Portugal.'
- 1663 *Essays on the Law of Nature*. (The Latin text with a translation ed. by W. von Leyden, 1954.)
- 1668 In Sydenham's treatise (2nd edition) *Methodus curandi Febres*, 1668, there is a Latin poem signed by J. Locke: 'In Tractatum de Febris D. D. Sydenham, praxin Medicam apud Londinenses mira solertia aequae ac felicitate exercentis.'
- 1671 Draft A (*An Early Draft of Locke's Essay Together with Excerpts from his Journals*, ed. by Aaron and Gibb, Oxford, 1936)
Draft B. (*An Essay concerning the Understanding, Knowledge, Opinion, and Assent*, ed. by Benjamin Rand, Harvard, 1931.)
- 1675-9 *Locke's Travels in France, As related in his Journals, Correspondence and other papers*. Ed. John Lough, C.U.P., 1953.
- 1686 (In Leclerc's *Bibliothèque Universelle et Historique*, July, p. 315): 'Méthode nouvelle de dresser des Recueils. Communiqué par l'Auteur.' (Reappeared in English in the *Posthumous Works*, 1706.)
- 1688 (In the same journal, January, pp. 49-142): 'Essai Philosophique concernant l'Etendement où l'on montre quelle est l'étendue de nos connaissances certaines, et la manière dont nous y parvenons.'
- 1689 *Epistola de Tolerantia ad Clarissimum Virum*. Gouda.
- 1689 *A Letter concerning Toleration* (translation of above by Wm. Popple). Printed for Awnsham Churchill, at the Black Swan at Amen Corner
- 1690 *A Second Letter concerning Toleration*. Printed for Awnsham and John Churchill, at the Black Swan in Ave-Mary-Lane, near Pater-Noster-Row.
- 1692 *A Third Letter for Toleration*. Printed for Awnsham and John Churchill, at the Black Swan in Pater-Noster Row. ('Part of a

- Fourth Letter for Toleration' appeared in *Posthumous Works*, 1706.)
- 1690 *Two Treatises of Government*. London Printed for Awnsam Churchill at the Black Swan in Ave-Mary Lane by Amen Corner. 1694, Second edition. 1698, Third edition.
(Cf. *Two Treatises of Government: A Critical Edition*, ed. Peter Laslett, Cambridge, 1960.)
- 1690 *An Essay Concerning Humane Understanding: In Four Books*. [first issue] Printed by Eliz. Holt for Thomas Basset at the George in Fleet St., near St. Dunstan's Church; [second issue] Printed for Tho. Basset and sold by Edw. Mory at the Sign of the Three Bibles in St. Paul's Churchyard.
- 1694 Second Edition, '*with large Additions*' [first issue] Printed for T Dring at the Harrow over-against the Inner Temple Gate in Fleetstreet and S Manship at the Black Bull in Cornhill, near the Royal Exchange, [second issue] Printed for Awnsam and John Churchil at the Black Swan in Paternoster Row and Samuel Manship at the Ship in Cornhill, near the Royal Exchange.
- 1695 Third Edition. A reprint of second edition.
- 1700 Fourth Edition, '*with large Additions*'. Printed for Awnsam and John Churchil and Samuel Manship
- 1706 Fifth Edition, '*with many large Additions*' Printed for Awnsam and John Churchill and Samuel Manship.
- 1692 *Some Considerations of the Consequences of the Lowering of Interest and the Raising of the Value of Money*.
- 1693 *Some Thoughts Concerning Education*. Printed for A. and J. Churchill.
- 1695 *Short Observations on a printed Paper, intituled For Encouraging the Coinage of Silver Money in England and after for keeping it here*.
- 1695 *Further Considerations Concerning Raising the Value of Money Etc*.
- 1695 *The Reasonableness of Christianity, as delivered in the Scriptures*. Printed by A. and J Churchill.
- 1695 *A Vindication of the Reasonableness of Christianity Etc. From Mr. Edwards's Reflections*.
- 1697 *A Second Vindication of the Reasonableness of Christianity Etc. By the Author of the Reasonableness of Christianity*.
- 1697 *A Letter to the Right Rev. Edward Ld. Bishop of Worcester, concerning some Passages relating to Mr. Locke's Essay of Humane Understanding. In a late Discourse of his Lordship's in Vindication of the Trinity. By John Locke, Gent* Printed by H. Clark, for A. and J. Churchill and Edw. Castle.
- 1697 *Mr. Locke's Reply to the Right Rev. The Lord Bishop of Worcester's Answer to his Letter*.
- 1699 *Mr. Locke's Reply to the Right Rev. The Lord Bishop of Worcester's Answer to his Second Letter*.

- 1705-7 Paraphrases of the Epistles of St. Paul. (For further information and full titles of paraphrases consult Christophersen.) With an introductory *Essay for the Understanding of St. Paul's Epistles by consulting St. Paul himself.*
- 1706 *Posthumous Works of Mr. John Locke: viz. I. Of the Conduct of the Understanding. II. An Examination of P. Malebranche's opinion of seeing all things in God. III. A Discourse on Miracles. IV. Part of a fourth Letter on Toleration. V. Memoirs relating to the Life of Anthony, first Earl of Shaftesbury. To which is added VI. His new Method of a Common-place-Book, written originally in French and now translated into English.* J. Churchill, London.
- 1714 *The Remains of John Locke.* E. Curll, London.
- 1714 *Works of John Locke*, 3 vols. Churchill & Manship, London. Second ed. 1722, third 1727, fourth 1740, tenth 1801 (in 10 vols.).
- 1720 *A Collection of Several pieces of Mr. John Locke, never before printed, or not extant in his Works.* [P. Des Maiseaux's Collection.]
- 1754 *Some Thoughts on the Conduct of the Understanding in the Search of Truth.* Glasgow. 1762, London.

(Many other works are attributed to Locke; cf. Christophersen.)

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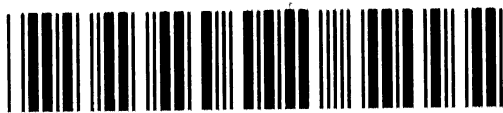
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