

G.W. LEIBNIZ

---

New Essays on  
Human  
Understanding

Abridged edition

*Translated & edited by*  
PETER REMNANT &  
JONATHAN BENNETT

G. W. LEIBNIZ

---

NEW ESSAYS ON  
HUMAN UNDERSTANDING

Translated and edited by  
Peter Remnant  
and  
Jonathan Bennett

ABRIDGED EDITION

CAMBRIDGE UNIVERSITY PRESS  
CAMBRIDGE  
LONDON NEW YORK NEW ROCHELLE  
MELBOURNE SYDNEY

Published by the Press Syndicate of the University of Cambridge  
The Pitt Building, Trumpington Street, Cambridge CB2 1RP  
32 East 57th Street, New York, NY 10022, USA  
296 Beaconsfield Parade, Middle Park, Melbourne 3206, Australia

© Cambridge University Press 1982

First published 1982

Printed in Great Britain by  
Redwood Burn Limited  
Trowbridge, Wiltshire

Library of Congress catalogue card number: 82-1334

*British Library cataloguing in publication data*

Leibniz, Gottfried Wilhelm

New essays on human understanding – Abridged ed.

1. Philosophy

I. Title II. Remnant, Peter

III. Bennett, Jonathan IV. Nouveaux  
essais sur L'entendement humain. *English*

193 B1294

ISBN 0 521 28539 9

## INTRODUCTION

### i Leibniz

Gottfried Wilhelm Leibniz was born in Leipzig on 1 July 1646.<sup>1</sup> His father, Friedrich (d. 1652), was Professor of Ethics and Registrar at Leipzig University; his mother was Catherina née Schmuck (d. 1664). He was brought up a Protestant and, in spite of great inducements to convert to Roman Catholicism, remained a loyal, though discriminating, adherent to Protestantism throughout his life. He attended school in Leipzig from age seven to fourteen after which he entered Leipzig University. Throughout the period of his schooling he had free run of his father's library. He received his bachelor's degree in Philosophy in December 1662 and his master's degree fourteen months later; the professors who most influenced him during this period were the Aristotelian philosopher Jacob Thomasius at Leipzig and the mathematician Erhard Weigel at Jena, where he spent a summer. In 1665 he presented two theses for the degree of Doctor of Laws and in the following year he qualified to teach in the Faculty of Philosophy by presenting the first part of his treatise *On the Combinatorial Art* – the founding document of modern logic; but his doctorate in law was withheld, and his hope of a teaching appointment in the Faculty of Laws dashed, because of his youth. In consequence, he left Leipzig for Nuremberg and its University of Altdorf, where he presented yet another thesis and received his doctorate in canon and civil law in February 1667. However, he refused the offer of a professorship at Altdorf, with the remark that 'my mind is inclined in a quite different direction'.

Leibniz spent the ensuing spring and summer in Nuremberg, where he became the secretary of a society of alchemists. In the autumn he moved on to Frankfurt-am-Main and Mainz. In Frankfurt he met the statesman Johann Christian von Boineburg, whom he

<sup>1</sup> All dates are given in terms of the Gregorian calendar, though this was not adopted by the German Lutheran states until 1700 and in Britain not until 1752.

assisted in cataloguing his library, and through Boineburg he met the Elector of Mainz, Johann Philipp von Schönborn. In 1668 Schönborn appointed Leibniz as a legal and diplomatic adviser to the Electoral Court in Mainz. Schönborn and Boineburg were both Roman Catholics of conciliatory tendency and in their service Leibniz seems to have first conceived his ambitious project of reuniting the various Christian sects.

At the time of Leibniz's appointment in Mainz, Louis XIV of France was ostentatiously preparing to invade the Netherlands. Leibniz conceived the idea of redirecting these hostilities against the Turkish regime in Egypt. Boineburg was favourably impressed and enlisted Schönborn's support, and in March 1672 Leibniz set out for Paris with a detailed plan for a French invasion of Egypt. His hopes of influencing French foreign policy were stillborn, but he remained in Paris for almost five years – the most intense and formative years of his life. Paris at this time was the hub of western civilization. Leibniz quickly made the acquaintance of scientists, philosophers, theologians, statesmen: of the physicist and mathematician Christiaan Huygens, of the philosopher Nicolas Malebranche and the philosopher-theologians Antoine Arnauld and Pierre Nicole (the authors of the 'Port Royal Logic'), and of the statesman Jean Baptiste Colbert, the First Minister of France and the founder of the French Academy of Sciences. During the first two months of 1673 he went to London with a diplomatic mission from Mainz. He found time there to attend a meeting of the Royal Society, of which he was later made a member, and to meet Henry Oldenburg, Robert Boyle, Robert Hooke, and other members of the scientific community. His exposure to the leading scientists of the day and to their ideas acted as a stimulus to his own scientific endeavours. He perfected, within the limits imposed by the materials available to him, a calculating machine of his own design which could add, subtract, multiply, divide, and extract square and cube roots, and he invented an instrument for solving algebraic equations. But what particularly occupied him was the search for a general method of analysing geometrical figures bounded by curves. The outcome was his discovery, by the autumn of 1675, of the foundations of the differential and integral calculus. During his final year in Paris he tried to obtain a salaried position there, at the Academy of Sciences or the College of France, but without success. The fact that he was both a foreigner and a Protestant counted against him. In October 1676 he reluctantly left Paris

— for ever, as it turned out — to take a post at the court of Duke Johann Friedrich of Brunswick, in Hanover. By way of compensation he travelled to Hanover via London and the Netherlands; he allowed himself a three-week tour of the Netherlands during which he visited the scientist Antoni van Leeuwenhoek in Delft and spent three days with Spinoza in The Hague.

Leibniz's duties in Hanover covered a broad spectrum: legal and diplomatic adviser, librarian, tutor, and poet laureate (he was, among other things, an accomplished writer of Latin verse). In 1679 he volunteered his services as a mining engineer. He proposed to improve the productivity of the Duke's silver mines, with the hope of using the increased revenues to fund a research establishment under his own direction. The undertaking was beyond even Leibniz's powers but he soldiered on until finally summoned to a new assignment by Johann Friedrich's successor, Duke Ernst August. The new assignment seemed harmless enough: to write a suitably congratulatory history of the House of Brunswick — but in the event it consumed much of the rest of Leibniz's life, poisoned his old age and remained unfinished at his death. Leibniz was never one to do things by halves. In preparation for his task, after ransacking the ducal archives, he embarked in 1687 on two and a half years of travel through southern Germany, Austria and Italy in search of documents bearing on the early history of the Guelphs of Brunswick. What eventually came out of this, in addition to several volumes of selected documents and a geological study of Lower Saxony, was the *Brunswick Annals of the Western Empire* for the period A.D. 768-1005 — a landmark in medieval historiography, but not exactly what Ernst August had ordered.

The history of Brunswick was probably the most onerous of Leibniz's responsibilities, but it was by no means the only one. Church reunion continued to preoccupy him and for many years he negotiated with Bishop Bossuet the terms under which the German churches might enter into communion with Rome. In 1690 he accepted the post of librarian of the great Bibliotheca Augusta in Wolfenbüttel — the private possession of another Brunswick duke, Anton Ulrich — and supervised its cataloguing and the design and construction of a new building in which to house it. He took a major part in the diplomatic manoeuvres leading up to the British Act of Settlement of 1701, which conferred the succession to the British crown on Princess Sophie, Ernst August's widow and the grand-daughter of

James I of England, and on her heirs. And yet another persistent pre-occupation was the founding of a German academy of science to rival those in Paris and London. With the support of Sophie's daughter Sophie Charlotte, his former pupil and by this time Queen of Prussia, he brought about the establishment, in 1700, of the Berlin Academy of Sciences, with himself as its president. This done, he turned his attention to academies elsewhere: he persuaded Tsar Peter to found the St Petersburg Academy of Science and he spent 1712-14 in Vienna advising the Hapsburg emperor on the establishment of an academy of the sciences and humanities there, advice which did not come to fruition until 1846.

On his reluctant return to Hanover, in 1714, Leibniz found that his two closest friends, Princess Sophie and Duke Anton Ulrich, were dead, and that Ernst August's successor, Georg Ludwig, had recently moved his court to London and ascended the British throne as George I. Leibniz was delighted at the prospect of going to London to take up the office of Historiographer Royal, but found himself instead in something like house arrest in Hanover until he should have completed his history of Brunswick – or at least have carried it as far as the year 1024, leaving the later centuries to an assistant. But, racked with gout in his feet, hands and shoulders, he found that even this was now beyond him. In the second week of November 1716 he was additionally afflicted with severe and persistent stomach cramps and he died on the evening of 14 November 1716. Contrary to the traditional account he was buried with all appropriate ceremony, although hardly anyone attended the funeral service.

According to a widely accepted tradition, Leibniz was ambitious, unprincipled, grasping, and mean-minded. The English-speaking world added the charge that he stole the basic ideas of the calculus from unpublished manuscripts of Newton's. He has long been acquitted of plagiarism, but the other slurs continue to be parroted. However, they are not supported by the primary sources: what emerges from these is a kindly, honest, candid, and generous man, strongly motivated by a concern for human progress and pursuing his own self-interest only for the advancement of the work that enthralled him.

During his forty years of service to the House of Brunswick Leibniz struggled to keep up with the scientific and philosophical work which he had begun even before his sojourn in Paris, and to maintain and extend the circle of his acquaintances. Throughout his

career he carried on a voluminous correspondence with philosophers, scientists, theologians, jurists, historians, linguists, politicians, explorers, and friends and relations the length and breadth of Europe and beyond. At the peak of his career he was in active touch with two hundred correspondents; the nineteenth-century catalogue of his correspondence, which is by no means complete, lists more than fifteen thousand letters. His scientific findings and some of his philosophical doctrines were published in the scholarly journals of his day, such as the *Journal des savants* and the *Acta eruditorum*. He published only two books on philosophical topics: *On the Combinatorial Art* when he was twenty and *Theodicy* when he was sixty-four. Most of his writings on philosophy are short pieces – letters or summaries or rough drafts – not intended for publication, and written in what time he could spare from his regular duties, frequently *en route* in his carriage. The first detailed exposition of his system of thought occurs in his *Discourse on Metaphysics*, written in 1686, apparently for Arnauld; in fact, Arnauld saw only the chapter headings of the *Discourse*, but these occasioned a correspondence between the two men which is one of the most valuable sources of insight into Leibniz's thought. Not until 1695 did Leibniz publish an account of his philosophy, 'New system of the nature and communication of substances', in the *Journal des savants*. In 1714 he wrote two important summaries of his system for two influential amateurs: the so-called *Monadology* for Nicolas Remond in Paris and the *Principles of Nature and of Grace* for Prince Eugene of Savoy in Vienna; neither of these was published in his lifetime. Finally, in 1715–16 he defended his system against the Newtonian one in a correspondence with Samuel Clarke; this interchange was terminated by Leibniz's death.

## ii The New Essays

Leibniz made strenuous efforts to enter into correspondence with John Locke. Within five years of the first appearance of the *Essay Concerning Human Understanding* (1690) he read at least some of it and wrote several pages of comments on parts of the work, allowing an intermediary to pass them on to Locke. The latter received them sourly and refused to be drawn into a discussion. Leibniz continued to study the *Essay* throughout the decade, in spite of his lack of familiarity with the English language. Then, in 1700, Pierre Coste's



French translation appeared, under the title *Essai philosophique concernant l'entendement humain* etc., based primarily on the fourth edition of the *Essay*. Leibniz began to study the Coste version in mid-1703, and at about that time began to write the extensive critical commentary which became the *New Essays on Human Understanding*. His first draft was finished in May 1704 and substantially revised, with the help of several correctors, throughout the summer. A fair copy was completed late in 1704, at just about the time that Locke died. Locke's death somehow aborted the plan to publish the *New Essays* and probably cut short the process of stylistic improvement, but there is no reason to think that there would otherwise have been any further changes in the philosophical content. The *New Essays* did not see the light of day until 1765, when it was published by R. E. Raspe, the author of the Baron Munchausen tales. The only acceptable text is the one published in 1962 by the Akademie-Verlag in Berlin, edited by André Robinet and Heinrich Schepers.

The *New Essays*, it must be admitted, is a flawed work. In spite of its title, it has the form of an extended conversation, and Leibniz's handling of the dialogue form is disappointing. Instead of two real people seriously arguing with each other, we have a mechanical spokesman for Locke (Philaethes) who dutifully serves up portions of the *Essay* so that Leibniz's spokesman (Theophilus) can discuss them. Sometimes Philaethes abjectly backs down from Locke's position, but usually he just passes on, without comment, to the next topic; rarely is he allowed an effective reply. It is also a defect in the full text of the work that Theophilus tends to ramble, especially in the second half; in our abridgement we have tried to keep him closer to the point. But the gravest defect is that Leibniz does not try to give a comprehensive understanding of the main outlines of Locke's way of thinking or of his own. Had he done so, the result would have been a synoptic view, through the eyes of the greatest rationalist, of how his way of thinking relates to empiricism. In the event, we get something less than that. Although he sometimes criticizes Locke on grounds of internal inconsistency, Leibniz does not try to enter into the Lockean manner of thinking. Nor, although his comments on Locke constantly rely on aspects of his own philosophical system, does he try to lay the main outlines of this system before the reader's eyes. In section III of this Introduction we shall make up somewhat for this lack, but the fact remains that Leibniz did not take the great opportunity he had created for himself.

In spite of these defects the work is absorbingly interesting and brilliantly illuminating. In it we find a supremely intelligent philosopher, at the height of his powers, working athletically on a large range of important philosophical topics. And although the work does not offer a systematic confrontation between empiricism and rationalism, it does present a lively clash between certain aspects of the two traditions. This includes a clash between two kinds of intellectual temperament which have historically tended to be associated with empiricism and rationalism respectively: Locke's inclination to keep theorizing in check by means of common sense, and Leibniz's much stronger preparedness to sacrifice surface plausibility to theoretic strength and unity. On almost every page, the *New Essays* manifests Leibniz's passion for system, order, definition, rigorous formality, and clarity, and in this respect he is in strong contrast with Locke (and even more so with Philalethes).

A few words about the present edition. There have been two English translations of the *New Essays*, a poor one which appeared in 1896, and one by the present editors in 1981. The present edition is a variant on the latter, relating to it as follows:

(i) More than a third of the text has been omitted from the present volume. Most of the omissions are of material that lacks philosophical interest, or is interesting in relation to Locke but not much to Leibniz; or of passages whose main content is duplicated elsewhere in the work; or of superfluous illustrative examples. Some Leibnizian philosophical content has also been lost, but not much, and only on points which we judge to be minor and peripheral.

(ii) In the unabridged edition the speeches of Philalethes are often given in Locke's exact words, and significant differences between Locke and Philalethes are pointed out in footnotes. Those notes have been dropped, and the renderings of the Lockean portions of the work, though still broadly guided by the text of the *Essay*, have been rescued from the idiosyncrasy and archaism which is often found in Locke. Apart from that, and from the correction of a few mistakes, this translation is the same as in the unabridged edition.

(iii) In each edition the marginal numbers refer to the corresponding pages in the Akademie-Verlag edition of the French text. From 50 onwards, the amount of material on that edition's pages does not vary greatly; so the spacings between our marginal numbers provide a rough indication of where big cuts have been made in the text.

(iv) The unabridged edition contains extensive editorial notes,

much of whose content has been dropped. Some appears here in foot-notes, and more is incorporated in the philosophical description of the *New Essays* which constitutes section III of this Introduction. The unabridged edition, incidentally, contains no interpretative endeavour comparable to section III.

(v) In the unabridged edition the Bibliography lists all of Leibniz's works referred to in the text or the editorial notes, with information about their first publication, and about the location of accessible editions of them and English translations, if any. The Bibliography in this edition lists good English translations of Leibniz's philosophical writings and a selection of secondary studies in English.

In translating the *New Essays* we have profited from the assistance of a large number of scholars, whose names are given in the Introduction to the unabridged edition. We are also grateful to Professors Benson Mates, G. H. R. Parkinson, David Shwayder, and Margaret Wilson for advice and suggestions concerning the Bibliography of the abridged edition.

### **iii Philosophical themes in the *New Essays***

#### *Brute facts*

Leibniz was a 'rationalist' at least in thinking that every intelligible 'Why?' question has a true and satisfying answer. He did not, however, maintain that whatever is true is absolutely necessary. For him, the actual world was chosen out of a range of possible worlds, by a personal God whose choice was guided by benevolence but not necessitated by anything; so there are contingent 'truths of fact' as well as necessary 'truths of reason'. Still, there are no reasonless or *brute* facts. Whenever Locke attributes something to God's arbitrary choice, making it not merely contingent but sheerly brute-factual, Leibniz resists. For example, why does this surface-texture cause that sensation of colour? Locke says that we 'attribute it wholly to the good pleasure of our Maker', and Leibniz replies: 'This good pleasure would indeed be neither good nor pleasure if God's power did not perpetually run parallel to his wisdom' (p. 382), i.e. if God did not always have some reason for arranging things in one way rather than another.

Leibniz seems to hold not merely that God never would make an arbitrary choice but that such a choice is impossible (p. 180). He is profoundly hostile to the idea of such a choice, anyway, because one

arbitrary choice would destroy the explanatory-rationalist principle that there is a reason for every fact (p. 179).

Sometimes Leibniz has clearly good grounds for denying that some fact is brute – for example in his wonderful discussion of the ‘Molyneux problem’, about how felt shapes relate to seen ones (pp. 135–9). But sometimes he is driven to some fairly bold conjectures. For example, he finds a reason for the link between colour sensations and surface textures by hypothesizing that the sensations are not ‘simple’, as Locke takes them to be, but only seem so; really, Leibniz says, they have an inner complexity which makes a colour sensation isomorphic with the surface which causes it (pp. 131f). Leibniz is here relying on his general doctrine – a keystone of his edifice – that many states of one’s own mind lie outside one’s awareness. Even if that is right, it is a further step to contend for the sort of unnoticed structure that Leibniz postulates in our sensations of colours; but he tries to make that plausible too, in a splendid discussion on pp. 403f, of how ‘the swift rotation of a cog-wheel makes us perceive an artificial transparency’.

Leibniz’s demand for a reason for everything makes him hostile to what he calls ‘bare faculties’ (p. 379). When Locke suggests that God could give matter the power of thought without adding a thinking substance to the matter, Leibniz says that this would be ‘a miracle’; it would be giving to the matter a bare power or faculty, not rooted in its nature, and this is contrary to God’s wisdom as well as being a speculation which opens the floodgates to ‘bad philosophy’ (p. 61).

### *Necessary truths*

When Locke argues that there are necessary truths in morals and politics, Leibniz destroys one of his examples, showing that on one interpretation it is false and on the other vacuous (p. 384). Usually, however, when Locke addresses himself to necessary truths it is to stress their unimportance: he calls some of them ‘trifling’ and says they ‘contain no instruction in them’ (p. 428); to others, which he characterizes as ‘maxims’, he allows some value, though not as foundations of knowledge (p. 415), but blames much intellectual misconduct on them (pp. 417–23\*). He is severe on those who esteem syllogistic argument (pp. 476–8). Leibniz replies sharply and, in the main, effectively to all of this.

\* Asterisked page numbers refer to passages in the *New Essays* which are not included in this abridged edition.

This difference in attitudes to necessary truths and demonstrative reasoning might seem natural between an empiricist and a rationalist, but really it is not useful to make the empiricist/rationalist contrast carry this load. The relevant doctrinal difference is not linked to empiricism versus rationalism. Rather, it is that Locke tends to allow only such mental activities and structures as one is consciously aware of, whereas Leibniz holds that most mental events do not come within the reach of awareness (*aperception*) because they are too small or confused or overlaid with more vivid mental content. Because Leibniz holds that something can happen in one's mind without one's being aware of it, he can give necessary truths a role which is not testified to by introspection – Locke's final court of appeal. Locke could not say, as Leibniz does, that necessary truths are the 'inner core and mortar' of all our thinking, relating to it as muscles do to our walking – being essential to it even if we are not consciously aware of the relationship (pp. 83f).

That, however, does not explain why Leibniz was so much more interested in logical organization, struggling to fashion sharp definitions of a number of difficult terms ('capacity', pp. 146f; 'shape', p. 148; 'free', p. 175; 'affinity', p. 249), and stressing the need to reduce one's reliance on unproved axioms and undefined terms (pp. 212, 406–8, 415). Nor does it explain his seeing, as Locke does not, that although the self-identity of the idea *man* generates the truth 'A man is a man', the non-identity of the ideas *man* and *horse* does not entail 'A man is not a horse'; for it is similarly true that the idea *triangle* is distinct from the idea *trilateral*, and yet it is false that 'A triangle is not a trilateral' (p. 408). (This simple point destroys Locke's theory about the basis of logical truth, though Leibniz does not say so.) And then there is Leibniz's willingness – not conspicuously shared by Locke – to criticize arguments whose conclusion he accepts (no vacuum, pp. 126\* and 151; all action of bodies is by impulse, pp. 130f; existence of external world, pp. 373f; existence of God, pp. 435f).

As those examples suggest, the two philosophers treat logic differently as a result of differences not of doctrine but of temperament, skill, and knowledge. Leibniz loved reasoning for its own sake, was supremely able at logic done in a mathematical manner, and had scholarly knowledge of the history of logic up to his own time. None of those things was true of Locke.

*Reason and experience*

Although Leibniz attached more weight than Locke did to reasoning, he valued the experimental sciences no less than Locke did. In fact the rationalists Descartes, Spinoza and Leibniz all cared more about the empirical sciences – and two of them had vastly more scientific knowledge – than any British empiricist. Several episodes in the *New Essays* concern problems in physics or neighbouring areas of metaphysics – what it is for something to occupy space (pp. 122–4), the transfer of motion (pp. 171f, 224), how matter hangs together (p. 222), problems in optics (p. 300).

Far from denigrating experience, Leibniz concedes greater powers to it than Locke is willing to do. He holds that if you use experimental data not in the blindly trusting manner of the lower animals but under the discipline of reason, you can get results which are not ‘necessary’ but of which you may be ‘certain’ (p. 406). He urges the importance of knowing how to use experimental results in theory-building (pp. 371–3, 388f, 416, 453–5); and he sketches a hypothetico-deductive structure in which reason collaborates with experience in confirming general hypotheses (pp. 450, 484).

*Innate knowledge*

Necessary truths are also relevant, as will appear shortly, to the famous disagreement about innate ideas and truths. Locke held that the human mind’s only innate endowment is a set of skills or aptitudes – no knowledge or beliefs and no ‘ideas’, all of these coming only through the impact of experience on the mind. When Locke says that without experience the human mind is a blank page, he does himself wrong, suggesting more passivity in the mind than he seriously believed it to have. That same exaggeration occurs in another metaphor of Locke’s, which is beautifully amended by Leibniz (pp. 144f).

Usually, Locke does acknowledge that the human mind is innately endowed with structure. Whether any of that structure – any of those innate capabilities and dispositions etc. – should count as *ideas* is hardly worth discussing: it depends on what we make of the term ‘idea’, which will be discussed shortly. There remains the question of innate *knowledge*. The debate about this between Locke and Leibniz, though ultimately not satisfactory, is instructive.

One focus of disagreement concerns learning. Locke implies that if

we innately know something then everyone knows it from birth and need never be helped to know it. Leibniz replies: 'I cannot accept . . . that *whatever is learned is not innate*. The truths about numbers are in us; but still we learn them' (p. 85). He holds that to 'learn' an innately known truth is to uncover what was there all along – to bring a mental possession above the threshold of awareness.

This position should not be dismissed out of hand on the grounds that there cannot be mental content of which its owner is unaware. That is what Locke does; but Leibniz says that he is not entitled to that move unless he can 'show that it is of the essence of thought in particular that one be aware of it' (p. 113); to which he adds an argument purporting to show that if Locke's view were right, all thought would be at a stand-still (p. 118). Be that as it may, Leibniz still has to explain what it means to say that I knew that P before I was aware of doing so. He says that I had the knowledge that P in a 'potential' way (pp. 77, 86) or as a 'tendency or aptitude' (p. 87). Locke implies that this trivializes the doctrine of innate ideas, because it means merely that when I was born I was capable of coming to know that P, which is obviously true for *every* P which I do eventually come to know. Leibniz has two replies to this (p. 79 through to the end of p. 80). The better though less prominent one says that I am born with a capacity eventually to know that P *by finding it within my soul*, whereas much of my knowledge can be acquired only with the aid of sense-experience. The more conspicuous answer contrasts 'a mere possibility of understanding those truths' with 'a disposition, an aptitude, a preformation, which determines our soul and brings it about that they are derivable from it'. Similarly, Leibniz says, 'the shapes which are arbitrarily given to a stone or piece of marble' may not be 'those which its veins already indicate'. But the veins in a block of marble are a poor metaphor for an active disposition, something between a mere possibility and an outright actuality; and Leibniz does not ever adequately explain the latter notion. It seems to be close to the concept he is using when he credits physical things with 'endeavours' to behave in certain ways (pp. 122–4); but that does not help us to understand the view that the human mind has an active disposition to be consciously aware of necessary truths.

However, Leibniz thinks that we *must* have innate knowledge: if we don't, then we learn everything from experience; but that alternative is surely wrong, for although experience can lead us to believe that P it can never show us that it is absolutely necessary that P. 'For

it cannot be denied', he says, 'that the senses are inadequate to show [necessary truths'] necessity, and that therefore the mind has a disposition (as much active as passive) to draw them from its own depths' (p. 80). The link between 'P is necessarily true' and 'P is to be found in the depths of my soul' is not explained.

### *'Idea' and 'image'*

Locke uses the term 'idea' broadly. In its basic sense, 'ideas' are images – sensory states, inner depicting and hearings and the like. But he also takes 'ideas' to be abstract thoughts, or contents of such thoughts: he holds that discursive thinking is mentally manipulating 'abstract ideas', which he describes as though they were attenuated images. This double use of 'idea' expresses Locke's tendency to assimilate the sensory side of the human condition to the intellectual.

It is sometimes said that Locke conflates images with concepts; but that is inadequate, because 'concept' is also ambiguous. A concept may be a mental item which occurs when thinking goes on; or it may be an abstract, logical item, neither mental nor physical. It is only when 'concept' is taken in this latter way that it is plausible to say that necessary truths owe their necessity to the nature of the concepts they involve. In short, there are (i) images, (ii) intellectual conceivings and (iii) logical concepts. In using 'idea' for all three, Locke assimilates the sensory to the intellectual *and* the mental to the logical.

The latter conflation comes to a head in his saying that truths which are known by 'intuition', or looking inward at one's 'ideas', include 'A circle is not a triangle' (p. 361) and 'I feel pleasure and pain' (see p. 434). Leibniz is also willing to label both sorts of truth as 'intuitive', but he is free of Locke's tendency to run them together entirely. Indeed, he sharply separates them into 'truths of reason' and 'truths of fact' (pp. 361, 367), and makes a daring attempt to say, in a single formula, both how they differ and how they are alike (p. 434).

Leibniz often admonishes Locke for conflating 'idea' with 'image', as when he says against Locke that there is no danger of confusing the *ideas* of a chiliagon and of a figure with one side less, any more than of confusing the numbers 1000 and 999, though of course the corresponding *images* may be hard to tell apart (pp. 261f, 375). I can't be in doubt about which sort of figure I am thinking about; I can be in doubt about which sort I am seeing or feeling. Leibniz is here inveighing against the conflation of the sensory with the intellectual, within the sphere of the mental.



As for the conflation of the mental with the logical: a special form of that occurs in Leibniz too. He remarks in passing (pp. 149, 155, 227) that God is the source of necessary truths – not merely the scribe who writes them into our souls but the reality which gives them their truth, as he explains in a remarkable passage about ‘that Supreme and Universal Mind . . . whose understanding is indeed the domain of eternal truths’ (p. 447). In effect, logic is treated as divine psychology; and we can do logic because of how our minds relate to God’s: ‘Although his ideas are infinitely more perfect and extensive than ours they still have the same relationships that ours do’ (p. 397). Leibniz does not relate this account of our knowledge of necessary truths to the account which pits the innate against the sensorily acquired.

Although Leibniz reduces ‘truths of reason’ to truths about God’s ‘ideas’, and seems to understand these psychologically, we should remember that his God, being atemporal and not subject to any contingency, is rather like an abstract object. This could enable Leibniz’s thoughts about necessary truth to share a great deal with the thoughts of those who insist that logic is about abstract objects and not concrete mental particulars. Their metaphors are certainly alike. Leibniz says that God’s understanding is ‘the domain [*région*] of eternal truths’, that ‘the divine understanding is, so to speak, the realm [*pays*] of possible realities’ (*Loemker*,<sup>1</sup> p. 336), and that ‘These essences and the so-called eternal truths about them . . . exist in a certain region [*regio*, Latin] of ideas, if I may so call it, namely in God himself’ (*Loemker*, p. 488). Compare that with what is said by two leading anti-psychologizing theorists, namely that necessary truths are about ‘the third realm’ (Frege) or about ‘logical space’ (Wittgenstein).

As for ‘ideas’ in relation to human psychology, Leibniz insists that an idea is not ‘the *form* of the thought’ but rather ‘the *object* of thought’ – something which does not come into existence with the thought or perish with it (p. 109; see also p. 140). That seems to imply that human ideas are not events in human minds; but Leibniz also insists that ideas are the *inner* objects of thoughts, which seems to give them a psychological status after all. Such a status is clearly presupposed in Leibniz’s way of distinguishing our thought from ‘our ideas’ on p. 119 (see also p. 301).

<sup>1</sup> I.e. Leibniz, *Philosophical Papers and Letters*, tr. Leroy E. Loemker, 2nd edition, Dordrecht, 1969.