

Background material for BSCS course 'History of Philosophy'

Excerpts from:

Routledge History of Philosophy (Volumes 1, 3, 4, 5, 8, 9)

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General editors' preface

The history of philosophy, as its name implies, represents a union of two very different disciplines, each of which imposes severe constraints upon the other. As an exercise in the history of ideas, it demands that one acquire a 'period eye': a thorough understanding of how the thinkers whom it studies viewed the problems which they sought to resolve, the conceptual frameworks in which they addressed these issues, their assumptions and objectives, their blind spots and miscues. But as an exercise in philosophy, we are engaged in much more than simply a descriptive task. There is a crucial critical aspect to our efforts: we are looking for the cogency as much as the development of an argument, for its bearing on questions which continue to preoccupy us as much as the impact which it may have had on the evolution of philosophical thought.

The history of philosophy thus requires a delicate balancing act from its practitioners. We read these writings with the full benefit of historical hindsight. We can see why the minor contributions remained minor and where the grand systems broke down: sometimes as a result of internal pressures, sometimes because of a failure to overcome an insuperable obstacle, sometimes because of a dramatic technological or sociological change and, quite often, because of nothing more than a shift in intellectual fashion or interests. Yet, because of our continuing philosophical concern with many of the same problems, we cannot afford to look dispassionately at these works. We want to know what lessons are to be learnt from the inconsequential or the glorious failures; many times we want to plead for a contemporary relevance in the overlooked theory or to reconsider whether the 'glorious failure' was indeed such or simply ahead of its time: perhaps even ahead of its author.

We find ourselves, therefore, much like the mythical 'radical translator' who has so fascinated modern philosophers, trying to understand an author's ideas in his and his culture's eyes, and at the same time, in our own. It can be a formidable task. Many times we fail in the historical undertaking because our philosophical interests are so strong, or lose sight of the latter because we are so enthralled by the former. But the nature of philosophy is such that we are compelled to master both techniques. For learning about the history of philosophy is not just a challenging and engaging pastime: it is an essential

element in learning about the nature of philosophy—in grasping how philosophy is intimately connected with and yet distinct from both history and science.

The *Routledge History of Philosophy* provides a chronological survey of the history of Western philosophy, from its beginnings up to the present time. Its aim is to discuss all major philosophical developments in depth, and with this in mind, most space has been allocated to those individuals who, by common consent, are regarded as great philosophers. But lesser figures have not been neglected, and it is hoped that the reader will be able to find, in the ten volumes of the *History*, at least basic information about any significant philosopher of the past or present.

Philosophical thinking does not occur in isolation from other human activities, and this *History* tries to situate philosophers within the cultural, and in particular the scientific, context of their time. Some philosophers, indeed, would regard philosophy as merely ancillary to the natural sciences; but even if this view is rejected, it can hardly be denied that the sciences have had a great influence on what is now regarded as philosophy, and it is important that this influence should be set forth clearly. Not that these volumes are intended to provide a mere record of the factors that influenced philosophical thinking; philosophy is a discipline with its own standards of argument, and the presentation of the ways in which these arguments have developed is the main concern of this *History*.

In speaking of 'what is now regarded as philosophy', we may have given the impression that there now exists a single view of what philosophy is. This is certainly not the case; on the contrary, there exist serious differences of opinion, among those who call themselves philosophers, about the nature of their subject. These differences are reflected in the existence at the present time of two main schools of thought, usually described as 'analytic' and 'continental' philosophy. It is not our intention, as general editors of this *History*, to take sides in this dispute. Our attitude is one of tolerance, and our hope is that these volumes will contribute to an understanding of how philosophers have reached the positions which they now occupy.

One final comment. Philosophy has long been a highly technical subject, with its own specialized vocabulary. This *History* is intended not only for the specialist but also for the general reader. To this end, we have tried to ensure that each chapter is written in an accessible style; and since technicalities are unavoidable, a glossary of technical terms is provided in each volume. In this way these volumes will, we hope, contribute to a wider understanding of a subject which is of the highest importance to all thinking people.

G.H.R.Parkinson
S.G.Shanker

Introduction

C.C.W.Taylor

In the two and a half centuries covered by this volume, from the beginning of the sixth century BC to the death of Plato in 347, Western philosophy developed from infancy to adulthood, from the earliest stage at which it can be recognized as an intellectual activity in its own right to a state in which most of its principal branches had been articulated from one another, major advances had been made in some of those branches, and some enduring masterpieces had already been written. The several chapters in this volume describe this astonishing process in detail; it is the task of this introduction to attempt an overview of the main developments.

The tradition of beginning the history of Western philosophy with the Ionian theorists of the sixth century (see [Chapter 2](#)) is as old as the history of philosophy itself; Aristotle, the earliest historian of philosophy whose work survives, describes Thales (*Metaphysics* 983b20–1) as ‘the founder of that kind of philosophy’, i.e. the enquiry into the basic principles of the physical world. Yet in the same passage Aristotle admits some uncertainty as to whether ‘the men of very ancient times who first told stories about the gods’ should not be counted as pioneers of that kind of enquiry (b27–30). This brings out the fact that Ionian speculation about the nature and origins of the physical world itself arises from an older tradition of cosmology, represented in Greek thought by Homer, Hesiod and the so-called ‘Orphic’ poems, a tradition which has considerable affinities with the mythological systems of Egypt and the Near Eastern civilizations (see [Chapter 1](#), and, for detailed discussion KRS [1.6], [ch. 1](#)). While it is traditional to contrast the ‘mythological’ thought of the poets, who explained the genesis and nature of the world via the activities of divinities, with the ‘physical’ or ‘materialistic’ thought of the Ionians, who appealed to observable stuffs such as water or air, that contrast is somewhat misleading, since on the one hand many of the divinities of the poets were themselves identified with components of the world such as the sea or the earth, while on the other the Ionians appear to have regarded their basic components as alive, and to have given them some of the attributes of divinity, such as immortality. None the less there are certain features of Ionian cosmological speculation which justify the traditional claim that it marks an unprecedented step in human thought. While the mythical cosmologies

mix up the cosmic deities with fairy-tale figures such as giants, Titans and monsters without distinction, and have no explanatory resources beyond the sexual and other psychological motivations of these beings, the Ionians eliminate the purely personal element, seeking to explain the world in terms of a minimum number of basic stuffs (e.g. water, air) and processes (e.g. condensation and rarefaction), and subjecting these accounts to the control both of primitive observation (as in Aristotle’s account of Thales’ reasons for identifying his principle with water) and of a priori reasoning (e.g. in Anaximander’s treatment of the problem of the stability of the earth). Their speculations were thus subjected to norms of rationality, as those of their mythologizing predecessors were not, and in satisfying those norms they pioneered the crucial concepts of a theoretical entity (Anaximander’s *apeiron*) and of a world organized in accordance with natural law (in the single fragment of Anaximander). (For a fuller discussion see Hussey [2.36].)

The Ionian cosmological tradition was an active element in the development of philosophy throughout the period covered by this volume, and beyond. But other strands soon become discernible in the fabric. The fragments of the poet Xenophanes, an Ionian writing later in the sixth century and probably well into the fifth, contain, in addition to some cosmological material, a number of criticisms of traditional theology. One element in this criticism is the rejection, on moral grounds, of the traditional tales of quarrels, adultery and other misdeeds on the part of the gods; the demand for a conception of the divine which represents it as a paradigm of moral perfection is from Xenophanes onwards a recurrent theme in Greek thought, particularly important in Plato, and is one of the elements which was taken over in the Christianization of Greek philosophy. More radical was Xenophanes’ ridicule of anthropomorphic representations of gods, which looks forward to the cultural relativism of the fifth century and thereby to an important aspect of the thought of the sophists. But Xenophanes’ contribution to theological speculation was not wholly negative; the fragments also provide evidence of belief in a non-anthropomorphic, perhaps incorporeal deity, which undertakes no physical activity, but controls everything by the power of thought. While there is disagreement among scholars as to whether Xenophanes was a monotheist, and whether he identified the deity with the cosmos, there can be no doubt that he is a pioneer of a theological tradition whose influence can be discerned in thinkers as diverse as Anaxagoras, Aristotle and the Stoics. He is also the earliest thinker who provides evidence of engagement with epistemological problems, initiating a tradition which was developed in different ways by the Eleatics, Plato and the Hellenistic schools.

The Ionian tradition was further diversified in the later sixth century by Pythagoreanism and by Heraclitus. The former movement, which had at least as much of the character of an esoteric religion as of a philosophical or scientific system, might appear altogether remote from the Ionians, but Aristotle’s evidence suggests that the early Pythagoreans thought of themselves rather as offering alternative answers to the same fundamental questions about the

physical world as the Ionians had posed than as taking an altogether new direction. Their fundamental insight, which was to have a profound influence on Plato and thereby on later developments, was that understanding of the physical world was to be attained by grasping the mathematical principles of its organization, but those principles do not appear to have been, at this early stage, clearly distinguished from the physical principles which the Ionians had posited. Another important aspect of early Pythagoreanism was its development of a theory of the nature of the soul, and in particular of the view that the soul is akin to the world as a whole, and therefore to be explained via the application of the same mathematical conceptions as make the world intelligible. While Heraclitus' thought was closer to that of his Ionian predecessors, lacking the peculiarly mathematical slant of the Pythagoreans, it none the less has certain affinities with the latter. He too seeks to identify an intelligible structure underlying the apparent chaos of phenomena, and thinks that that structure has to be ascertained by the intellect, rather than directly by observation. He too is interested in the nature of the soul, and stresses its continuity with the rest of the physical world. He shows greater consciousness than the Pythagoreans of epistemological questions, including the relation of theory to observation, and is the first thinker to show an interest in the nature of language and its relation to reality, a set of problems which came to dominate much fifth-century thought, which were central to the thought of Plato, Aristotle and their successors, and which, it is no exaggeration to say, have remained at the centre of philosophical enquiry to the present day.

Undoubtedly the two most significant figures in the thought of the fifth century were Parmenides and Socrates, each of whom not only reshaped his immediate philosophical environment but influenced, indirectly yet decisively, the whole subsequent development of western thought. In his total rejection, not merely of Ionian cosmology, but of the senses as sources of knowledge, Parmenides initiated the conception of a purely a priori investigation of reality, and may thus be said to have begun the debate between empiricism and rationalism which has been central to much subsequent philosophy. More immediately, he challenged those who accepted the reality of the observable world to show how plurality, change, coming-to-be and ceasing-to-be are possible, and the subsequent history of fifth-century cosmology, represented by Empedocles, Anaxagoras and the Atomists, is that of a series of attempts to meet that challenge. Plato's response to Parmenides was more complex. While the fifth-century pluralists sought to defend the reality of the observable world against the challenge of Parmenidean monism, Plato accepted one of Parmenides' fundamental theses, that only the objects of thought, as distinct from perceptible things, are fully real. But rather than drawing the conclusion that the observable world is mere illusion, with the corollary that the language that we apply to that world is mere empty sound, he sought to show how the observable world is an approximation to, or imperfect copy of, the intelligible world, and to develop an appropriate account of language, in which words whose primary application is to

the intelligible world apply derivatively to the sensible. An important part of that enterprise was to show how, *contra* Parmenides, it is possible to speak intelligibly of what is not. Holding that strict monism is self-refuting, Plato was committed to positing a plurality of intelligible natures constituting the intelligible world, to describing the structure of that world and to defending that construction against Parmenidean arguments against the possibility of non-being. Some of the central themes of Platonic metaphysics and philosophy of language can thus be seen to have developed at least partially in response to the challenge of Parmenides' logic.

In one way the influence of Socrates on subsequent philosophy is incalculable. Had Socrates not lived, and more particularly had he not died as he did, it is doubtful if Plato would have become a philosopher rather than a statesman, and had Plato not become a philosopher the whole development of Western philosophy would have been unimaginably different. (For a start, Aristotle would not have been trained in the Academy; hence his philosophical development, assuming it to have occurred at all, would have been altogether different, and so on.) Aside from the general influence of his personality on Plato, Socrates' principal contribution to philosophy seems to have been twofold, first in focusing on fundamental questions of conduct, as distinct from physical speculation, and second in applying to those questions a rigorous argumentative method. The effect of the application of this method to that subject-matter was the creation of ethics as a distinct area of philosophy. It would, however, be quite misleading to think of Socrates as having single-handedly given philosophy this new direction, for in concentrating on questions of conduct and treating them with his characteristic method of argument he was responding in part to developments instituted by certain of his contemporaries, known collectively as 'The Sophists'.

The so-called 'Sophistic Movement' was a complex phenomenon. In the fifth century BC the increasing intellectual sophistication, economic prosperity and political development of a number of Greek states, particularly Athens, created a demand for education going beyond the traditional elementary grounding in music and literature (especially poetry), arithmetic and physical training which was all that was then available. To a certain extent this took the form of the popularization of the Ionian tradition of cosmological speculation, which was extended into areas such as history, geography and the origins of civilization. The demand for success in forensic and political oratory, fostered by the increase in participatory democracy which was a feature of political life, especially in Athens, led to the development of specialized techniques of persuasion and argument, associated in particular with the names of Gorgias and Protagoras. Finally, the sophists were associated with a rationalistic and critical attitude to things in general, with implications, unwelcome to those of conservative views, for matters of morality and religion. One feature of this attitude was cultural relativism, leading to a view of moral and religious beliefs as tied to the particular norms of different peoples, with no claim to universal validity. Beliefs of this kind were said to arise purely by convention (*nomos*), and hence to lack

the objective authority that was supposed to reside in nature (*phusis*); a typical example of the use of this contrast was the claim (maintained by Callicles in Plato's *Gorgias*) that since by nature the strong prevail over the weak (as can be observed, for example, from the behaviour of animals), that is how things should be, and that conventional rules constraining the aggression of the strong lack any legitimacy. This complex of activities and attitudes was transmitted throughout the Greek world by a new profession, that of itinerant teachers who travelled from city to city lecturing and giving other kinds of instruction to those who were prepared to pay. It was essentially an individualistic activity, an extension to new areas of the older tradition of the itinerant rhapsode (i.e. reciter of poems). The sophists belonged to no organization, nor did they all share a common body of specific belief (though the attitudes mentioned above were sufficiently widespread to be regarded as characteristic of them), and they founded no schools, either in the sense of academic institutions or in that of groups of individuals committed to the promulgation of specific philosophical doctrines.

None of these aspects of the sophists' activity was without some impact on Socrates, according to Plato's portrayal of him. He was at one time deeply interested in physical speculation, though he appears to have abandoned it in favour of concentration on ethical questions. This shift of interest seems to have been motivated by the rationalistic assumption that mechanistic explanations are in general inadequate, since they can provide no account of the reasons for which things happen. For that it is necessary to show how things happen as a rational agent would arrange them, i.e. for the best. An application of that rationalistic assumption is at the heart of Plato's version of Socratic morality. Every rational agent is uniformly motivated to seek what is best, understood in self-interested terms as what is best for the agent; given that constant motivation, understanding of what is in fact for the best is sufficient to guarantee conduct designed to achieve it. But rather than leading to the abandonment of conventional morality, as in the case of some of his sophistic opponents, this rationalism presents Plato's Socrates with the task of showing that adherence to the traditional virtues of courage, self-control, etc. are in fact beneficial to the agent. In so doing Socrates rejects the antithesis between *nomos* and *phusis*; so far from conflicting with the promptings of nature, morality is necessary for humans to achieve what nature (i.e. rational organization) has designed them to seek, namely, what is best for them. As regards techniques of argument, Socrates indeed relied on a technique which was one of those pioneered by the sophists, that of subjection of a hypothesis, proposed by a participant in debate, to critical questioning, with a view to eliciting a contradiction in the set of beliefs held by the proponent of the hypothesis. In this case the difference was not in method, but in aim. Plato consistently represents the sophists as treating argument as a competitive game in which victory was achieved by reducing one's opponent to self-contradiction, whereas Socrates regarded argument as a co-operative enterprise in which the participants are not opponents but partners in the search for truth. Reduction of

one's interlocutor to self-contradiction is not the end of the game, as it is for the sophists, but a necessary stage on the path of discovery.

Inevitably, discussion of the role of Socrates in the development of philosophy in the fifth century has merged insensibly into discussion of Plato. This reflects the fact that Plato's earliest writings take the form of imaginative representations of conversations between Socrates and others, which, while remaining faithful to the personality of Socrates and the spirit of his philosophizing, present him as the ideal philosopher. At this stage it is not possible to draw any clear line between doctrines maintained, possibly in inchoate form, by the historical Socrates and those developed by Plato under the stimulus of Socratic argumentation. Gradually Plato develops his independent voice, both in widening the range of his interests from Socrates' concentration on ethics and in articulating his own doctrines, in particular the Theory of Forms (see [Chapter 10](#)). The range of Plato's interests is formidable, including virtually all the areas dealt with by his predecessors, as well as areas in which his pioneering ventures set the agenda for future generations. His cosmology in the *Timaeus* blends a basically Pythagorean conception of the organization of the cosmos with a great deal of detail derived from Empedocles and others; his metaphysics, which includes pioneering work in the theory of language and of definition and classification (primarily in the *Sophist* and *Statesman*), is a sustained dialogue with Parmenides (and to a lesser extent Heraclitus) and his ethics is in large part a response to the challenge of the sophists. In many areas the depth and comprehensiveness of his vision takes him beyond his predecessors to make new connections and develop new fields. For instance, taking over from the Pythagoreans and Empedocles the theory of the survival of the soul through a series of embodiments, he applies it not merely in the context of arguments for immortality, but in a novel account of a priori knowledge (in the *Meno*) and of the ability to apply universal concepts (in the *Phaedo*). Again, while in the early dialogues he had followed Socrates in arguing that observance of morality is in accordance with the natural drive towards self-interest, he had provided no convincing argument to show that the social goods promoted by morality always coincide with the individual's own good. In the *Republic* he seeks to bridge that gap by nothing less than the integration of psychology with political theory; the individual personality is itself organized on a social model and its best state consists in a certain form of social organization which mirrors that of the good society. Finally, while the sophists and their younger contemporary Democritus had indeed touched on some of the political implications of ethical questions, it was Plato who, in systematically exploring these connections in a series of major works, not only created political philosophy but in the *Republic* wrote what is still acknowledged to be one of the masterpieces of that subject, and indeed of philosophy as a whole.

That work more than any exhibits the synoptic character of Plato's genius. In addition to the attempted integration of politics and psychology just mentioned, it encompasses virtually all the major areas of philosophy. A well-organized society must be founded on knowledge of what is best for its citizens; hence the

dialogue embraces the nature of knowledge and its relation to belief. Knowledge is a grasp of reality, and in particular of the reality of goodness; hence basic metaphysics is included. The account of the training of the rulers to achieve that knowledge constitutes a fundamental treatment of the philosophy of education, literature and art. Some of these topics are explored by Plato in other dialogues, some of which individually excel the *Republic* in their particular fields (see the discussions in [Chapters 10–12](#)). No single work, however, better encapsulates Plato's unique contribution to the development of Western philosophy.

of odd and even numbers; and so on.) But from here the thought emerges, first, that mathematics is not just a useful practical device; that it reveals an abstract structure in things; and secondly that this abstract structure may be the key to the essential nature of things. It is through these ideas that Pythagoras became the midwife of pure mathematics, which began to develop from now on; and indeed the founder of the whole mathematical side of scientific theory.

PARMENIDES

The Poem of Parmenides

Parmenides was a citizen of the Greek city of Elea in southern Italy. His philosophical activity belongs to the first half of the fifth century. He expounded his thoughts in a poem, using Homeric hexameter verses. Verse for public recitation was then still a natural medium for diffusing ideas; yet the 'natural philosophers' of the sixth century had chosen prose, to show their rejection of the authority of the poets, and their closeness to ordinary experience. Parmenides' choice of hexameter verse may imply in its turn a rejection of the natural philosophers.

The poem begins with a first-person narrative of a journey. Accompanied by the daughters of the Sun, the narrator rides in a chariot into remote regions, to reach 'the gate of the paths of night and day'. Passing through, he is welcomed by a goddess, who promises that he is to 'find out everything'. She goes on to fulfil the promise, in an exposition which constitutes the whole of the rest of the poem.

Over one hundred verses of the poem survive, including all of the introductory narration and probably almost all of the first and fundamental part of the goddess's exposition. Together with comments of Plato, Aristotle and others, this is a fine corpus of first-rate evidence, the survival of which is due principally to Simplicius, the sixth-century Neoplatonist commentator on Aristotle.⁴

Yet controversy dogs almost every part of Parmenides' thinking, for a conjunction of reasons. First, there are gaps in our information at certain crucial points. Next, Parmenides' language is often obscure, in spite of his evident striving for maximal clarity. The constraints imposed, by the metre and vocabulary of epic verse, on the exposition of a subject-matter for which they were never designed, are bad enough. Then there is the problem of supplying whatever, in the course of his exposition, Parmenides left to be understood. Finally, his thought is itself novel and complex.

Any translation, therefore, and any overall reconstruction of Parmenides, including the one now to be outlined, cannot but be highly controversial at many points.⁵

The Promise of the Goddess

Central to the understanding of Parmenides is the promise made by the goddess:

It is necessary that you find out everything: both the unmoving heart of well-rounded reality [*alētheiē*], and the opinions of mortals, in which there is no real guarantee of truth—but still, these things too you shall learn, how [or: since] it had to be that opinions should reputably be, all of them going through everything.

(DK 28 B 1.28–32)

The division of the objects of discovery into two determines the structure of the rest of the poem. It rests on the distinction (explicit since Xenophanes at least) between what can and what cannot be certainly known. The first part, concerned with *alētheiē*, will contain only certainties. The second part, of which the truth cannot be guaranteed, will contain ‘opinions of mortals’. As with Xenophanes, there are better and worse opinions: those to be revealed are not any old opinions, but ones which enjoy the status of being ‘reputable’, and which form a complete system.⁶

If we leave on one side, for the moment, the ‘opinions’ and what is here said about them,⁷ the next fundamental question is the meaning of the word *alētheiē*. In English, it is usually translated by ‘truth’, to which it seems to correspond in the spread of its early usage. The adjective *alēthēs*, from which it is formed, has much the same spread as ‘true’ (covering the areas indicated by the words ‘truthful’, ‘accurate’, ‘real’, and ‘genuine’; though not that of ‘faithful’). But in Parmenides the translation ‘reality’ for Parmenides’ *alētheiē* must be insisted on, in order to bring out the essential point: what is referred to here is not anything (words, speech, thoughts) that is or makes a true statement; it is what the true statement is *about*, and is guaranteed by: the underlying actual state of things, the reality. So, later on, the goddess marks the end of the first part by saying, ‘At this point I end for you my trusty tale and thought concerning *alētheiē*.’⁸

While ‘reality’ may be taken as the closest word to the intended primary meaning here, it is also true that *alētheiē*, as in Homer, carries implications about the *certainty* of what is said, and of the *correctness* and *accuracy* of the method by which it is found. Parmenides wants to insist on these points too; which he does, here and elsewhere, primarily by words indicating trustworthiness and its guarantees (*pistos*, *pistis*, *peitbō*). The goddess promises not only insight into some reality, but a guarantee of the truth of the insight.

This reality is ‘well-rounded’, presumably because it forms a satisfactorily coherent and closed system; and it has an ‘unmoving heart’, presumably because at least in essentials it is not subject to change. Both of these thoughts reappear significantly later.

The Choice of Ways

The narrator’s ‘finding out’ of reality is represented as a matter of simply listening to the goddess. Yet there are hints that his was an active pursuit of the truth; it was his own desire that started him off. The metaphor of travel, and the implication of active pursuit in ‘finding out’, are now carried further. There is talk of ‘ways of enquiry’; the listener is warned off from two of these ‘ways’, and told of ‘signs’ that appear in the course of the third. The exposition envisages an active rethinking, by the listener, of the course of Parmenides’ thinking.

Why the *active* participation of the listener is needed becomes clear from what follows. The exposition concerning reality is in the form of a deductive argument, which one cannot properly follow and grasp, without recreating it in the movement of one’s own mind. The ‘ways of enquiry’ are ‘lines’ (as we say) of argument, each following deductively from its own initial premiss, by the mention of which it is, naturally enough, identified in the exposition. Rigorous deductive arguments were possibly already in use in mathematics; but they must have been novel to most of Parmenides’ contemporaries. Hence the efforts Parmenides makes, using the metaphor of the ‘ways’, to keep the course of the arguments, their interrelation and their overall effect, absolutely clear.

Come then, I will tell you (and you, listen and take in the story!), which ways of enquiry alone are to be thought: the one, that it is and cannot not be, is the path of conviction, for it follows along after reality; the other, that it is not and that it is necessary that it is not—*this* track, I tell you, is utterly unconvincing...

(DK 28 B 2.1–6)

This presents, as a starting-point, a choice between two such ways, which are mutually exclusive. Clearly, though, they are not jointly exhaustive, since there might also be ways involving unrealized possibilities (‘it is, but might possibly not be’, ‘it is not, but might possibly be’). In fact, in the sequel, Parmenides will present only one more way, the ‘way of mortals’, which, as stated, is evidently self-contradictory. The two named here are apparently the only ones that ‘are to be thought’; and, of these, one is to be rejected as false.

What is going on here seems to be as follows. Parmenides holds (on what grounds, remains to be examined) that to speak of unrealized possibilities involves a contradiction. Hence, taking ‘is it?’ as the basic question at issue, there can be only two premisses to be considered: ‘necessarily, it is’, and ‘necessarily, it is not’. The ‘way of mortals’, which says that ‘it is and it is not’, is self-evidently contradictory; it is therefore not ‘to be considered’. None the less, it is mentioned later, and the reader is expressly cautioned against it, because it is a popular and appealing way. Of the two ways worth consideration, the second, which says ‘necessarily, it is not’, also turns out to involve a

contradiction, but this is not evident at the start; it has to be shown by argument. Once that has been done, the way that says ‘necessarily, it is’ is the only remaining possibility. Accordingly, it is accepted as true by elimination, and its consequences examined.

What then is meant here by ‘it is’ and ‘it is not’? First, what is ‘it’? In the Greek, the verb *esti* stands alone, as Greek verbs can, without even a pronoun to function as the grammatical subject. But unless Parmenides is making some radical and improbable departure from ordinary practice, an intended subject of discourse, of which ‘is’ and ‘is not’ are here said, must have been meant to be readily supplied from the context. Unfortunately for us, the original context is now partly missing. Between the promise of the goddess and the statement of the two ways, some now lost stretch of text, probably not long, once stood. None the less, what remains is sufficient for near-certainty as to the intended subject.

The ways are ‘ways of enquiry’. An enquiry, then, is presupposed as being already afoot. What that enquiry is concerned with, is likely to be what the first part of the goddess’s promise is concerned with: reality. It is true that the word *alētheiē* nowhere appears subsequently in the subject place attached to the verb *esti*. In the exploration of the true way that says ‘it is’, the subject of ‘is’ appears sometimes, cloaked in the unspecific designation (*to eon*, ‘that which is’. This phrase, though, can be taken without artificiality as another, and metrically more convenient, way of referring to *alētheiē*. (So taken, it involves a metaphysical pun: see below on the meanings of the verb *einai*.)

This conclusion, that *alētheiē*, in the sense of ‘reality’, is the intended subject, is central to the interpretation of Parmenides to be presented here.⁹ It has been reached by a simple yet powerful argument. It has yet to be subjected, though, to a series of severe tests. A reconstruction of Parmenides deserves acceptance only if it makes convincing sense of the *whole* of the surviving evidence.

The first test arises immediately. Can one make sense of an initial choice between ‘necessarily, reality is’ and ‘necessarily, reality is not’? At this point, we must also ask about the possible meanings of the verb *einai* (‘be’).

In general, it seems to make sense, whatever *x* may be, if one is making an enquiry into *x*, to start by asking ‘is there any such thing as *x* or not?’ The normal usage of the verb *einai* easily covers such a sense of ‘is’. In launching an enquiry into *alētheiē*, understood in extension from Homeric usage in a ‘summed sense’, as what would be jointly indicated by all true statements, Parmenides is in effect asking, sceptically, ‘why do we have to suppose that there is any such thing in the first place?’

Since this entirely normal and familiar use of *einai* fits the context so well, there is no need at the outset to look for more exotic possibilities.¹⁰ Later, though, when the subject of discourse is referred to as ‘that which is’ (*to eon*), a different use of the verb bears the logical weight. Another common use of *einai* is that in which it means (said of possible states of affairs) ‘obtain, be the case’. If *alētheiē* is thought of as a ‘summed state of affairs’, then to say that there actually exists such a thing is just the same as to say that it is the case.

Parmenides’ philosophical starting-point looks, in this light, rather like that of Descartes. Both start with a philosophical enquirer, an apparently isolated mind, trying to establish what it can know with absolute certainty. Parmenides approaches the problem via the concept of *alētheiē*, the reality that would have to underwrite any knowledge. What is next to be examined is his argument to establish that there must be such a reality. It is here that his further initial presuppositions, if any, are to be found. This is the argument that rejects the way that says ‘it is not’.

The Rejection of ‘it is not’

The passage in which Parmenides justifies the rejection of the second way is probably not preserved entire. There survive, in fact, only the beginning ((A) below) and the end, plus a single sentence presumably belonging closely with it ((B) below).

(A)...*this* track, I tell you, is utterly unconvincing [or: undiscoverable]; for you would not recognize [or; become aware of] what is not (for that cannot be done), nor would you point it out.

(DK 28 B 2.6–8)

The claim is that the way ‘it is not’ must be rejected. The verbs on which the argumentative weight is thrown, are, in the aorist forms used here, common Homeric words for ‘recognize’ and ‘point out’; they are cognitive ‘success verbs’. Their objects can be either ordinary individuals or ‘that’-clauses. So it is necessarily true that (1) ‘you would not recognize [to be the case: i.e. get knowledge of], or point out [as being the case: i.e. show, demonstrate], what is not’.

The natural way to expand (1) into a relevant argument is as follows. If there is no such thing as reality, then no-one can recognize it, nor point it out. In that case there can be no knowledge (if knowledge requires recognition of reality) and no communication of knowledge.

This will suffice to reject ‘it is not’, provided two further premisses are available: (2) that knowledge involves or consists in awareness of reality, and communication of knowledge involves or consists in the pointing-out of reality; (3) that knowledge and its communication are possible.¹¹

Did Parmenides supply any support for (2) and (3)? As to (2), there is no way of telling; maybe it was taken as following immediately from the meaning of *alētheiē*, as that which truths are *about*, and knowledge is *of*. As to (3), first of all some evidence of Aristotle comes in here opportunely. Aristotle identifies, as an underlying thesis of the Eleatics, that ‘some knowledge or understanding (*phronēsis*) is possible’ (Aristotle, *On the Heavens* III. 1, 298b14–24). This supports the reconstruction; but does not tell what grounds if any were given for (3). It cannot be that this assumption is embodied in the initial acceptance of the

'enquiry', as something actually on foot, unless there was an argument to show that enquiry is always successful. It will now be suggested that in fact the remaining pieces of text, dealing with the rejection of 'it is not', give the supporting argument for (3).

(B) For the same thing is for thinking and for being.

(DK 28 B 3)

It must be that what is for saying and for thinking, is; for it is for being, but what is not is not [for being]...

(DK 28 B 6.1–2)

These passages are part of the conclusion of the rejection of 'it is not'. But they should be treated, at least initially, as (part of) a separate argument from the one reconstructed above. Once again, Homeric usage is an important guide. 'It is for being/thinking/saying' represents an idiom familiar in Homer: 'A is for x-ing' means either 'there is A available to do some x-ing' or 'there is A available to be x-ed'.

Much depends here on what sort of thing might be said to be 'available for saying and thinking'. In Homeric usage, the object of the verbs 'say' and 'think' is usually expressed by a 'that'-clause. What the clause describes is the state of affairs, in virtue of which the saying or thinking is true or not.

An interpretation is possible within these linguistic constraints. Parmenides is arguing for the thesis that what can be said and thought, must actually be the case; i.e. that one can say and think only 'things that are', these being thought of not as true statements but as actual states of affairs.

The argument has a very close affinity with one which troubled Plato in various places, notably in the *Sophist* (but he did not accept it as correct, in the *Sophist* or elsewhere).¹² The 'Platonic problem' (as it may be called for convenience) starts from the premiss (4), that saying and thinking must have, as objects, a state of affairs, actual or not; i.e. a genuine case of saying or thinking must be a case of saying or thinking that such and such is the case. But then, (5) if saying or thinking actually and not merely apparently occurs, its object must exist. Now, (6) for a state of affairs, to exist is just to be actual. Hence (7) only actual states of affairs are thought and said, i.e. all thinking and saying is true.

Actual what is left of Parmenides' text there appears, not quite this argument, but a far-reaching modal variation of it. What can be thought and said, must by (4) be at least a possible state of affairs ('it is for being'). But (8) there can be no unrealized, 'bare' possibilities. The argument to this effect is brought out effectively by the idiomatic 'is for being'. What 'is for thinking', also 'is for being', and therefore necessarily is. There can be nothing more to 'being for being', than just being. Anything that is not, cannot be in any sense, and so cannot even 'be for being'. Hence every possible state of affairs is actual, and so it must be that (7) what can be thought and said is true.

We must, then, disentangle here the result (7), that there is no false thinking or saying, from the strong modal principle (8), that there are no unrealized possibilities. They are, of course, akin; in both (7) and (8), there is a refusal to have any philosophical truck whatever with any non-existent state of affairs. It is principle (8) that also supplies what is obviously needed: an explanation of Parmenides' hitherto unjustified ruling-out of the ways 'it is but might not be' and 'it is not but might be'.

Both principles, (7) and (8), are important for the rest of the poem as well.¹³ In the deduction of consequences from 'it is', principle (8) will have a central role. Moreover, error, by principle (7), doesn't consist in any 'saying' or 'thinking' but in the constructing of fictions of some sort, *apparent* statements. The effect of (7) is to force a new analysis of apparent falsehood, as will be seen later.

These two partial reconstructions may now be put together to make an overall reconstruction of the rejection of 'it is not'. The overall effect of the rejection of the way 'it is not' is to establish that since there must be true thinking and saying, there must be some objective reality. The first piece of text ((A) above) is a sketch of this overall argument, using premisses (1) (2) (3). In reply to this argument, a sceptic might question premiss (3): granted that thinking and saying occur, why should it be that some thinking and saying must be *true*?¹⁴ So Parmenides engages with this objection in the further argument which terminates in the second piece of text ((B) above). This argues that (7) there is no such thing as false thinking and saying, and (8) there are no unrealized possibilities either.

On this reading, if Parmenides' starting-point is like that of Descartes, and his first task is to show that knowledge is possible, his next problem, having shown that, is of a Kantian kind: given that knowledge and correct thought *must* be possible, what if anything follows about the nature of things? With the premisses (1), (2) and (3), he is able to show for a start that there must be such a thing as reality. There must be something for the knowledge to be *about*, and *of*, which by being so guarantees it.¹⁵

The 'Way of Mortals'

After rejecting the way that says 'it is not', the goddess mentions, as unacceptable, yet another way, not previously mentioned:

Then again [I shut you out] from this [way], which ignorant mortals wander along [or. construct], two-headed (for it is helplessness that steers the wandering mind in their breasts); they drift along, deaf and blind, in a daze, confused tribes: they accept as their convention that to be and not to be is the same and not the same [*or*: that the same thing and not the same thing both is and is not]; the path of all of them is back-turning.

(DK 28 B 6.4–9)

For surely it will never be forced that things that are not should be...

(DK 28 B 7.1)

There is no problem in understanding the rejection of a way that is clearly self-contradictory. But why does Parmenides identify this way as the way of ‘mortals’; and are all human beings meant, or only some particular group?

From the text, the ‘mortals’ seems to be ‘people’ generally, humanity in the mass. The ‘confused tribes’ can hardly be just a particular group of theorists.¹⁶ Besides, the goddess associates this way with an unthinking interpretation of the evidence of the senses, which is due to ‘habit of much experience’ and therefore presumably almost universal among adults:

do not let the habit of much experience drive you along this way,
exercising an unexamining eye, and a hearing and a tongue full of noise;
but judge by reason the controversial test which I have stated.

(DK 28 B 7.3–6)

It seems to be, not sense perception itself which is at fault here, but people’s lazy habits in selecting and interpreting the information given by sense perception. The distinction had already been made by Heraclitus, who remarked: ‘Bad witnesses to people are eyes and ears, if [those people] have uncomprehending souls’ (DK 22 B 107). It is reason that must dictate how sense perception is to be understood, and not the other way round.

On what grounds Parmenides took ordinary people to be enmeshed in contradiction about reality, is not yet clear. The reference to ‘the controversial test which I have stated’ must include the rejection of ‘it is not’. Parmenides may see people as accepting both ‘it is’ and ‘it is not’, because, while they see the need to assume some kind of reality, they at once contradict that assumption, as Parmenides believes, by allowing reality to contain features which are excluded by the test. For example, the existence of unrealized possibilities, and other things which are yet to be expressly excluded. The ‘controversial test’ probably includes also the negative implications of what is yet to come: the examination of the way that says ‘it is’.

Consequences of ‘it is’

The other ways having been shown false, only the way that says ‘it is’ remains, so that this must be true.

Only one story of a way is still left: that it is. On this [way] are very many signs: that what is cannot come-to-be nor cease-to-be; [that it is] whole, unique, unmoving and complete—nor was it ever nor will it be, since it is all together now—one, coherent.

(DK 28 B 8.1–6)

The ‘signs’ are best taken as the proofs, to follow, of the properties announced here as belonging to ‘what is’ (*eon*), i.e. reality. Evidently the deduction of the consequences of ‘it is’ constitutes, as expected, the journey along the way.

(a)

Reality cannot come-to-be nor cease-to-be (B 8.6–21)

For, what origin will you seek for it? How and from where did it grow? Nor will I let you say or think that [it did so] out of what is not, for it is not sayable or thinkable that it is not. Besides, what necessity would have driven it on to come-to-be, later or sooner, starting from what is not?

(DK 28 B 8.6–10)

The first section of proof reveals the techniques of argument characteristic of this part. For convenience, the subject (‘what is’ or ‘reality’) will be denoted by *E*. Suppose that *E* does at some time come-to-be. Then Parmenides asks: *out of what* does it come-to-be? The implied premiss is: (10) whatever comes-to-be, comes-to-be out of something. Parmenides seems to have taken (10) as self-evidently true; it is plausible to connect it with other places in this argument where he seems to have some variety of the Principle of Sufficient Reason in mind. So, if *E* comes-to-be, it comes-to-be out of *F* (say). Then for *F*, in turn, there are the two possibilities: *F* is, or *F* is not. Parmenides considers the second possibility, but not, apparently, the first one. This is a first problem.

There is an extra twist to it. So far, we have considered Parmenides’ reasonings about ‘it is’ and ‘it is not’ without taking account of the ambiguities of the present tense. The rejection of the way ‘it is not’ does not call for these to be considered. But the Greek present tense is ambiguous in the same ways as the English one; and where, as here, possible past and future events are being discussed, it becomes necessary to distinguish the various uses. ‘It is’ and ‘it is not’ may be timeless, or refer to the time of the coming-to-be, or to the time of utterance, if that is different. Parmenides gives us no help at all on this point; but it is plausible to assume that he means the question ‘is *F* or is it not?’ to be understood as specialized (in line with ordinary usage) to the time of coming-to-be. This results, as will now be shown, in an intelligible argument.

The question is then: *E* comes-to-be out of *F*; is *F*, or is it not, at the time of *E*’s coming-to-be? First, if *F* is, at that time, then at that time it is part of *E*, since *E* (on the interpretation followed here) is the whole of reality. But nothing can come-to-be out of a part of itself, since that does not count as coming-to-be at all. This point will account for Parmenides’ failure to examine the supposition ‘*F* is’.

Second, suppose then that *F*, at the time of *E*’s coming-to-be, is not. This is the case which Parmenides examines. He gives two arguments.

One argument is: 'It is not sayable or thinkable that it [*F*] is not'. This invokes the results of the rejection of the way that says 'it is not'. By principle (7), '*F* is not' is not sayable or thinkable, because it is not true.

But why is '*F* is not' not true? By principle (i), if it were true, then *F* would not be capable of being recognized or pointed out; so it could not figure intelligibly in any sentence; so no sentence including it could be true, a contradiction. Parmenides in what follows will repeatedly appeal to the same consequence of (1): namely (11), *no* sentence of the form '*X* is not' can be true.

It might be objected that this principle (11) (so far as has been shown) applies only to what is not *at the time when the utterance is made*; in other words that here too there is a crucial ambiguity in the present tense. What if *F* is not, at the time of coming-to-be, but is, at the time of speaking? In that case, it would seem to be possible to recognize and point out *F*, and say of it intelligibly that it was not, at some earlier time. Again, Parmenides seems unaware of this objection. Is there a hole in his proof? It is more charitable, and perhaps more plausible, to suppose that Parmenides tacitly applies a principle of tense-logic such as this: (12) for any time *t*, and any statement *S*, if it is true now that *S* was (will be) true at *t*, then it was (will be) true at *t* that *S* is true then. By this means, Parmenides can transfer the force of principle (1) to the time of the supposed coming-to-be. '*F* is not' cannot be (have been, be going to be) true at *any* time, because, if so, it would be true at the relevant time that '*F* is not'; but, by principle (11), the truth of '*F* is not' (at any time) would involve a contradiction.

The powerful general moral to be drawn, which will find further applications, is that, in assigning the properties of what is, none may be assigned which involves reference to things that supposedly *at any time* are not.

The other argument begins: 'Besides, what necessity would have driven it on to come-to-be, later or sooner, starting from what is not?'

The demand for a 'necessity', to explain what would have happened, implies, again, some variety of the Principle of Sufficient Reason. In an initial state in which there is nothing that is, there could hardly be any way of grounding the necessity. Even if there were, why did it operate 'later or sooner': at one particular time rather than at another?

The rest of section (a) is occupied, on this interpretation, only with recapitulation and summing up. Only the case of coming-to-be has been discussed; there is no parallel treatment of ceasing-to-be, presumably because the arguments are intended to be exactly analogous.

(b)

Reality is undivided, coherent, one (B 8.22–25)

Nor is it divided, since it is all in like manner, nor is it in any respect more in any one place (which would obstruct it from holding

together) nor in any respect less: all is full of what is. Hence it is all coherent, for what is comes close to what is.

(DK 28 B 8.22–5)

The underlying strategy here is parallel to that of section (a). Suppose that reality (*E*) is divided. What that implies is that something divides *E*. What could that be?

By the fact that *E* is 'summed', comprising all that is, anything other than *E* has to be something that is not. By the same argument as before, it can never be true to say that *E* is divided by something that is not. Hence *E* is not divided by anything other than itself. This limb of the argument, though suppressed here as obvious, appears in the parallel passage at 8.44–8.

What is here explored is the other possibility: that *E* is divided by itself, i.e. by its own internal variations. The possibility of internal qualitative variations is not mentioned; presumably they would not count as creating divisions. What is mentioned is the possibility of variations of 'more' and 'less', i.e. in 'quantity' or 'intensity' of being. These are rejected, by the observation that 'it is all in like manner'. Being admits of no degrees; anything either is or is not.

(c)

Reality is complete, unique, unchanging (B 8.26–33)

The same, staying in the same, by itself it lies, and thus it stays fixed there; for strong necessity holds it in the fetters of the limit, which fences it about; since it is not right that what is should be incomplete, for it is not lacking—if it were, it would lack everything.

(DK 28 B 8.29–33)

This is a train of argument in which exposition runs the opposite way to deduction. It must be read backwards from the end. The starting-point is that reality (*E*) is complete or 'not lacking'. Once again the strategy is the same, that of *reductio ad absurdum*. Suppose *E* is lacking; then *E* must lack something. What is this something? It cannot be part of *E*, for then it would not be lacking from *E*. Therefore it is not part of *E*, and hence is not; but it is not true that it is not, by the now familiar argument.

Given that *E* is not lacking, it is complete, and has a 'limit'. The word used here has no close English equivalent: Homer's usage applies it to anything that marks or achieves any kind of completion. Here, the 'limit' functions as a constraint on reality: the need for completeness is a (logical) constraint. Completeness rules out, in particular, all change and movement, and enforces uniqueness: reality is 'by itself' or 'on its own'. Why?

Completeness has these consequences because it embodies the principle that *E* contains everything that is. This now enables Parmenides to get some grip on the

problem of the past and the future. If past (or future) realities are still (or already) real, then they form part of reality; if not, not. The further question about the reality of the past (or future), does not here have to be decided. Either way, there can be no such thing as change or movement of reality: for those would imply the previous existence and present non-existence of some part of reality. Either past (future) and present coexist but differ, and then change is unreal; or the past (future) does not exist and then change is impossible.

For similar reasons it must be 'by itself, that is, unique, and not existing in relation to anything else. For 'anything else' that could be taken into account could not fail to be part of it.

(d)

Reality is spherically symmetrical (B 8.42–9)

The grand finale of the way 'it is' combines points made earlier in a striking image:

But since there is an outermost limit, it is perfect from every direction, like the mass of a well-rounded ball, in equipoise every way from the middle. For it must not be that it is any more or any less, here or there. For neither is there what is not, which would obstruct it from holding together, nor is there any way in which what is would be here more and here less than what is; for it is all immune from harm. For, equal to itself from every direction, it meets its limits uniformly.

(DK 28 B 8.42–9)

What is new in this section is spherical symmetry. From its 'being all alike' (the uniformity of its manner of being) and its perfection, is deduced its symmetry about a centre. What is surprising is not the symmetry, since that could be seen as a form of perfection, but the 'middle', a privileged central location, introduced without explanation (on this see the next section).

The Nature of Reality

Having followed the proofs of the properties of reality, one may still be uncertain just what those properties are. How strong, for instance, is the claim that reality is 'one and coherent' meant to be? Does 'completion' include spatial and temporal boundedness, and in general does reality have any spatial or temporal properties at all? How, if at all, is it related to the world apparently given in ordinary experience?

Is reality spatial or temporal or both?

First, the question of spatial and temporal properties. Parmenides shows no hesitation in applying to reality words which would normally imply spatial and temporal properties. It is 'staying in the same thing' and it 'stays fixed there'; and 'what is comes close to what is'. The word 'limit' (*peiras*) by itself implies nothing about space or time; but it is also said that this limit 'fences it about' and is 'outermost'. The simile of the ball might not be meant spatially, but what of the statement that reality is 'in equipoise every way from the middle'?

Recall that reality has been interpreted to be a state of affairs. Such a thing, though it may persist or not through time, can hardly itself have a spatial location or extension. This point chimes with another: if one supposes that reality is spatially extended, its spherical symmetry is problematic. The 'limit' cannot possibly be meant as a spatial boundary, since for reality to be bounded in space would be for it to be incomplete. It must be right, then, to take the spatial terms metaphorically. They must be aids to grasping how reality inhabits a kind of 'logical space'. This works out smoothly. The 'spherical symmetry' must express metaphorically the point that reality is exactly the same, however it is viewed by the mind: it presents no different 'aspects'. The 'middle', about which it is symmetrical, can be identified with the 'heart of well-rounded reality' mentioned earlier; and be some kind of logical core (more on this later). Likewise the undividedness and coherence of reality mean that it is unified, not logically plural, not self-contradictory. 'What is lies close to what is', in the sense that any internal variation between parts does not constitute an essential difference. 'Staying the same in the same and by itself makes the point that reality does not exist in relation to anything other than itself, and so not in relation to any external temporal or spatial framework; it is unique, and provides its own frame of reference. The metaphorical understanding of these terms is supported, above all, by the nature of the proofs. As has been seen, these make no appeal at all to properties of the space and time of experience.

With respect to time, though, the situation is different. It is at least possible to conceive of a state of affairs as being in, and lasting through, time. Parmenides argues against any *change* in reality; but this is still consistent with the view that reality is something which persists, without change, *through* time. Did he wish to go further? There are good reasons for thinking so.

First, the point made in connection with space, that reality exists 'by itself, without relation to anything other than itself, means that, if reality exists in and through time, time must itself be seen as an aspect of reality. The basic temporal phenomenon must be the temporal extension of reality. This already goes some way beyond the simple notion of a persisting reality.

Second, the argument (section (c) above) to the conclusion that reality is changeless and 'by itself seems powerful enough to rule out, not merely change, but even mere time-lapse in relation to reality.

Third, the initial list of conclusions states: 'nor was it ever, nor will it be, since it is all together now.' If one cannot even say that 'it was' and 'it will be', then one cannot say that it persists. Nor is it necessary to understand 'now' as a 'now' which implies a 'time when'. It is much more plausibly a metaphorical 'now', indicating a single timeless state, in which there is no longer any distinction of before and after, and therefore no meaning in tensed statements.

The metaphorical interpretation of these spatial and temporal terms, as applied to reality, does not, of course, imply that for Parmenides the spatial and temporal properties of ordinary objects are *illusory*. It still remains to be seen (in the next section) how Parmenides deals with the world of ordinary experience.¹⁷

In what sense is reality one?

There is no doubt that Parmenides was a monist of some kind; the comments of Plato and Aristotle alone would prove it, even if the fragments were lacking.¹⁸ The relevant proofs are those given under (b) and (c) in the previous section. While argument (b) shows that reality is internally one ('not divided'), argument (c) shows *inter alia* that there is nothing other than reality (it is 'unique' or 'by itself'). Together these yield a monistic thesis: reality is both unified and unique, so there is but one thing.

Just what this monism amounts to, may be seen by seeing what it excludes. The minimum that it must exclude is the error made by mortals when (in a passage to be discussed below) they decide to 'name two forms, one of which ought not [to be named]; this is where they have gone astray' (B 8.53–4). The fundamental error of the 'mortals' of the cosmology is to allow there to be two different subjects of (apparent) discourse, rather than just one.

Parmenides is then committed at least to a logical monism: there is one and only one subject about which anything is true. This seems also to be the maximum that needs to be claimed, and the maximum that is imputed by Aristotle's remark that '[Parmenides] seems to be getting at that which is one in definition' (*Metaphysics* I.5, 986b18–19). The argument for unity (section (b)) demands nothing more. In particular it does not exclude internal variation, nor does it impose qualitative homogeneity. Reality consists of a set of facts true of itself. It is not excluded that reality might be constituted by more than one such fact; and after all many statements about reality are made by the goddess herself in the course of the argument; it would be absurd to suppose that they are meant to be seen as identical. Even though one may talk (as even the goddess sometimes does) in a misleading conventional way, this 'plurality' of facts must not be understood as a genuine plurality: what we are really dealing with here is different aspects of reality. Even when different parts of reality are distinguished, the correct formulation does not admit them as subjects in their own right, but speaks only of 'what is': 'what is comes close to what is'; 'what is cannot be here more or here less than what is'.

So when the goddess distinguishes 'the unmoving heart', and the 'middle', of reality, implying that there is also a peripheral part, she must be understood as speaking, in a conventional way, about a situation which could be described more correctly. What she means by it, has now to be considered.

The Errors of 'Mortals' and the Place of Ordinary Experience

It remains to ask how this reality is supposed to be related to the world of ordinary experience.

In Parmenides' rejection of the 'way of mortals', it was seen that sense-experience in itself did not seem to be blamed for their mistakes. It was mortals' habitual misinterpretation of sense experience which caused them to fall into self-contradiction.

After the exploration of the nature of reality, it is possible to specify the fundamental mistake of 'mortals' more clearly, and Parmenides does so:

The same thing is for thinking and [is] the thought that it is; for you will not find thinking apart from what is, in which it is made explicit. For nothing other is or will be outside what is, since that has been bound by fate to be whole and unchanging. Hence it will all be [just] name, all the things that mortals have laid down, trusting them to be real, as coming-into-being and perishing, being and not being, changing place and altering bright colour.

(DK 28 B 8.34–41)

'Mortals', here too, includes all who accept a world of real plurality and real change. Such people are committed to the reality of what are in fact conventional fictions or 'names', taken as putative objects of thinking and saying. The passage starts with a reaffirmation of the principle derived from the 'Platonic problem' (see above): 'what can be thought is just the thought that it is', since this is (with its various consequences) the only true thought. Because there is no saying and thinking something false, apparent false thought must be 'mere names'. So too at the beginning of the cosmology (see next section), where we shall see that even 'mere names' (like other conventions, so long as intelligently made and properly observed) can have their uses.

It is the subjects of ordinary discourse, the things that we normally identify as the plural changing contents of the world, that are here denounced as just 'name', conventional noises and nothing more. Since statements about them cannot be true, they are not capable of being genuinely spoken and thought about.

The self-contradictory 'way of mortals' is now explained. 'Mortals' recognize the existence of an objective reality, and therefore say 'it is'. But they also have to say 'it is not', because they take reality to be something truly plural and changing.¹⁹

The denunciation of ‘mortals’ does *not* exclude the substantial reality of the ordinary world of experience—provided a construction is put upon that world which is radically different from the usual one, on the two key points of plurality and change. The temporal dimension may be kept, so long as it is in effect spatialized, with becoming and change ruled out as an illusion. The multiplicity of things in both spatial and temporal dimensions may be kept, so long as it is seen as non-essential qualitative variation within a single logical subject.

Finally, if this is right, it yields a satisfactory sense for the mentions of the ‘unmoving heart’ of reality and of its ‘middle’, a core implying a periphery. The ‘heart’ or ‘middle’ is constituted by the necessary truths discovered by reasoning, which alone are objects of knowledge. The outside is ‘what meets the eye’: the contingent snippets of reality as perceived by the senses. Sense-perception, even when in fact veridical, presumably does not yield knowledge because of the possibility of deception.²⁰ What it reveals, not being part of the core of reality, is non-essential and not demonstrable by reasoning.

*The Nature and Structure of Empirical Science: Cosmology as
‘Opinions of Mortals’*

Parmenides’ stringently exclusive conception of knowledge does not entail the uselessness of all other cognitive states. Far from it. He recognizes both the possibility and the practical value of ‘opinions’ about the cosmos, when organized into a plausible and reliable system. Here, building on the ideas of Xenophanes, he turns out to be the first recognizable philosopher of science.²¹

This is why the conclusion of the investigation of reality does not mark the end of the poem. There still remains the second half of the promise of the goddess, which must now be recalled:

It is necessary that you find out everything: both the unmoving heart of well-rounded reality [*alētheiē*], and the opinions of mortals, in which there is no real guarantee of truth—but still, these things too you shall learn, how [*or*: since] it had to be that opinions should reputably be, all of them going through everything.

(DK 28 B 1.28–32)

This promise of an exposition of ‘mortal opinions’ is taken up at the end of the exploration of reality:

At this point I cease for you my trusty tale and thought concerning reality; from now on, learn the opinions of mortals, hearing the deceptive ordering of my words... This world-ordering I reveal to you, plausible in all its parts, so that surely no judgement of mortals shall ever overtake you.

(DK 28 B 8.50–1 and 60–1)

What Parmenides says about his system of ‘opinions’ confirms the conclusion already reached, that for him sense-perception cannot give knowledge. For he is at pains to emphasize that such a system has no ‘proper guarantee of truth’; and that it is ‘deceptive’ (it purports to give knowledge, but does not). It appeals to empirical evidence for support, not to reason. So it lacks any claim to be an object of knowledge. The deeper reason why it cannot be supported by appeal to pure reason is presumably that it is concerned with ‘peripheral’, contingent aspects of reality.

But there is still a problem. If conducted in the usual way, a cosmology must also necessarily be not so much false as meaningless verbiage, since it takes seriously the illusions of plurality and change, speaks as though they were real, and offers explanations of such changes in terms of physical necessities. Parmenides’ ‘Opinions’ is such a cosmology. Why does he deliberately offer a system of which he himself thinks, and indeed implicitly says (in calling it ‘deceptive’, and basing it on an ‘error’), that it is not merely not certain, but, taken literally, meaningless all through?

One possible answer is that Parmenides thought that his convenient, but literally meaningless, statements could be at need translated back into the correct but cumbersome language of timelessness and logical monism. Unfortunately, there is no indication in the text that it is merely a question of words.

He does at least seem to reassure us that, meaningless or not, these statements are *practically* useful. In some way they correspond to the way the world presents itself to us. The fictitious entities they mention correspond to the fictions we create on the basis of our misread ordinary experience. That experience shows they may be usefully manipulated to give a practically workable understanding of the phenomenal world.²² (Cosmology so conceived is like science as seen by ‘operationalist’ philosophers of science; and like divination and natural magic—a thought perhaps taken further by Empedocles.²³)

Within such limits, cosmology may none the less be required to satisfy certain formal demands.²⁴ Parmenides sets out these demands explicitly, for the first time. The original promise of the goddess stresses that the cosmology to be told is (1) reliable; (2) comprehensive. Both of these points are echoed in the later passage. (1) Reliability is echoed by ‘deceptive’ and ‘plausible’. The demands on the cosmology are further that it be a ‘world-ordering’, not only (2) comprehensive but also (3) coherent and formally pleasing; and (4) the best possible of its kind. These last two points may also include economy or beauty of explanation. The Principle of Sufficient Reason, which is closely related to the demand for economy, appears, as in the exploration of reality, so again in the cosmology, to yield a symmetry between the two cosmic components.

In fact, Parmenides devises an elegant and economical basis for cosmology by following a hint given by the ‘way of mortals’. Any conventional cosmology has to tread that false way, and to say both ‘it is’ and ‘it is not’. The simplest way to commit this error is to suppose initially not one logical subject but two: one

which is, and one which is not.²⁵ The physical properties of the two subjects are then a kind of cosmic parody or allegory of the logical properties of what is and what is not.

Now, they have fixed their judgements to name two forms, one of which should not [be named]; this is where they have gone astray. They have separated their bodies as opposites, and laid down their signs apart from one another: for the one form, heavenly flaming *Fire*, gentle-minded, very light, the same as itself in every direction, but different from the other one; but that [other] one too by itself [they have laid down] as opposite, unknowing *Night*, a dense and weighty body.

(DK 28 B 8.53–9)

Fire and Night are the physical embodiments of the two opposed principles. The cosmology is dualistic, and there is reason to suspect that, as with the Pythagoreans from which it may borrow, the dualism was a moral (and an epistemic) as well as a physical one. The two opposed ‘forms’ are associated from the outset with knowledge and ignorance; perhaps also with good and evil. Traces of morally charged struggles and loves of ‘gods’ within the cosmos remain in the testimony.²⁶ A cycle of cosmic changes is the most likely explanation of a detached remark (DK B 5) about circular exposition.

Not only is the basis economical, but there are overall formal demands on the two forms. They must jointly exhaust the contents of the cosmos; and there must be cosmic symmetry as between them (DK B 9),²⁷

Conclusion: the Trouble with Thinking

This account of Parmenides must end with questions on which certainty seems to be out of reach.

The overarching question is this: is Parmenides’ ‘framework’, in which his theory of reality is embedded, itself meant to be grounded in that theory of reality? By the ‘framework’ is meant roughly the following: the original assumption about the actual existence of thinking and certain knowledge; the distinction between knowledge and opinion; the application of logic in the discovery of the nature of reality; and the assertion of the practical, empirical effectiveness of systematized ‘opinions’.

Even if this question cannot ultimately be given any confident answer, it usefully focuses attention on one sub-problem, which has so far been kept to one side. This is the problem about the relation between thinking and reality. We have seen that thinking, for Parmenides, can only be of truths, indeed of necessary truths, about reality. Is it a necessary truth that thinking occurs? If so, that truth itself is of course a necessary truth about reality; and whatever it is that thinks must be (part of) reality. If so, one would think that it ought to be deducible from the nature of reality that it thinks about itself. No such

deduction appears in the text, though; and the thesis that true thinking occurs seems to be (as Aristotle took it) an initial assumption which is taken as unquestionable, but not formally proved.

On this point, there are two parts of the poem which might serve as some kind of a guide. One is the introductory narrative of the journey to the goddess. Another is the outline of ‘physical psychology’, a general theory of perception and thought, which is attested as part of the cosmology.

The journey to the goddess

The chariot-ride of the narrator in the introduction (preserved in DK B 1) has usually been taken as an allegory of Parmenides’ own intellectual odyssey, and of the framework with which he starts.²⁸ Its chronology and geography are elusive and dreamlike. The individual beings mentioned, even the narrator and the goddess herself, are but shadowy outlines. Only certain *technological objects*—the chariot wheels and axle, the gate and its key—stand out in relief. Is Parmenides here proclaiming his advances in the technology of thinking, as the motive power in, and the key and gateway to, all that follows? The ‘paths of Night and Day’ would then be the ways of ‘it is’ and ‘it is not’. The chariot, the horses, the daughters of the Sun who act as guides, and Parmenides’ own ambition, would correspond to everything Parmenides needs to get him as far as the choice of ways,—that is, to the ‘framework’. All too much, though, must be left uncertain, even if such an approach looks plausible in general.

The empirical psychology

The psychology or ‘theory of mental functioning’ which was outlined in Parmenides’ cosmology is, equally, not much more than a tantalizing hint. Theophrastus says that for Parmenides as for several others ‘sense perception is by what is similar’, and goes on:

‘As for Parmenides, he goes into no detail at all, but just [says] that, there being two elements, cognition [*gnōsis*] is according to what predominates. For, as the hot or the cold predominates, the intellect [*dianoia*] alters, but that [intellect] which is [determined] by the hot is in a better and purer state, though even that kind needs a kind of proportioning. He says:

According as the compounding of the wandering limbs is in each case, in such a way is mind present in people; for it is

the same thing in each and in all that the nature of the limbs has in mind: the more is the thought.

For he talks of sense perception and mental apprehension as being the same; which is why [he says that] memory and forgetting occur from these [constituents] by the [change of] compounding. But whether, if they are in equal quantities in the mixture, there will be mental apprehension or not, and what state this is, he does not go on to make clear. That he also makes sense perception [occur] for the other element [(the cold)] in itself, is clear from the passage where he says that the corpse does not perceive light and hot and noise, because of the lack of fire, but does perceive cold and silence and the opposite things. And in general [he says that] everything that is has some kind of cognition. Thus it seems he tries to cut short, by his dogmatic statement, the difficulties that arise from his theory.

(Theophrastus *On the Senses* 3–4, citing DK 28 B 16)

This would seem to be at least a two-tier theory. The lower tier is basic sense perception, available to everything that exists, and ‘by the similar’; i.e. what is fire can perceive fire, what is night can perceive night, and what is a mixture can perceive both. The higher tier is that of mind and thought, somehow due to a ‘proportionate compounding’ in human (and other?) bodies.²⁹

Any inferences from these indications can be but tentative. Briefly, the general shape of Parmenides’ theory of reality shows that any real thinking must be (part of) reality thinking about itself.³⁰ The account of Parmenides’ intellectual journey may be taken as acknowledging the need for starting-points for thinking—for a ‘framework’. The theory of mental activity in the cosmology is of course infected with the fictitiousness of the whole cosmology; yet it is probably meant to correspond, somehow, to the truth about thinking. If one element (‘fire’) in the cosmology corresponds to reality, then the fact that it is fire that cognizes fire reflects the truth that it is reality that thinks of reality. It is a pity we can know no more of what Parmenides thought about thought.

ZENO

Introduction

Zeno of Elea, fellow citizen and disciple of Parmenides, became famous as the author of a series of destructive arguments. There is no good evidence that he put forward any positive doctrines. Plato and Aristotle were deeply impressed by the originality and power of the arguments; such knowledge of Zeno as survives is due principally to them and to the Neoplatonist scholar Simplicius.³¹

The Arguments against Plurality

(a)

Plato on Zeno’s book and the structure of the arguments

Plato’s dialogue *Parmenides* describes a supposed meeting in Athens, around 450 BC, of the young Socrates and others with two visitors from Elea, Parmenides and Zeno. Plato’s fictional narrator gives some biographical data about the two Eleatics, and recounts a conversation between ‘Socrates’ and ‘Zeno’ which tells (127d6–128e4) of the genesis of Zeno’s arguments against plurality, their structure and their aim. Even if based solely on Plato’s own reading of Zeno’s book, this has to be taken seriously as testimony.³²

According to this testimony, there was a book by Zeno which consisted entirely of arguments directed against the thesis ‘there are many things’. Each argument began by assuming the truth of this thesis, and proceeded to deduce a pair of mutually contradictory conclusions from it, in order to make a *reductio ad absurdum* of the original thesis. In support of this account, Simplicius the Neoplatonist gives verbatim quotations from two of the arguments, which can be seen to exemplify the pattern; Plato’s narrator himself gives the outline of another.

(b)

The aim of the arguments

This account of the structure of Zeno’s arguments leads ‘Socrates’ in the dialogue to the view that Zeno’s aim was simply to refute the thesis of pluralism (‘that there are many things’), in any sense incompatible with Parmenides’ theory, and thereby to establish Parmenidean monism. However, this conclusion of ‘Socrates’ is not completely accepted by ‘Zeno’, who denies that the book was a ‘serious’ attempt to establish Parmenidean monism, and goes on:

actually this [book] is a way of coming to the aid of Parmenides’ theory, by attacking those who try to make fun of it [on the grounds] that, if there is one thing, then many ridiculous and self-contradictory consequences follow for the theory. Well, this book is a counter-attack against the pluralists; it pays them back in the same coin, and more; its aim is to show that their thesis, that there are many things, would have even more ridiculous consequences than the thesis that there is one thing, if one were to go into it sufficiently.

(*Parmenides* 128c6–d6)

The natural way to read this is as saying that the arguments had an *ad hominem* element. ‘Zeno’ cannot be saying that Parmenides’ thesis really had ridiculous consequences; ‘even more ridiculous consequences’ points to the employment by

Zeno of assumptions made by Parmenides' opponents, but not accepted by Zeno himself.

Yet 'Socrates', a little earlier, has said that the arguments give 'very many, very strong grounds for belief (128b1–3) that pluralism, of any variety incompatible with Parmenides, is false. In Plato's opinion the arguments, however they originated, were usable against all varieties of anti-Parmenidean pluralism. Therefore Plato's testimony on Zeno cannot be fully understood unless we know how he interpreted Parmenides, which cannot be investigated in this chapter.

Provisionally, it is enough to note that there is no danger of contradiction in Plato's testimony, provided we may assume that Zeno's original opponents made, and Zeno himself used against them, only such assumptions as were either inconsistent with Parmenides; or plausibly seen as articulations of common-sense.³³ The question can be finally decided, if at all, only by analysis of the arguments themselves.

One further piece of information is given at 135d7–e7: the arguments were about 'visible things', i.e. they addressed themselves to the question of pluralism in the ordinary world, using assumptions derived from experience.³⁴

(c)

The argument by 'like' and 'unlike'

According to Plato (*Parmenides* 127d6–e5), the argument (the first one in the book) purported to show that 'if there are many things, they must be both like and unlike'. Nothing further is known.

(d)

The argument by 'finitely many' and 'infinitely many'

Simplicius preserves the entire text of this argument. The compressed, austere style is reminiscent of Parmenides.

If there are many things, it must be that they are just as many as they are and neither more of them nor less. But if they are as many as they are, they would be finite.

If there are many things, the things that are are infinite. For there are always other things between those that are, and again others between those; and thus the things that are are infinite.

(DK 29 B 3, Simplicius *Physics* 140.27–34)

The first limb insists on the implications of countability. If it is true to say 'there are many things' and to deny that 'there is one thing', that implies that (a) there is one correct way of counting things; (b) that that way of counting the things that

are leads to a definite result. But a definite result implies finitely many things: if there were infinitely many, counting them would lead to no result at all.

The second limb invokes the relation 'between' (*metaxu*). Any two distinct things are spatially separate (the converse of Parmenides' argument for the oneness of reality from its undividedness). But what separates them must itself be something that is, and distinct from either. From this principle, an infinite progression of new entities is constructed.

Though this involves an appeal to spatial properties, it might easily be rephrased in terms of logical ones. The principle would be: for any two distinct things, there must be some third thing different from either which distinguishes them from one another; and so on.

(e)

The argument by 'sizeless' and 'of infinite size'

Again Simplicius is our source. He quotes two chunks of the text, and enough information to recover the rest in outline.

The first limb claimed that 'if there are many things, they are so small as to have no size'. The argument proceeded, according to Simplicius, 'from the fact that each of the many things is the same as itself and one' (*Physics* 139, 18–19). It is not difficult to make a plausible reconstruction here. First, to speak of a 'many' implies, as in (d), a correct way of counting. The many must be made up of securely unified ones. Then consider each of these units. The line may have been (compare Melissus DK B 9): what has size has parts; what has parts is not one. Hence each of the units must be without size.

The second limb contradicted this in successively stronger ways. First, it claimed to show that, in a plurality, what is must have size. Suppose something does not have size, then it cannot be:

For if it were added to another thing that is, it would make it no larger: for if something is no size, and is added, it is not possible that there should be any increase in size. This already shows that what is added would be nothing. But if when it is taken away the other thing will be no smaller, and again when it is added [the other thing] will not increase, it is clear that what was added was nothing, and so was what was taken away.

(DK 29 B 2, Simplicius *Physics* 139.11–15)

This argument in terms of adding and taking away obviously makes essential use of the assumption 'there are many things'; it could not, therefore, have been turned against Parmenides. It also needs some principle such as 'to be is to be (something having) a quantity': not a 'commonsense' axiom, but one likely to be held by most mathematizing theorists of the time.³⁵

The next and final step proceeds from size to infinite size:

But if each [of the many things] is, then it is necessary that it has some size and bulk, and that one part of it is at a distance from another. The same account applies to the part in front: for that too will have size and a part of it will be in front. Now, it is alike to say this once and to keep saying it all the time: for no such part of it will be the endmost, nor will it be that [any such part] is not one part next to another. Thus if there are many things, it must be that they are both small and large: so small as to have no size, so large as to be infinite.

(DK 29 B 1, Simplicius *Physics* 141.2–8)

One axiom used is that anything having size contains at least two parts themselves having size. This clearly generates an unending series of parts having size. Less clear is the final step from ‘having infinitely many parts with size’ to ‘infinite (in size)’, which apparently was taken with no further argument. There is some analogy with the ‘Stadium’ and ‘Achilles’ (see (c) below): just as the runner’s supposedly finite track turns out to contain an infinite series of substretches, each of positive length, so here the object with supposedly finite size turns out to contain an infinite series of parts, each having size. If we try to recombine the original thing out of the parts, we shall never finish, but always be adding to its size; and this, Zeno might plausibly claim, is just what is meant when we say something is infinite in size.³⁶

(f)

Methods and assumptions

In the light of the arguments themselves as preserved, the question of their aims and methods can be taken up again.

It is evident that some of the assumptions used by Zeno in these arguments are not due to simple ‘common sense’. Common sense does not make postulates about the divisibility *ad infinitum* of things having size; nor suppose that ‘to be is to be something having a quantity’; nor insist on a single correct way of counting things. Hence Zeno’s arguments are not directed against unreflecting ‘common sense’. In fact, these are the kind of assumptions that are naturally and plausibly made, when one sets about theorizing, in an abstract and mathematical spirit, about the physical world.

The methods and the style of proof are also mathematical. Note-worthy are the constructions of progressions *ad infinitum*, and the remark when one is constructed: ‘it is alike to say this once and to keep saying it all the time’. However many times the operation is repeated, that is, it will always turn out possible to make precisely the same step yet again.³⁷

- 4 The fragments of Parmenides have been edited many times. DK is the standard edition for reference purposes; the most reliable and informed recent edition, on matters of Greek linguistic usage and of textual history, is that of Coxon [4.8], which also gives much the fullest collection of secondary ancient evidence. Among minor sources are some other Neoplatonists (Plotinus, Iamblichus, Proclus), and Sextus Empiricus the Sceptic.
- 5 The scholarly literature is extensive. A small selection is given in the bibliography; the monograph of Mourelatos [4.24] can be particularly recommended for clarity, fullness of information and breadth of approach. The footnotes below offer very brief indications of the spread of opinion on cardinal points; they do not try to outline the arguments needed to justify the reading given in the text.
- 6 On Xenophanes and his relevance here, Hussey [2.35], 17–32.
- 7 On the ‘opinions of mortals’ see below pp. 147–9.
- 8 On *alētheiē* and related words in early Greek, scholarly discussion has been too often darkened by philosophical prejudice. See the useful study of Heitsch [4.29]; also Mourelatos [4.24], 63–7 and references there.
Alētheiē in Parmenides is taken as ‘reality’ by Verdenius [4.30], Mourelatos [4.24], 63–7, Coxon [4.8], 168. Others understand it as ‘truth’ or ‘manifest or necessary truth’.
- 9 So Verdenius [4.30]. Allied to this view are those who take the intended subject to be ‘what is’ in the sense of ‘what is the case’ (e.g. Mourelatos [4.24]). Other leading candidates for the role of subject of discourse: ‘that which is’ (so e.g. Cornford [4.19], Verdenius [4.27], Hölscher [4.22], O’Brien [4.12]); ‘what can be spoken and thought of (Owen [4.46]), ‘whatever may be the object of enquiry’ (Barnes [2.8]). That a wholly indefinite subject (‘something’) or no specific subject at all is intended, at least initially, is suggested in different ways by e.g. Calogero [4.18], Coxon [4.8].
- 10 On the verb *einai* ‘be’ in early Greek, see items [4.31] to [4.34] in the Bibliography. The entirely straightforward Homeric usage (‘*X* is’—‘there is such a thing as *X*’) is the obvious first hypothesis for the *esti* and *ouk esti* paths. Some, though, have put the so-called ‘veridical’ uses (‘be’=‘be true’ or ‘be’=‘be so’, ‘be the case’) in the forefront (e.g. Jantzen [4.23], Kahn [4.42]); others make the use of *einai* in predication central (e.g. Mourelatos [4.24]); yet others (Calogero [4.18], Furth [4.41]) have suggested that in Parmenides this verb is a ‘fusion’ of two or more of the normal uses.
- 11 In fact premiss (2), even without (1) and (3), gives a reason to reject the way that says ‘it is not’. For this way says, about reality generally, that it doesn’t exist or obtain. So by its own account it can’t state any truth, since truth presupposes reality. But there is nothing to show that Parmenides took this short cut.
- 12 Plato *Theaetetus* 188c9–189b6, *Sophist* 237b7–e7. On the versions of this argument in Plato, see e.g. items [4.49] to [4.51] in the Bibliography.
- 13 It is true that in places the words ‘say’ (*legein, phasthai*), ‘think’ (*noein*) and their derivatives are used in ways that seem inconsistent with principle (7). (a) The goddess describes (at least) two ways as those ‘which alone are to be thought’ (B 2.2), including (at least) one false one. (b) She warns Parmenides against a false way: ‘fence off your thought from this way of enquiry’ (B 7.2), as though it were possible to think its falsities, (c) She speaks of ‘[my] trusty account (“saying”) and thought about reality’ (B 8.50–1), as though it were possible to have un-trusty

thought. Of these passages, though, (b) and (c) are rhetorical flourishes, in no way essential to the argument; while (a), which occurs before principle (7) has been introduced, need only mean that *at most* those two ways can be thought.

- 14 Xenophanes, for instance, would have questioned the ambition of establishing the truth, rather than mapping out by enquiry *coherent possibilities for well-based opinion*.
- 15 Whether this reality is *objective* or not, is not here at issue. On this question, see 'Conclusion; the Trouble with Thinking'.
- 16 Though verbal echoes suggest that Parmenides (not surprisingly) had Heraclitus, with his aggressive use of (?apparent) contradictions, particularly in mind.
- 17 Some have taken the spatial and temporal ways of speaking literally. Literal sphericity and centre: e.g. Cornford [4.19], Barnes [2.8]; against this, e.g. Owen [4.46], 61–8. Persistence through time: e.g. Fränkel [4.20], sect 6; Schofield [4.48]; against this, Owen [4.47] The tense-logical principle ascribed to Parmenides at p. 140 above would not commit him to the reality of time in any sense.
- 18 For example, Plato *Sophist* 242d4–6; *Parmenides* 12834–433; Aristotle *Metaphysics* 1.5, 986b10–19. Recent views on just what the monism amounts to, and of the reliability of Plato's testimony, have differed widely; Barnes [4.39] maintains that Parmenides is not a monist at all.
- 19 The contemptuous term 'mortals' may itself hint at their double mistake, by itself presupposing that mistake: it is plural, and it implies the reality of death. By their very error, they condemn themselves to appear to themselves as plural and ephemeral. Interesting parallels for this in early Brahmanical monism, e.g. in the Katha Upanishad:

...Herein there's no diversity at all.
Death beyond death is all the lot
Of him who sees in this what seems to be diverse.

(R.C.Zaehner, *Hindu Scriptures* (Everyman's Library: London and New York, Dent/Dutton, 1966); 178)

- 20 That the bare possibility of deception suffices to destroy a claim to knowledge had been pointed out by Xenophanes (DK 21 B 34).
- 21 On Xenophanes see the section 'The Promise of the Goddess'.
- 22 But what it is (if anything), in the nature of reality, that underwrites this practical usefulness, is not clear. There is a hint ('it *had to be* that opinions should reputedly be', B1.32) that Parmenides did envisage such a guarantee; and see below on the cosmology as formally parallel to the section dealing with *alētheiē*.
- Scholarly opinion has been much divided on the status and purpose of the section concerned with the 'opinions of mortals'. They have been taken, for example, as a 'dialectical' refutation by analysis of the presuppositions of ordinary mortals (Owen [4.46]), a 'history of the genesis of illusion' (Hölscher [4.22]), a 'case-study in self-deception' (Mourelatos [4.24]); or as reportage of the latest (Pythagorean) fashion in cosmology (Cornford [4.19]). Or, as here, they have been taken to be meant seriously as empirical science (and philosophy of science); so e.g. Calogero [4.18], Verdenius [4.27], Fränkel [4.20].

- 23 Empedocles promises magical powers to the disciple who meditates on his cosmology: Empedocles DK B 110 and 111.
- 24 On the internal structure of the 'opinions', and the parallelism with *Alētheiē*, see Mourelatos [4.24], 222–63.
- 25 This reading is supported by Aristotle's testimony (*Metaphysics* 1.5,
- 26 'Love' as a power: DK 613, cf. Aristotle *Metaphysics* 1.3, 984b20–31; struggles of gods: Plato *Symposium* 195c, Cicero *On the Nature of the Gods* I.II.28 (DK 28 A 37). There is no need to be puzzled by the appearance of Hesiodic divinities here, if Parmenides, as suggested, is taking an 'operationalist' view of what he is doing.
- 27 On details of the cosmology not discussed here (except for the theory of mental functioning, on which see pp. 150–1; see Guthrie [2.13] II: 57–70.
- 28 But there is much disagreement about the details. An extended ancient allegorization is found in Sextus Empiricus (*Adversus Mathematicos* VII.111–14). For the important parallels in Homer, Hesiod and Orphic writings, see Burkert [4.28].
- 29 On the theory of mental functioning, Fränkel [4.20], sect. 3; Laks [4.54]. Both text and meaning of the lines of Parmenides here quoted by Theophrastus are, unfortunately, uncertain at vital points.
- 30 Of course it does not follow from this that reality's thinking is what alone constitutes reality, nor that reality is just what thinks itself. (It does follow that reality is not ultimately 'mind-independent', in that it is necessarily thought by itself. In this rather special sense, Parmenides is an idealist, but not provably in any wider sense.)
- 31 Zeno was 'the Eleatic Palamedes' (Plato *Phaedrus* 261d6), the 'inventor of dialectic' (Diogenes Laertius *Lives* VIII.57 (W.D.Ross *Aristotelis Fragmenta Selecta*, Oxford, 1955:15).
- 32 Plato's evidence has not gone unchallenged. Zeno has sometimes been read as attacking Parmenides as well as his opponents, particularly by those who question whether Parmenides was a monist. The attempt of Solmsen [4.72] to undermine Plato's testimony was countered by Vlastos [4.73]; but even Vlastos doubts Plato's testimony that all the arguments in the book were directed against plurality.
- 33 Closeness to common sense is also suggested by the knockabout flavour of 'making fun' (*kōmōidein*). (The phrase 'as against all the things that are said' (127d9–10) is too vague to be of use.) But mere unreflecting common sense would not have tried to make fun of Parmenides *by arguments*, as Zeno implies his opponents did.
- 34 This fits the earlier suggestions of *ad hominem* argumentation by Zeno. It does not imply that, in Plato's opinion, Parmenides' monism was a monism about the ordinary world.
- 35 So Aristotle, *Metaphysics* III 4, 1001b7–16, who calls the argument 'crude' because of this assumption.
- 36 Vlastos ([4.64], 371) points out that the step made here was taken as valid by many later ancient writers.
- 37 Other possible arguments of Zeno against plurality appear at: Aristotle *On Generation and Conception* 1.2, 316a14–317a12 (not attributed, and introduced in the context of Democritus' atomism); and Simplicius *Physics* 139.24–140, 26, Themistius *Physics* 12.1–3, Philoponus *Physics* 80.23–81.7 (attributed to

- Parmenides or Zeno). On these as possibly Zeno's: see Vlastos [4.64], 371–2 and Makin [4.66].
- 38 On their possible interdependence, see section (e).
- 39 Compare the assumption needed in (e) above, that anything having size can be divided into two things each having size.
- 40 Sometimes known as the 'Dichotomy'. Aristotle's own solution is at *Physics* VIII 8, 263a4–b9.
- 41 Aristotle's phrase corresponding to 'at a moment' is 'in the now', i.e. 'in the present understood as an indivisible instant'. This excludes periods of time, even supposedly indivisible ones. It is possible that Zeno's argument somehow depended crucially on the instant's being taken as *present* (as suggested by Lear [4.67]).
- 42 Diogenes Laertius (*Lives* IX.72, DK 29 B 4), using a source independent of Aristotle, gives a summary of an argument which may possibly descend from Zeno's formulation of step (2): 'that which moves does not move either in the place in which it is, or in the place in which it is not'.
- 43 The long illustrative example (240a4–17), implying a lettered diagram, is given as Aristotle's own contribution; there is no reason to attribute it to Zeno.
- 44 Attempts to reconstruct a more satisfactory argument include those of Furlley [4.63] and Owen [4.68].
- 45 In some interpretations, the arguments have been seen as systematically exhausting the theoretical possibilities for pluralism. The idea goes back to the nineteenth century; notable in this connection is the theory of Owen [4.68]. On such a view, time and the track of the moving thing are considered in the 'Stadium' and the 'Achilles' as divisible *ad infinitum*; but in the 'Arrow' and the 'Moving Rows' as 'atomized', i.e. as consisting ultimately of indivisible units of extension.
- 46 On the indications connecting Zeno's arguments with 'Pythagoreans' see Caveing [4.62], 163–80.
- 47 This is not to deny that modern mathematics enables us to give sharper formulations both of the arguments and of the possibilities for meeting them: see especially Grünbaum [4.75].
- 48 See above pp. 145–7.
- 49 On Aristotle's description and criticism of this programme, see Huffman [4.78], 57–64; and Kahn [4.2].
- 50 The surviving fragments attributed to Philolaus are due to various late sources (Diogenes Laertius, some Neoplatonists, and the anthology of Stobaeus). Their authenticity is controversial; on this question, see Burkert [2.25], 238–68; [4.78].
The reading of Philolaus given here is indebted to Burkert [2.25] and particularly to Nussbaum [4.79].
- 51 See DK 44 B 1, 2, 4, 5, 6.
- 52 Nussbaum [4.79], 102.
- 53 Aristotle *Metaphysics* I.5, 986b25–7 ('rather crude'); *Physics* I 2, 185a10–11 ('low-grade'). One purported source, the pseudo-Aristotelian essay *On Melissus Xenophanes Gorgias (MXG)*, is an exercise in 'philosophical reconstruction', from which it is not possible to disentangle with confidence any further information about Melissus. *MXG* is not drawn on here. The most noteworthy modern attempt to rehabilitate Melissus as a philosopher is that of Barnes [2.8], chs. 10, 11, 14.
- 54 This is a conjectural interpretation of Simplicius' paraphrase, *Physics* 103.15: 'if nothing is, what would one say about it as though it were something?'

- 55 It is not safe, though, to read back the mind-body dualism of Plato's middle period into Pythagoras.

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CHAPTER 10

Plato: metaphysics and epistemology

Robert Heinaman

METAPHYSICS

The Theory of Forms

Generality is the problematic feature of the world that led to the development of Plato's Theory of Forms and the epistemological views associated with it.¹ This pervasive fact of generality appears in several guises, (1) Normally, *one* characteristic is exhibited by *many* individuals. Redness, for example, characterizes many objects. (2) General terms such as 'is red' are correctly applied to many objects, and abstract singular terms such as 'triangularity' appear to name something without naming any individual. (3) We can *think* of general characteristics such as redness and of general facts such as that 'the triangle is a three-sided plane figure', where what is thought cannot be identified with a red individual or a fact about an individual triangle. (4) I can not merely think of but *know* general notions such as triangularity and general truths about them. Plato was the first western philosopher to focus attention on these facts, and his Theory of Forms attempts to explain their existence.

Although the first philosopher to draw attention to the problem of universals, Plato himself did not use any word that could be translated by 'universal'. The Greek terms normally used in the middle dialogues' 'classical' Theory of Forms are *eidos* and *idea*, which mean shape or form.

These terms already appear without their later metaphysical weight in early dialogues, where they signify moral characteristics which Socrates wants to define. In a famous passage of the *Metaphysics* (987a32–b8) Aristotle wrote,

Having in his youth first become familiar with Cratylus and with the Heraclitean doctrines (that all sensible things are ever in a state of flux and there is no knowledge about them), these views he held even in later years. Socrates, however, was busying himself about ethical matters and neglecting the world of nature as a whole but seeking the universal in these

ethical matters, and fixed thought for the first time on definition. Plato accepted his teaching, but held that the problem applied not to sensible things but to entities of another kind—for this reason, that the common definition could not be a definition of any sensible thing, as they were always changing. Things of this other sort, then, he called Ideas...

This fits what we find in early dialogues where, in asking questions of the form ‘What is X?’ Socrates² is seeking a general definition stating what *X is*, not merely what *X is like*. The correct definition of X should not only be coextensive with X but illuminate the nature of X: the *being or reality or essence (ousia)* of X.

While taking over Socrates’ interest in general definitions, Plato went further by raising the question of ‘what the problem applied to’: *what* do we define when we truly state, for example, that

(1)
Virtue is knowledge of good and evil?

Further, Plato had a deep interest in mathematics, seeing it as a paradigm of knowledge, and the same question arises for mathematical truths such as

(2)
The triangle is a three-sided plane figure.

Precisely *what* is the subject-matter of such a statement?

I believe the following sort of reasoning lay behind Plato’s answer to this question: Whatever such truths are about, their being about *that* must explain why they are *eternally* and *changelessly* true. By contrast, truths about sensible objects such as (3) Socrates is sitting inevitably become false. The explanation for this feature of (3) seems straightforward: (3) is about Socrates, a changeable object, and it is because Socrates changes that the statement about him changes from true to false.

Since (3)’s changeable subject-matter explains its change in truth value, it appears plausible to suppose that what explains the fact that (2) is eternally and changelessly true is that it is about an eternal and changeless subject (cf. *Timaeus* 2.9b).

If so, with what could such a subject be identified? Apart from one brusquely dismissed proposal to be mentioned shortly, Plato believed that the only alternative to Forms which needs to be ruled out consists in sensible objects. Now, as Aristotle informs us, Plato was influenced by a student of Heraclitus named Cratylus who said that the world is in constant flux, and he himself held a similar view of the sensible world. Whatever the exact meaning of Plato’s claim, it certainly entailed that the instability of sensible objects excludes them as the subject-matter of eternal truths.

Even if sensible objects sustain the same features for some time, they eventually perish and so could not be what *eternal* truths are about. If the triangle is a three-sided plane figure even after a particular sensible triangle perishes, the general truth cannot be reporting any fact about it. After its demise, no state of affairs involving the particular triangle exists, so no such state of affairs can be the reality represented by the general truth.

So, I take Plato to have reasoned, (2) is about a Form, an eternal and changeless entity, and that is why (2) is an eternal and changeless truth. Similarly, there will be a Form of Virtue underlying a true definition such as (1), thereby justifying Plato’s belief in an objective moral reality which is as independent of human capacities and interests as mathematical reality.

A related and absolutely fundamental point for understanding why Plato believed in the Forms lies in their role as objects of thought. Its importance is stressed at the end of the criticism of the Theory of Forms in the *Parmenides* when, in face of all the alleged problems for the theory, Plato comes down to one bedrock argument that furnishes unanswerable proof for the existence of Forms:

If one does not allow Forms of things in view of all the present difficulties and others like them, and does not distinguish some single Form in each case, *one will have nothing on which to fix one’s thought*, since one is not allowing that in each case there is an Idea that is always the same, and so one will utterly remove the possibility of discourse.

(135b–c)

Plato sees thought as involving an awareness of entities external to the thinker where these entities furnish the contents of the thought. For, first of all, when I think of triangularity I am thinking about something, my thought has a content. So, Plato (fallaciously) reasons, what I am thinking of exists. Therefore triangularity is a being that I am aware of when thinking of triangularity. And second, to think of triangularity is not to be aware of some thought inside my own mind. Thought is directed toward a content other than itself—a Form (*Parmenides* 132b–c).

So thought, like perception, mentally connects us with a reality outside ourselves, and Plato regularly speaks of thinking as a kind of mental vision. By thinking of triangularity I stand in a relation to a being which is the content of the thought. And since I can think of triangularity when no particular triangles exist, particular triangles could not be the reality I am then related to and aware of in thinking of triangularity. For *what* is thought when I think of triangularity does not vary with the shifting population of particular triangles. So at no time could the object of thought be identified with sensible objects.³

For Plato, this shows not merely that the object of thought—the Form of triangularity—differs from particular triangles, it proves the Form’s complete independence of them. Hence, Forms are not only eternal and changeless, they exist independently of what happens in the sensible world.

The reference to discourse at the end of the passage quoted from the *Parmenides* indicates that what holds for thought applies equally to language: general words have a meaning or content that must be identified with the Forms. Although Plato distinguishes between words and statements, he does not (yet) distinguish the ways in which they function. Both signify some objective reality which is identified with their content.⁴

Only Forms are objects of knowledge. To see why we must look more closely at Plato's view of the sensible world.

The eternity, changelessness and independence of the Forms are part of what Plato has in mind when, under the influence of Parmenides' conception of being as an eternal changeless reality, he says that the Forms are real or *are* in a strong sense to be contrasted with the *appearance* and *becoming* characteristic of sensible objects. *Being* also comprises truth—*really being* such and such—and when Plato says that knowledge is of *being* the notion of truth is fused with the idea that a subject S's *being* F involves S being F *in virtue of its own nature*, and therefore *being eternally and changelessly* F, and hence never being the opposite of F.

So the nature of S explains why S *really is* F. Only what is F in this way is a stable F, a pure F, a true, perfect and real F. A subject cannot be a real F, it cannot be its nature to be F, if it ever appears contrary to F, which Plato (at times) conflates with appearing to be *not* F.

We saw that in early dialogues Plato says that being or reality is displayed in a general definition. Such being or reality—where this now has all the connotations noted above—is found only among the Forms. Beauty, for example, is beautiful in virtue of its own nature, and hence is eternally and changelessly beautiful without any trace of its opposite, ugliness.

In contrast, sensibles are never beautiful in virtue of their own nature: they inevitably appear ugly in another respect, or in comparison to another thing, or at another time. If a beautiful object is not ugly at the same time, it will nevertheless eventually become ugly since it is undergoing continuous change. For example, sensible objects constantly change place, and if a beautiful object approaches a more beautiful object the first will be uglier than the second, and hence appear ugly as well as beautiful. Or one may move to a position from where the object appears ugly rather than beautiful. If, unavoidably, A will appear ugly as well as beautiful, then we cannot explain A's beautiful appearance by saying that it is A's nature to be beautiful. It is not beautiful *in itself*, it merely presents an appearance of beauty in virtue of 'participating' in a being outside of itself, the Form of Beauty. That is—this is the only content Plato ever gives to *participation*—the sensible resembles or imitates the nature of Beauty. We must look beyond the sensible object to explain its appearance. It is dependent on the Form which is, by contrast, entirely independent of it.

This situation of appearing F without *being* F applies to all features of sensible objects. There is nothing that they *really are*. We cannot say that this stuff before us really is snow because changes are constantly going on in the sensible world

which will lead to the disappearance of snow. It is not snow in itself, it does not have the nature of snow, or *any* nature since all its features will eventually disappear or be joined by their contraries. So we must look beyond the snow itself to explain why it is cold. We can say that the stuff before us is cold because it participates in the Form of Cold, or, more interestingly, that it is cold because it participates in the Form of Snow, which always brings along Coldness. But we cannot explain why it is cold by saying that the stuff before us has the nature of Snow, and therefore is cold.

At times Plato goes further⁵ and suggests that the constant change undergone by sensible objects leaves them bereft of any kind of identity between what we *call* different phases of the 'same' object. Plato believes in particular qualities which are peculiar to the object they are found in. Socrates' health, for example, is peculiar to him and differs from Aristotle's health. A sensible object is a bundle of such qualities and when the qualities change the numerical identity of the object changes as well, even if we call it the same because of the similarity⁶ between the earlier and later objects. Not only can we not properly say that this object *is* healthy, we cannot say that it *is* Socrates, for that would impute a stability which it does not possess. For the same reason it is misleading to refer to sensible phenomena with the word 'this': it suggests permanence and stability that the sensible phenomena are too volatile to merit.⁷

The *Timaeus* identifies individual qualities with images of the Forms which cannot be legitimately called this or that but should only be derivatively described in reference to their models—Forms—as, for example, 'such as' water. One point of this characterization is that the images and sensible objects composed of them are derivative from, dependent on and less real than the Forms they reflect, as images in mirrors or water are derivative from, dependent on and less real than their ordinary models. When shifting phenomena change from air to water to earth, etc., we can, during the second stage, say that the image is such as water since there is a fleeting resemblance to Water. (Similarly we could say that a mirror image of water is 'such as' water, imitates or resembles water, without really being water.) But the image's disappearance shows that we could not have pinned it down as 'this' or 'that': like mirror images, the phenomena lack any nature which they could be said to be.

The *Timaeus* further develops Plato's view of the sensible world by introducing the 'dim and difficult' notion of space as an entity needed besides Forms and images on the grounds that an image requires a medium or receptacle where it can exist. Space has no feature of its own since that would interfere with its imaging the contrary feature. But since its nature is stable and unchanging, it can properly be spoken of as 'this'. What we observe in the phenomenal world should be described by saying (e.g.): this (namely, space) is such as fire. An analogue would be the statement that gold is triangular: as an underlying medium gold receives and exhibits the feature without really being that feature and without its own nature being affected by the presence of the shape.

Knowledge exists, and its object must plainly be what *is*, reality. And here all the aspects of *being* noted above coalesce: truth, essence, eternity, changelessness, stability and intrinsic intelligibility. For Plato, a paradigm case of knowledge would be expressed in the definition of the being or nature of triangularity. Since in knowing that the triangle is a three-sided plane figure one has knowledge of reality, *what* reality precisely is it that is known? Not a sensible triangle for, as we saw, the changeable character of sensible objects exposes their lack of the being demanded of an object of knowledge: they *are* not anything but only appear to be and imitate reality. The nature and being of a triangle is not present in but beyond the sensible object and there is nothing there in the sensible to be known. Since sensibles have no natures to be known, the objects of knowledge must be different: the Forms.

Nevertheless, we do have mental states related to sensible objects. These, however, are perceptions and opinions or judgements (*doxai*) based on perception, not knowledge. Lacking any notion of a proposition or sense that could serve as the content of a cognitive mental state, Plato identifies this content with the being in the world that the mental state is about. Since judgement or opinion differs from knowledge—it can be correct or incorrect, it is not based on an account of its object—the entity that is its content, Plato argues, can no more be identical with the *being* grasped by knowledge (namely, the Forms) than a colour can be what we hear. Still, since opinion does have a content it cannot be directed toward sheer nothingness. So the objects of opinion fall between being and not being. Sensible objects, appearing both to be F and not to be F for many properties, must be the entities that furnish opinions with their content.⁸

Again, the Forms must be changeless and eternal, and as objects of knowledge they must *be* the natures expressed in definitions.

For Plato, even if there were (or are) eternal triangles in the sensible world, there would be a distinct Form of Triangularity because we could not otherwise explain why the triangles have something *in common*, share *one general* feature.

If it is by reference to the Form of Triangularity that we explain why particular triangles have something in common, then (*Republic* 597b–c; cf. *Timaeus* 31a) there must be only one Form of Triangularity. An individual's being F is explained by its participation in F. If, *per impossible*, we had two Forms of triangularity, T₁ and T₂, then if object *a* were a triangle because it participated in T₁ and *b* were a triangle because it participated in T₂, we could not explain why *a* and *b* have something in common. To do that we must relate them both to one and the same entity, one and the same Form.

To explain how things have features in common, then, we must suppose that for each property there is one and *only* one Form.

We have, Plato believes, the ability to think of ideal standards such as perfect equality, for when we judge that sensible objects are equal we may judge at the same time that they fall short of perfect equality. So to judge is to compare the sensible objects with another entity. For to think about perfect equality—to have *that* as a content of thought—is for the mind to stand in a relation to a reality

outside the mind. The question then arises of how to explain this awareness and our ability to think—from among all the entities that exist—of precisely *it*.

I could no more have become aware of this entity through examining the contents of my own mind than I could have by introspection become aware of Mount Everest. And Plato appears to believe that the explanation of my ability to think of perfect equality must be that at some time or other I experienced it. To perceive sensible equals is not to experience perfect Equality since none of them really *is* equal: they are inevitably also unequal, the opposite of equal. It is not, Plato thinks, by observing an object that is no more equal than unequal that I can acquire the notion of perfect equality. So it must be through acquaintance with the Form of Equality, which is perfectly equal, that I acquired the ability to think of perfect Equality.

So a Form of F-ness is a paradigm of F, it is perfectly F. This is part of a Form's *being* in a way that sensibles are not.

This idea that a Form of F is itself F has come to be known as 'self-predication'.⁹ Already in the earliest dialogues, where the Theory of Forms is undeveloped, we observe thought and language that naturally evolved into the self-predication assumption. For example, proposed definitions were often expressed as in the following definition of justice:

(1) Doing one's own *is just*.¹⁰

If the definition is correct, since

(2) Doing one's own=justice

it follows that

(3) Justice is just.

In early dialogues such statements are taken to express self-evident truths.¹¹ A statement of this form is also implied by the assertion that if Beauty is correctly defined as X, then X must be more beautiful than anything else¹² and cannot be the opposite of beautiful;¹³ and by an argument that X cannot be the definition of Beauty because it is not beautiful.¹⁴

Assertions of (3)'s form are entailed by Plato's belief that if an object *b* explains why an object *a* is F, *b* must itself be F¹⁵ and somehow impart its own F-ness to *a*. Plato considers it self-evident that if *a* is F, F-ness is a *being*, and the presence of F-ness explains why *a* is F.¹⁶ It follows that F-ness must itself be F.

This condition on explanation is important once the Theory of Forms is developed, for Plato uses it and related principles in the *Phaedo* to mount a rationalist attack on experience of the sensible world as a source of knowledge, and to argue that explanations of phenomena in terms of perceptible and mechanical processes lead to absurdity. Typically, Plato believes, if we use our

senses to identify some sensible property, physical process or object X as the explanation of something—Y—in the sensible world, the following absurdities arise: (1) X is contrary to Y, or (2) in other cases the contrary of X appears to bring about Y, or (3) in other cases X appears to bring about the contrary of Y. To suppose that a contrary could be explained by its own contrary is like supposing that we could explain why snow is cold by appealing to the presence in it of something hot.

Plato's explanations of phenomena in terms of participation in Forms avoid these difficulties.¹⁷ The 'safe and stupid' explanation of why a sensible object is cold, for example is that it participates in the Form of Coldness. The 'clever' explanation appeals to the fact that certain kinds of thing are necessarily associated with one opposite characteristic and exclude another; as Snow, for example, must, in virtue of its own nature, be characterized by Coldness and exclude Hotness. So the clever explanation of why a sensible object is cold could be that it participates in the Form of Snow.

Although clearly distinguished from *teleological* explanations, Plato gives no indication that his preferred explanations differ in kind from those he rejects. But while the latter include what Aristotle would label efficient causes, Plato's recommended explanations are more like 'formal causes'. A safe and stupid explanation states *what it is* for a sensible to be F. The clever explanation's account of why the snow is cold combines with the snow's participation in Snow the point that 'snow' entails 'cold', just as 'triangle' entails 'interior angles equal to 180 degrees'.

The important point for self-predication is that Plato's explanations avoid the alleged difficulties confronting physical, mechanical explanations. The items appealed to possess the characteristic explained and never possess the contrary. Thus, the Form of Snow is cold, and the Form of Coldness is cold. Self-predication is essential to Plato's idea of explanation.

It is also essential to his account of participation. A sensible object gives the *appearance* of Beauty, so although it cannot *be* beautiful, the appearance can only be accounted for if the sensible object 'participates' in the Beauty which it cannot be. And for the sensible to participate in Beauty is for it to resemble or imitate the nature of Beauty which it does not possess. If there is resemblance, then there is a shared characteristic.¹⁸ And if this is not strictly true, that is not because the Form of Beauty is not really beautiful, but because the sensible is not really beautiful and only appears to be such as the Form truly is.

Resemblance and self-predication are also important for recollection since Plato thinks we are often reminded of and re-acquire knowledge of Forms by observing sensible objects that resemble them.

Again, self-predication alone makes sense of Plato's theory of love. Love is the desire to possess what is beautiful and the supreme object of love is the Form of Beauty. So the Form must be beautiful. How could the object of the most intense and most pleasurable eros *not* be a beautiful object?

As the goal of a passionate longing, the Forms are objects of desire, and to 'acquire' them by knowing them is a mystical experience of *divine*¹⁹ beings. All people, most unconsciously, yearn to recapture the vision of the Forms which they enjoyed before birth. This alone did give them and would give them complete satisfaction and happiness.

All this makes some sense only if the Forms are perfect paradigms. Because of their greater reality 'possession' of the Forms gives true satisfaction in a way in which possession of sensibles does not. And part of that greater reality consists in the Forms being perfectly what sensible objects are only deficiently or in appearance.

Similarly, Forms are more real because of their greater 'cognitive visibility' in comparison with sensible objects.²⁰ If we want to learn what a property F is, the observation of a sensible F will typically prove of little use since the property will be bound up with its opposite, and so the observation will provide a confused idea of what F-ness is. However, if we could attain a clear view of the Form we would immediately know what F-ness is because it is a 'pure' and perfect example of F uncontaminated by its opposite (cf. *Philebus* 44d–45a). Here again, the greater reality of the Forms depends on their being paradigms.

Self-predication, then, is fundamental for Plato's philosophy. However, it is a mistake, arising, in part, from confusions that helped to make it seem entirely natural.

1 Plato does not distinguish different uses of 'to be.' His single Form of Being merges these different uses with the features of true being noted before. So the existential use is run together with the identifying use,²¹ the existential use is conflated with the predicative use,²² and the predicative use is confused with the identifying use.²³ Given the last confusion, since, plainly, Beauty is Beauty, it may also seem self-evident that Beauty is beautiful.

2 Pre-Socratic philosophers did not always properly distinguish between objects and properties. Thus, Anaxagoras spoke of 'the hot' and 'the cold' on a par with 'earth' as elements from which things come to be. If Plato too was not clear on this point, then it would have been natural for him to think of Beauty as a beautiful object.²⁴

The point is not that Plato did not distinguish attributes and objects but that he did not adequately distinguish the kinds of thing which they are.

3 Greek uses expressions formed from the definite article and an adjective such as 'the beautiful' to name properties. Occasionally Plato will even use the adjective on its own as the subject of a sentence to refer to a Form. Such expressions lend themselves to being understood as operating in the same manner in which they *do* operate when applied to sensible individuals, namely as *describing* the object named. And this danger is especially serious in Plato's case for (*Cratylus* 384d–385c) he does not adequately distinguish naming and describing. So he could easily understand terms designating the

Form of Beauty—‘the beautiful’ and ‘beautiful’—as describing and not merely naming the Form.

4 The definition

(D) The triangle is a three-sided plane figure

specifies the condition an individual must satisfy to be a triangle. But even if ‘the triangle’ in (D) names a universal, the rest of the sentence does not *describe* the universal. That is, (D)—however it should be construed—does not say that the universal *triangle* is a three-sided plane figure, is a triangle, in the way an individual triangle is. But that is just how Plato understands (D).

This connects with a failure to distinguish different types of general predication. Supposing there is a Form of Man we could say that

(a) Man is eternal, changeless, etc.

Here properties are attributed to the Form just as they are attributed to Socrates when I say he is white, henpecked, etc. Man is an entity that is an eternal thing, etc. But

(b) Man is an animal, mortal, etc.

makes a different sort of claim. Thus, whereas there may be some plausibility in proposing that (b) means

(c) Every man is an animal, mortal, etc.,

(a) certainly does not mean

(d) Every man is a universal, eternal, etc.

The predications in (a) are true because they are about a Form: all Forms have those properties. The predications in (b) are true because they are about the specific concept Man. If the two types of predication are not distinguished, one might understand the predications in (b) in the same way as those in (a). Then definitions such as

Man is a rational animal

may make it seem obvious that Man is a man, Triangularity is a triangle, etc.

Plato’s metaphysics is built on the contrast between Forms and sensible objects. These contrasts make Forms *more real* than sensible objects. Forms are natures existing independently of sensibles: eternal, changeless, divine, immaterial, imperceptible, knowable and intelligible in virtue of their natures. Free of contrary attributes, they are perfectly beautiful, just, etc. and of the highest value. Sensible objects, by contrast, are dependent on Forms: material, perceptible, transient, in constant flux, of little or no value, or evil; lacking intrinsic natures, they *are* not really anything but bound up with opposites and unintelligible.

Being utterly contrary to what is found in the sensible world, Forms do not exist in but apart from the world around us.²⁵ While their images exist in us,²⁶ they exist ‘in themselves’, and this means that they do not exist in us or anywhere ‘here on earth’²⁷ in the ‘corporeal and visible place.’²⁸ They exist in ‘another place,’²⁹ the ‘intelligible place,’³⁰ ‘the place in which the most blessed part of reality exists,’³¹ a place ‘untainted by evils’³²—heaven³³ or a ‘place beyond heaven.’³⁴

The Parmenides

Parmenides 127d–136e presents the puzzling spectacle of Plato putting forward criticisms of his own Theory of Forms. Probably the prevalent view today is that the dialogue documents Plato’s realization of the unacceptable consequences of self-predication, which he therefore abandons.

I disagree. Plato portrays a youthful, immature Socrates not yet in possession of the philosophical acumen that would enable him to answer the objections to his underdeveloped theory. But Plato himself, I believe, is not concerned about the objections because, in his view, they arise from confusion or an inadequate understanding of the Theory of Forms. I will only have space to discuss the first version of the Third Man Argument (132a–133a), the ‘TMA’.³⁵

The argument’s validity rests on two assumptions not given in the text: Self-Predication,

(SP) A Form of F-ness is F

and ‘Non-Identity’,

(NI) If all members of a set of objects are F in virtue of participating in a Form of F-ness, no member of that set—that Form of F-ness.

The only assumption on the surface of the text is the ‘One over Many Assumption,’

(OM) If several objects are F, there exists a Form of F-ness by virtue of participating in which they are F.

Whereas Plato maintains that only one Form exists for any attribute, he appears committed to infinitely many Forms for each attribute.

For suppose that sensibles

(1) a, b and c are large.

Then by (OM)

(2) there exists a Form of Largeness: Largeness₁.

By (SP) it follows that

(3) Largeness₁ is large.

So now we have a new set of large things:

(4) a, b, c and Largeness₁ are large.

By (OM), applied to this new set of large objects,

(5) there exists a Form of Largeness: Largeness₂.

And given (NI), Largeness₂ differs from Largeness₁: since Largeness₁ is large by virtue of participating in Largeness₂, it cannot be Largeness₂. When endlessly repeated, these steps produce an infinite number of Forms of Largeness.

Since Plato nowhere explains his attitude toward this argument, we will never know what he thought of it. The question must be addressed on the basis of indirect evidence.

Attention has focused on self-predication since that is in fact a mistake. As we saw, self-predication is essential to Plato's earlier Theory of Forms, so the TMA's presumption of self-predication does not render it irrelevant to Plato's position.³⁶

The belief that the argument's point is to prove the unacceptability of self-predication runs into the problem that self-predication is present in what is now generally agreed to be a dialogue later than the *Parmenides*, namely the *Timaeus*.³⁷ There, despite *Parmenides* 133a's rejection of resemblance, sensibles participate in paradigmatic Forms by resembling and imitating them. Resemblance brings along self-predication.

That the target is not self-predication is also indicated by a peculiar argument separating the two versions of the Third Man Argument. Socrates proposes that Forms might be *thoughts*, to which Parmenides objects that then everything is a thought, and hence either everything thinks or else, while *being* a thought, does not think.

The argument assumes that *a thought* thinks. Further, we saw that one confusion behind self-predication is the failure to distinguish between predications such as

(i) Man is eternal

and

(ii) Man is mortal.

If Socrates participates in the Form of Man, then *only* (ii)'s predicate can be legitimately transferred to Socrates. But when from the proposal that Forms are thoughts Parmenides concludes that

(iii) Man is a thought,

the predication is of the type that occurs in (i). So one who was clear about the difference between (i) and (ii) would not take Socrates' participation in Man together with (iii) to imply that Socrates is a thought.

But such is Plato's inference. Now, Plato certainly rejects the idea that Forms are thoughts, so he is probably making what *he* considers a sound objection against it. If the point of the TMA were to expose and reject self-predication, why would Plato, in the midst of this demonstration, deliberately present a fallacious argument against a view he wants to refute, where the fallacy is of precisely the sort involved in the error of self-predication?

But if Plato did not abandon self-predication, how could he respond to the Third Man Argument? By restricting the One over Many Assumption, the only assumption expressly given in the text.³⁸ Platonists in the Academy regularly limited the inference from a set of Fs to a Form of F to cases where the members of the set do not stand in relations of priority and posteriority; and, according to Aristotle, Plato himself accepted this restriction.³⁹ Aristotle reports this view in the *Eudemian Ethics* (1218a1–8):

There is not something common over and above and separate from things in which the prior and posterior exist. For what is common and separate is prior (*proteron*) since the first (*prōton*) is taken away when what is common is taken away. For example, if *double* is first of the multiples, *multiple*, which is predicated [of particular multiples, namely *double*, *triple*, etc.] in common, cannot be separate. For then there will be [a multiple] prior to *double*.

But *double* is the first multiple and cannot have a multiple prior to it. So there is no Form of *Multiple* over and above specific multiples. The rationale for this

principle assumes self-predication: it is *because* the Form of Multiple would be a multiple that it would be, impossibly, a multiple prior to *double*.

Ontological priority is in question: if x's non-existence entails y's non-existence, but x can exist without y, then x is prior to y. Aristotle reports that Plato regularly used this notion of priority.⁴⁰

One page before the quoted passage Aristotle points out that a Form of F is, in just that sense, prior to particular Fs: the Form of Good is the first and prior good because if taken away the other goods would be taken away. That is because for them to be good is for them to participate in, and thus depend on, the Form, while the Form is not similarly dependent on the particular goods: *being good* is its nature, so it is good in itself.

Likewise for any other Form. So at step (4) of the argument,

(4) a, b, c and Largeness1 are large,

Plato can block reapplication of the One over Many Assumption and the inference to a new Form. One subject—the Form—is the first of ‘the larges’ and prior to the others.

Of course, if the reason given above was Plato's justification for thus restricting the One over Many Assumption, then the restriction is unacceptable since it rests on self-predication. In fact, then, but unknown to Plato, the Third Man Argument presents a serious problem for the theory of Forms.⁴¹

Many have detected revision of the Theory of Forms in a discussion of ‘friends of the Forms’ in the *Sophist* (248a–249d). Some believe Plato is allowing that the Forms can change, some believe that motion is allowed to be real, and some believe that the Forms have become ‘powers’ (*dunamis*) or potentialities for change—all contrary to what Plato previously believed.

Interpretation of the passage is made difficult by its aporetic character, and the entire discussion (236–51) ends in aporia. The Eleatic Stranger, who leads the *Sophist's* conversation, examines a dispute between ‘giants’ who define being in terms of matter, and ‘gods’ who explain that being consists of the immaterial and changeless grasped by reason independently of the senses. The latter are called ‘friends of the Forms’ and are often thought to include Plato himself. Hence, when their position is criticized it is thought that Plato is criticizing his own previous position.

Before discussing the friends of the Forms, the Stranger criticized the materialists and introduced the following definition of *being*: x is a being just in case x has a power to act on, or be acted on by, something else. The friends of the Forms might be expected to reject the definition because it admits material objects as beings, but the only explanation given for their rejection is their denial that Forms—the beings—possess a power to act or be acted on.

The Eleatic Stranger raises two objections against the friends of the Forms, (1) They allow that Forms are known. But *to know* is to act, and therefore *to be known* is to be acted on. Hence, in being known the Forms are acted on, and

therefore changed. (2) He cannot accept that intelligence does not belong to ‘what wholly is’. But if intelligence belongs to being, so must life, soul, and hence change, belong to being.

Now, to determine Plato's attitude to this criticism, we need to know: Does Plato accept the Eleatic Stranger's definition of being?

And to answer this we would need to answer the following question: Is the notion of *being* defined in terms of the capacity to act or be acted on *being* in the strong sense or the weaker notion applicable to material objects?

The *Sophist* itself fails to settle these questions. But if we look to later dialogues where the earlier contrast between being and becoming is reaffirmed,⁴² and assume that the *Sophist* does not represent a temporary detour, then we can say the following: (1) If the *Sophist* defines being in the strong sense, then Plato cannot accept its definition since he later reaffirms that being cannot apply to the sensible world of becoming. (2) If the *Sophist* is defining being in the weaker sense, then Plato could accept it consistently with his contrast between a stronger notion of being and becoming. For the fact that x is acted on does not, as the Stranger falsely suggests (248e), entail that x is altered. One example of ‘acting’ and ‘being acted on’ was that if x possesses an attribute F, then F acts on x, and x is acted on by F. In this sense the Form of Figure ‘acts’ on the Form of Triangularity, and, according to the *Sophist's* doctrine of the communion of Forms, the Form of Being ‘acts’ on the Form of Difference. Obviously, this does not entail that Triangularity or Difference change, and the passage ends with the changelessness of the objects of knowledge reaffirmed (249b-c; cf. *Politicus* 269d).

If it is said that the vehemence with which the Stranger asserts that motion, life, mind and wisdom belong to ‘the *wholly* real’ shows that he is asserting their being in the strong sense, this is consistent with the earlier *Theory* of Forms.⁴³ It too asserted the existence of Forms of Soul and Life in the *Phaedo*.⁴⁴ The Form of Motion is casually referred to in Socrates' outline of his *immature* Theory of Forms in the *Parmenides* (129e), and the Form of Knowledge is mentioned later in the same dialogue (134a–e; cf. *Phaedrus* 247d–e).⁴⁵

While there is no clear evidence for the suggested alterations in the Theory of Forms, the *Sophist* does undeniably contain one new development: for the first time Plato speaks of Forms participating in other Forms: the ‘communion of Forms’. Hitherto, Plato was only concerned to give the ontological analysis of the fact behind a true statement that a subject S is F when S is an individual. But in many cases—and many cases of the sort that Plato would be particularly interested in—the subject of a statement asserting that S is F will name a Form. If the case where S is an individual demands explanation, it is obvious that the general case likewise demands an explanation. And this Plato provides for the first time with his doctrine of the communion of Forms.

A central passage in the *Sophist* (251a–257a) presents a series of arguments to distinguish five ‘greatest Kinds’: Being, Sameness, Difference, Rest and Motion. Many have found more sophisticated theories here, but I believe that communion

of Forms is the same relation as his earlier notion of participation—in the sense that for a Form S to participate in a Form F is for S to possess F as a property, just as for an individual S to participate in a Form F is for it to have F as a property.⁴⁶ Consequently, self-predication is a feature of the *Sophist's* Kinds⁴⁷ since the ontological analysis of the fact that *the Triangle is a figure* is: the Kind Triangularity participates in the Kind Figure, and hence *is a figure* in the same way as particular triangles are. Given that the Kinds are also ‘divine’ (254b), they must be the same Forms which we find in the middle period dialogues.

Divinity also characterizes the ‘Henads’ of the *Philebus* (62a), a very late dialogue mainly concerned with ethical problems but containing important and notoriously obscure passages on metaphysics with Pythagorean overtones absent from earlier works. The obscurity is probably due, in part, to the metaphysics of the *Philebus* being grounded in Plato’s ‘unwritten doctrines,’⁴⁸ about which our knowledge is very thin.

Plato divides ‘all beings’ into the categories of (1) Limit, (2) the Unlimited, (3) the mixture of Limit and the Unlimited, (4) the cause of this mixture. (4) is relatively clear, being identified with intellect, but the rest of the scheme resists interpretation because of the shifting usage of the notions of Limit and Unlimited, and the bizarre diversity of examples from the mixed class.

The Limit-Unlimited contrast is associated with the contrast between one ‘Henad’ with a specific number of species, and its indefinitely large range of generable and destructible instances (16c-d). But Limit is later explained in terms of the notion of a numerical ratio or measure (2 5 a), and still later connected to the ideas of *moderation* and a *balanced* and *good* proportion (26a). Correspondingly, the Unlimited is not only associated with the idea of an indefinite range of particular instances but is explained in terms of scales of qualities referred to with pairs of comparative adjectives: hotter-colder, higher-lower, etc., which are generally characterized as admitting the more and the less, and as in themselves admitting no definite quantity. Further, the Unlimited also includes pleasure and the *life* of pleasure. The difficulties are further compounded by Plato’s identification of these different notions of Limit and Unlimited (23c) and by the disparate nature of the examples from the mixed class: it includes a moderate amount of pleasure, the life which combines pleasure and intellect, the art of music, fair weather, health and virtue of character. As these last examples show, Plato’s scheme cannot be interpreted in terms of Aristotle’s notions of form (Limit), matter (Unlimited) and composite (mixture). Nevertheless, it appears that Plato is analysing entities into what can be loosely called ‘formal’ and ‘material’ elements.

How do the Forms fit into this classification? If the One of the One-Many problem raised at 13e–15c corresponds to a (perhaps ‘mathematized’) Form from earlier dialogues, then since the One-Many problem arises for all items in classes (1)–(3) (23e, 24e, 26d), Forms do not fall under any one of these classes but rather there are Forms for all the beings in (1)–(3). So, for instance, the

Unlimited will include both the Form of Pleasure and particular instances of pleasure.

As in the *Sophist*, Plato displays greater interest in the relations between Forms than he did before. The *Philebus* addresses the problem of reconciling the Form’s unity with the fact that it not only has many individual instances but will often be divisible into further species which are themselves Forms. Perhaps 15d–17a proposes a solution to this problem, but if so it is, like much of the *Philebus’* metaphysics, steeped in obscurity.⁴⁹

EPISTEMOLOGY

Recollection

The recollection theory is Plato’s explanation of our ability to think of and acquire knowledge of general notions and general truths, where general notions are understood as Forms and general truths the facts about Forms.⁵⁰ The theory claims that in this life we can think of and know the Forms only because we experienced them before birth and thereby acquired knowledge of them. This ‘active’ knowledge is lost at birth but remains latent in the soul, and perception of sensibles that resemble the Forms, or teaching by another, or enquiry into the Forms by a dialectical conversation which (ideally) operates independently of the senses, may lead to full recovery of the latent, innate knowledge.

To understand why Plato adopted this extravagant theory we must recall his picture of thought as a relation to—as an *awareness of*—beings outside our minds. Suppose that yesterday you found yourself thinking of my cousin Ruth Collins in Lancaster County, Pennsylvania, a person you never heard of before. As you could not have simply pulled out of yourself the awareness of this person who is a real being existing independently of you, if it could be established that you have had no experience of her since birth, it might be plausible to suppose that you must have somehow experienced her before birth. And how else *could* we explain your ability to think of *her*?

Of course, we are unable to think about sensible objects we have not encountered since birth. Plato believes, however, that we *can* think of general notions and general truths which we have never experienced in our present life, and so the problem which does not exist for sensible objects does exist for general notions and general truths.

Thus, the *Phaedo* says we have the ability to think of Equality. Where could it come from? Not merely from perception of sensible equals, for they, unlike the Form, appear unequal as well as equal. This establishes that the Form is a different entity from the sensibles. So even if the sensible equals were perfectly similar to the Form of Equality, our awareness of them on its own could not have made us aware of and able to think of that entirely distinct entity, Equality itself.⁵¹ No more than the perception of several people exactly like Ruth Collins

Next, we must be clear about the fact that a statement has two kinds of parts that function in different ways. The name signifies the being in the world that the statement is about, while the verb signifies what is said about the subject, namely the being in the world that is the attribute ascribed to the subject.

‘Theaetetus is sitting’ is true if *sitting* ‘is with respect to Theaetetus’, i.e. if sitting=one of his attributes. And then ‘Theaetetus flies’ is false if *flying* ‘is not with respect to Theaetetus’, i.e. *is different from* every attribute that is with respect to Theaetetus. The fact that in this false statement *what is not* is said of Theaetetus does not mean that *nothing* is said about Theaetetus. For here *what is not* is not the *non-existent* or *non-existence*⁶⁷ but *flying*—a being.

Plato’s solution marks a major advance when he clearly signals the difference between the ways in which words and statements function. But with no clear notion of sense as distinct from reference, he still has nothing to say on the question of what could constitute the content of a false statement.

NOTES

- 1 My understanding of the Theory of Forms owes most to Ryle [10.43] and Frede [10.74]. See also Graeser [10.76], Ross [10.92]; Wedberg, ‘The Theory of Ideas’, in [10.97], 28–52; Bostock [10.67], 94–101, 194–201, 207–13. Crombie [10.36] can be consulted on all subjects covered by this chapter. I am very grateful to Christopher Taylor for his extensive and helpful comments on earlier drafts of this chapter.
- Any discussion of the topics I discuss is bound to be controversial and some alternative interpretations can be found in works cited in the notes and bibliography. Limitations of space compel these references to be highly selective.
- 2 I assume the generally agreed view that the earliest dialogues closely reflect the methods and beliefs of the historical Socrates, but that in middle period dialogues the character of Socrates expresses views which go far beyond those of Plato’s teacher.
- 3 Cf. the argument ‘from things that are no more’ from Aristotle’s *On Ideas* in [10.63], 81–2. Note that the point in the text applies just as much to ‘horse’ and ‘finger’ as it does to ‘beauty’ and ‘one’. Some believe *Republic* 523–5’s distinction between concepts that do and do not give rise to thought shows that Forms are not needed for concepts such as ‘horse’ which, like the concept of ‘finger’, do not give rise to thought. But the passage only indicates that perception of particular fingers may suffice, epistemically, for recollection of the Form of Finger. The latter is an object of thought as distinct from perceptible fingers as the perceptible and ‘oppositeless’ squares and circles drawn in the sand are distinct from their corresponding Forms which are the objects of the mathematician’s thought (*Republic* 510d–511a).
- 4 *Cratylus* 431b–c; cf. 432e, 385b–c. Similarly with the philosopher Parmenides: what is required for thought was not distinguished from what is required for speech.

- 5 *Symposium* 207d–208b: the relation between the different phases of ‘one’ life is the same as that between a parent and its offspring. See also *Cratylus* 439d; *Theaetetus* 154a, 159d–160a; *Timaeus* 49c–e. Contrast *Phaedo* 102e.
- 6 Even in this most extreme statement of the doctrine of flux, Plato allows that the later and earlier objects share many characteristics. Hence, he does not accept the *Theaetetus*’ wild version of Heracliteanism which says that sensibles always change in every respect.
- 7 *Timaeus* 49d–e. For other views on flux, see Bolton [10.65], Irwin [10.80].
- 8 For a different interpretation, see Fine, ‘Knowledge and Belief in *Republic* V–VII’, in [10.101], 85–115.
- 9 This topic is thoroughly examined in Malcolm [10.85].
- 10 *Hippias Major* 289d, 291d, 292c–d, 297e, 304d; *Charmides* 161a–b; *Laches* 192c–d.
- 11 *Hippias Major* 292e; *Protagoras* 330c–e.
- 12 *Hippias Major* 291c.
- 13 *Hippias Major* 291d.
- 14 *Hippias Major* 296c–d.
- 15 *Lysis* 217c; *Charmides* 160e–161a, 169d–e; *Hippias Major* 291c; *Gorgias* 497e; *Meno* 87d–e; *Phaedo* 68d–e, 100e–101b; *Republic* 335d–e, 379a–c; *Parmenides* 131c–d; *Philebus* 65a.
- 16 *Hippias Major* 287c.
- 17 While Plato allows that physical conditions and phenomena are necessary conditions for the items he explains in other terms, the *Phaedo* (99a–b) denies them the title of ‘explanations’. In the *Timaeus* (46c–d), however, he calls them secondary or co-operative causes or explanations.
- 18 *Parmenides* 139e, 148a.
- 19 See, for example, *Symposium* 211e, *Republic* 500c, *Phaedo* 84b, *Pbaedrus* 250a, *Sophist* 254b, *Philebus* 62a.
- 20 See Vlastos [10.98], 58–75. For the ideas in the paragraph before last, see [10.98], 43–57.
- 21 *Timaeus* 38b.
- 22 *Republic* 478b12–c1 with 478d–479d.
- 23 *Phaedo* 74c1–2. Plato equates two questions: (1) Is Equality ever unequal? (2) Is Equality ever Inequality?
Had he seen the difference, he should also have seen (2)’s irrelevance to his argument. He is trying to show that sensible equals differ from Equality because they possess a feature Equality lacks. But sensible equals no more appear to be Inequality than Equality does.
- 24 On this point see Frede [10.74], 51–2.
- 25 *Timaeus* 52a, c; *Symposium* 211a–b.
- 26 *Phaedo* 102d–e, 103b; *Republic* 501b; *Parmenides* 132d.
- 27 *Theaetetus* 177a.
- 28 *Republic* 532c–d.
- 29 *Phaedo* 80d.
- 30 *Republic* 508d, 509d, 517b.
- 31 *Republic* 526e.
- 32 *Theaetetus* 177a.
- 33 *Republic* 592b.

- 34 *Phaedrus* 247c–e.
- 35 Very briefly on the other objections: the first questions the range of Forms but does not present any positive objections. The second falsely assumes that Forms exist in sensible objects. The last objection mistakenly infers from the statements that (for example) the Form of Master is master of Slavery itself and not of any particular slave, and a particular master is a master of a particular slave and not of Slavery itself, that there can be *no* relations between individuals and Forms.
- 36 For another view, see Allen, ‘Participation and predication in Plato’s middle dialogues’, in [10.64], 43–60, and in Vlastos [10.97], 167–83; H.F.Cherniss ‘The relation of the *Timaeus* to Plato’s later dialogues’, in [10.64], 360–7; Nehamas [10.87].
- 37 In a famous paper (‘The Place of the *Timaeus* in Plato’s dialogues’, in Allen [10.64], 313–38) G.E.L.Owen argued that the *Timaeus* should be dated prior to the *Parmenides*. This provoked H.F.Cherniss’s response in the article cited in n. 36. Owen’s thesis ‘must be pronounced a failure’ Vlastos [9.93], 264). See Brandwood [10.34], and, more briefly, ‘Stylometry and chronology’, in Kraut [10.41], 90–120.
- 38 The only author I have come across who notes the relevance of the following point to the Third Man Argument is Cherniss [10.71], 520.
- 39 [10.63], 84. Cf. *Philebus* 59c; Aristotle, *Nicomachean Ethics* 1096a17–19, ps.-Aristotle, *On Indivisible Lines* 968a9–14.
- This restriction on the One over Many Assumption was a commonplace among the Neoplatonists. See Proclus, *In Parmenidem*, V, 125, Cousin=684, Stallbaum; Plotinus, *Enneads* VI, 1.1. Ammonius, *In Porphyrii Isagogen*, ed. A. Busse, Berlin, 1891, 28.10–12; 29.18–19; 82, 5–10; Olympiodorus, *In Categorias*, ed. A. Busse, Berlin, 1902, 58.35–7; Asclepius, *In Metaphysicorum Libras A–Z Commentaria*, ed. M.Hayduck, Berlin, 1888, 226. 21–2.
- 40 *Metaphysics* 1019a2–4.
- 41 For further discussion see Vlastos, ‘The Third Man Argument in the *Parmenides*’, in [10.64], 031–63; Strang, ‘Plato and the Third Man’, in [10.58] I, 184–200; Allen [10.19].
- 42 *Timaeus* 27d–28a, 51d–52a; *Philebus* 59a–c. Cf. *Politicus* 269d.
- 43 But possibly Plato is referring to the demiurge of the *Timaeus* or the world soul (cf. *Timaeus* 30b, *Philebus* 30c).
- 44 *Phaedo* 106d refers to the Form of Life. Keyt [10.81] convincingly argues the *Phaedo*’s commitment to Forms for substances such as Snow and the Soul.
- 45 *Sophist* 248a–249d is discussed in Keyt [10.82].
- 46 I defend this view in [10.78]. For other views see Ackrill ‘**ΣΥΜΠΛΟΚΗ ΕΙΔΩΝ**’, in [10.64], 199–206 (= [10.58] I, 201–9); and a sometimes inaccurate survey of alternative accounts in Pelletier [10.89].
- 47 I argue that the text of the *Sophist* bears this out in [10.77]. For other views, see, e.g. Vlastos, ‘An Ambiguity in the *Sophist*’, in [9.87], 270–308; Frede [10.73].
- 48 Aristotle, *Physics* 209b15. The unwritten doctrines are views attributed to Plato by Aristotle and ancient commentators which are, at least frequently, not clearly expressed in Plato’s writings. The *Philebus*’ notions of Limit and the Unlimited may be connected to Plato’s generation of Forms from the One and the Great and the Small in his oral teachings (Aristotle, *Metaphysics* 987b18–21). On the unwritten doctrines, see, for example, Cherniss [10.70], Gaiser [10.75], Krämer [10.83], Robin [10.91], Vlastos, ‘On Plato’s oral doctrine’, in [9.87], 379–403.
- 49 For discussion of the *Philebus*, see Hackforth [10.25]; Gosling [10.26]; Sayre [10.93], ch. 7; Striker [10.95].
- 50 At least this is so in the *Phaedo* where Forms and the recollection theory are said to stand and fall together (76e). Since we do not experience Forms in the world around us, the *Phaedo* in effect offers an explanation of a priori knowledge, where the knowledge is prior not to *all* of the soul’s experience, but to its experience since birth in its present life. It is doubtful, however, that Plato is thinking of Forms in the earlier *Meno*, where they go unmentioned and we recollect things seen ‘here’ (81c6) in the present life. A related difference between the dialogues is that in the *Meno*, where knowledge is a kind of opinion (98a), both latent opinion and latent knowledge explain the slave boy’s performance. While in the *Phaedo*, where Forms alone are recollected and are ‘unopinable’ (*adoxaston*, 84a), references to latent opinions disappear.
- For general discussion of Plato’s epistemology, see, for example, Gulley [10.102] and the papers on Plato in [10.101].
- 51 It doesn’t matter whether x is or is not like y, or, in the first case, whether x does or does not (73a) fall short of y; the important point is that ‘as long as while you are seeing *something else* (*allo*) from this vision you think of *something else* (*allo*)’ (74c–d) it is recollection.
- 52 In the dialogue the slave boy does not recover active knowledge of p (85c–d), so what he *actually does* there which requires explanation in terms of recollection must be something else.
- 53 *Cratylus* 431b–c.
- 54 The confusion persisted into this century. ‘Moore and Russell were constantly perturbed by whether or not to identify true propositions with facts, which they took to be fully part of the real world, or merely to regard the one as corresponding to the other, whether to admit the existence of false propositions, and similar problems, and constantly changing their minds on these points’ (M. Dummett, *Frege: Philosophy of Language*, London, Duckworth, 1973, p. 153).
- 55 There are good reasons to reject Gail Fine’s suggestion that Plato answers (1) with the slave boy example by saying that, even though the enquirer lacks knowledge in any sense, he has true beliefs about the subject of enquiry (‘Inquiry in the *Meno*’ in [10.41], 200–26). First, the purpose of the slave boy example is to demonstrate the truth of the recollection theory (81e, *Phaedo* 72e–73b), not to solve the paradox of enquiry. Further, her attempt to explain away the references to the slave boy’s knowledge as allusions to his past or future knowledge (n. 40) is refuted by the reference to ‘the knowledge which he now has’ at 85d9. Likewise *Phaedo* 73a is clearly saying that the slave boy could not have spoken the truth if *knowledge* had not been in him *then*. This is also the presumption of *Republic* 518b–d. There is no contradiction with *Meno* 85b–c’s statement that the slave boy does not have knowledge since this denies that he has current, revived knowledge of p, not that he has latent knowledge of p.
- 56 For different views of the recollection theory, see the papers reprinted in [10.10].
- 57 This paragraph is based on Strange [10.94]. Some other works on the *Timaeus*: Cornford [10.23], Brisson [10.68], Mohr [10.86], Taylor [10.96]. For Plato’s dialectical method in the middle dialogues the classic work is Robinson [10.105]. See also Sayre [10.106].
- 58 In particular, the *Phaedrus*, the *Sophist*, the *Politicus* and the *Philebus*.

- 59 For discussion of Plato's later dialectic, see Ackrill [10.99]; Sayre [10.106]; Stenzel [10.107].
- 60 Some works on the *Theaetetus*: Cornford [10.20]; McDowell [10.21]; Burnyeat [10.22]; Bostock [10.100].
- 61 One important issue of interpretation concerning the *Theaetetus* is the question of whether Plato revises his earlier views of the sensible world. For the famous debate between Owen and Cherniss (referred to in n. 37), see Allen [10.64], 332–5 and 349–60.
- 62 The standard view holds that Plato is saying that to know one must truly judge *that* something is the case (*grasping being* either is this judgement or is presupposed by it in virtue of 'is'), and that such an intentional content cannot be delivered by perception. But Plato uses singular terms and 'that' clauses indifferently to refer both to objects of judgement and objects of perception. (Judgement: 185c–d, 186a–d; 185a–b, 186b. Perception: 184b, 184d–185a; 185b–c.) Furthermore, on the standard view it is inexplicable that Plato blatantly ignores the point for the rest of the dialogue where many examples of objects of knowledge and judgement are individuals. Before, during and after 184–7 both things and facts are objects of the knowledge which the dialogue attempts to define, and this is one source of the difficulties troubling Plato's discussion.
- 63 Unlike present day epistemologists, Plato does not speak here of the justification of belief in a proposition.
- 64 This argument brings out Plato's inability to clearly distinguish *thinking* of X and *knowing* X: to think of X is already to know X.
- 65 Burnyeat in [10.22], 238.
- 66 For further discussion of the *Sophist's* solution, see McDowell [10.103] and Frede 'The *Sophist* on false statements,' in [10.41], 397–424.
- 67 Here I am assuming a view of Not-Being in the *Sophist* which not all will accept. This issue is discussed in Malcolm [10.84]; Frede [10.73] Owen 'Plato on Not-Being', in [10.58] I, 223–67; Heinaman [10.79]; Brown [10.69].

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Introduction

John Marenbon



Medieval philosophy, the subject of this volume, is a distinct tradition within the history of Western philosophy. Its four sub-traditions are ‘Arab’ philosophy—which took place in Islamic lands and was written usually in Arabic, though sometimes in Persian; ‘Jewish’ philosophy—the work of Jews in Islamic and Christian countries, written in Arabic or Hebrew; ‘Latin’ philosophy—produced in the countries of Christian Europe where Latin was the main language of higher learning and usually, though not always, written in Latin; and (of rather less importance) ‘Byzantine’ philosophy—written in Greek in the Christian empire of Byzantium. Medieval Arab philosophy begins with the first philosophical writings in Arabic in the ninth century; it ends, as a tradition of importance, with the death of Ibn Rusd (Averroes) in 1198, after which growing religious intolerance scarcely permitted the practice of philosophy as it had been known. Medieval Jewish philosophy begins in Islam not long after the Arab tradition, with which it is closely connected. It went on to flourish also in the Jewish colonies of Christian Europe and declined in the fifteenth century. Philosophy in the medieval Latin West begins in the late eighth century, at the court of Charlemagne. The tradition has no clear chronological end point and its final centuries coincide in time with the different, though related, tradition usually described as ‘Renaissance philosophy’. Fifteenth- and sixteenth-century universities continued to produce philosophical work firmly in the medieval tradition (often, indeed, consciously restating the ideas of one or another great master of the thirteenth or fourteenth century), and in late sixteenth- and early seventeenth-century Spain there was a flowering of philosophy which, though with differences of emphasis, is distinctively medieval in its sources, techniques and concerns. In Byzantium, it is hard to place any

but an arbitrary boundary between late ancient Neoplatonism and medieval Greek philosophy. The tradition was brought to a clear end, however, when Constantinople fell to the Turks in 1453.

Why, though, speak of a single, distinct tradition of ‘medieval philosophy’ when four different traditions, developed in different languages and cultures, appear to be involved? And why include works written in Persia and the Middle East, in non-European languages, in the history of *Western* philosophy? These seem difficult questions, but the answer is simple (although it is wrong to use the description ‘Western philosophy’ in a cavalier way: the importance of works in Arabic for medieval philosophy should make historians ask how Western ‘Western philosophy’ is¹). The four traditions are interlinked so closely that, whilst their differences are important, they are best understood as a whole. First, all use a common heritage of ancient Greek philosophy, especially that practised in the Neoplatonic schools of late antiquity, although with a greater emphasis on the complete works, rather than just the logic, of Aristotle. Second, in their development, the traditions are interconnected. Medieval Jewish philosophers were deeply influenced by the Arab thinkers they read, and translations of Arabic writing transformed the study of philosophy in the Latin West from the late twelfth century onwards. The Byzantine tradition was less open, although there were some translations from Latin into Greek late in the Middle Ages. Third, all four traditions belong to cultures dominated by a monotheistic, revealed religion: Islam, Judaism or Christianity. Although the relations between religious doctrine and philosophical speculation varied both from one tradition to another, and at different periods within each tradition, the questions posed and constraints exercised by revelation were similar in all three religions and exercised a profound influence on the philosophical work produced within their ambit.

It is this third feature—its close connection with revealed religion—which, more than anything else, explains a final, extrinsic characteristic which applies to the medieval tradition of philosophy as a whole: its comparative neglect. The *Routledge History of Philosophy* itself provides an illustration. This volume, devoted to the Middle Ages, must consider roughly twice the length of time covered by the following seven volumes, dealing with Renaissance and modern philosophy. But the allocation of space to medieval philosophy by the general editors is, none the less, unusually generous by the standards usually accepted today. The more common estimation of the Middle Ages among professional philosophers is indicated by a recent, and in most other respects excellent, textbook designed to introduce students both to philosophy as it is practised today, and to the history of philosophy. The editor explains to his readers that:

For a very long period—roughly from the fourth to the seventeenth centuries AD—thought in the West was dominated by Christianity. This does not mean that there was no philosophy; far from it; but much of it served theology or at least (except in such cases as logic) it was constrained by theological considerations.²

Medieval (and Renaissance) philosophy is, apparently in consequence, eliminated from the book entirely, except for a fleeting reference to Aquinas. The historical section jumps from the Greeks to Descartes without further comment.

The historiography of medieval philosophy (especially medieval Latin philosophy, which has dominated historians' attention) can be seen as a series of reactions and counter-reactions to the dismissive approach to the area illustrated here in a modern and extreme form, but widespread in many variations, at least since the eighteenth century.³ The earliest serious historians of medieval philosophy, in the nineteenth century (such as Victor Cousin and Barthélemy Hauréau) were willing to concede the principle on which the dismissive approach, adopted by those who would ignore medieval philosophy altogether, was founded. The dominance of Christianity and its influence on the thought of philosophers was, they granted, a grave defect in medieval philosophy; but not so grave that the period was without interest. Cousin, for instance, argued that in the Middle Ages ecclesiastical authority was absolute and medieval philosophy—'scholasticism' as he called it—was used 'in the service of faith, under the aegis of religious authority: it moved within a circle that was not of its own devising, but had been imposed on it by an authority other than its own' ([Intr. 1] 28). Yet philosophy still retained something of its own nature, and Cousin believed that even medieval scholasticism took the four forms he found in each epoch of philosophy: idealism, sensualism, scepticism and mysticism. The approach produced richer results than its apologetic tone would seem to promise, aided perhaps by Cousin's belief in a clear, though non-linear, development of philosophy from antiquity to his own day.

From the late nineteenth century until nearly the present, however, most work on medieval philosophy has been carried out from a very different point of view.⁴ Historians strongly committed to orthodox Catholicism, many of them in holy orders, were quick to build on a long tradition of medieval scholarship within the Church (especially among religious) and take up the new interest in medieval philosophy. Understandably, however, they were opposed to the approach followed by Cousin and other 'rationalist' historians (as they described them). Yet they did not, as might have been expected, counter it by arguing

that the influence of revealed religion on medieval philosophy was not cramping, but beneficial. Rather, they insisted that the great medieval thinkers (pre-eminently, Thomas Aquinas) recognized a distinction between philosophy and theology. They were, indeed, great theologians; but they were also great philosophers, who elaborated rational systems of philosophy independent of revelation. It is, they argued, the job of the historian of medieval philosophy to isolate and explain these philosophical systems. Part of the stimulus behind this approach may well have been provided by the problem which many Catholic thinkers and churchmen in the late nineteenth and earlier twentieth century believed modern philosophical movements posed for them. They saw most contemporary philosophy as hostile to the claims of religion and hoped to find in medieval thinkers a system which could be set against the current schools of thought. For this purpose, it was essential that, although scholastic philosophy should be fully compatible with Christian doctrine and lead naturally towards it, it should also be recognized as a fully independent philosophy, separable from revealed doctrine and able to compete on equal terms with other schools of thought. The advantage of this approach is that it brought an interest to medieval thinkers which was neither condescending nor merely antiquarian. Its disadvantage is that the distinction between philosophy and theology in the Middle Ages (even just in the Latin tradition) was neither clear-cut nor undisputed nor unchanging, and that the modern scholastic philosophy elaborated on the basis of medieval models is intellectually feeble.⁵

In recent decades, three trends have been particularly important in shaping approaches to medieval philosophy. All areas of medieval study have become more and more professional, and there has been an increasing emphasis on the need for research on the raw material of medieval scholarship: the large, still in many parts unexplored collections of manuscripts in libraries throughout Europe. So much remained, and remains, to be done in the way of editing works of medieval philosophy, studying their diffusion, establishing chronologies and tracing influences that many scholars have devoted their careers to this type of work. What they achieve, so long as they are technically competent, is of enormous value; indeed, a good edition is likely to go on being used and appreciated long after the best of interpretative studies have been left to gather dust. There is, however, a tendency among some scholars to see these sort of tasks as constituting the main business of historians of medieval philosophy. Once the manuscripts have been studied and edited most of the historian's work, they feel, has been done: it remains only to present the medieval philosopher's thoughts in terms as close as possible to his own; any attempt at deeper analysis or, God forbid, criticism is disparaged as 'unhistorical'. In this way, the

pursuit of scholarly goals, so valuable in itself, is made to obstruct the *understanding* of medieval philosophy.

This emphasis on technical historical and editorial scholarship occurs mostly among scholars who regard themselves primarily as medievalists (and often belong to history or to literary faculties in universities). A very different trend is to be found among the scholars of medieval philosophy in the philosophy faculties of universities in Britain, North America and Australasia. Whereas medieval philosophy has usually had a place in philosophy courses in continental Europe, up until the 1950s it was almost entirely ignored by English-speaking analytical philosophers, working in the tradition of Frege and Russell. Then a number of pioneers—medievalists who had taught themselves logic, such as Ernest Moody; logicians with medieval interests, such as Peter Geach and Arthur Prior—began to point out the remarkable parallels between modern and medieval logic.⁶ Many of the medieval logicians' ideas could be clarified by using modern symbolic logic to describe them, and it became apparent that in some fields they had anticipated the discoveries of the twentieth century. More broadly, the highly technical, unrhetoical, logically-based manner of addressing philosophical issues in the medieval universities—which had often been another cause of neglect—was seen to be uncannily close to the methods of the twentieth-century analytical school. Since the 1960s or 1970s a group of philosophers, mainly in North America, led by Norman Kretzmann, have brought the interests, technical training and clarity of the analytical method to bear on a range of mostly thirteenth- and fourteenth-century philosophy and, especially, logic. *The Cambridge History of Later Medieval Philosophy*, edited by Kretzmann, Jan Pinborg and Anthony Kenny (whose career has combined original work in modern philosophy with studies of ancient and medieval philosophers), is both a manifesto of this approach, and a monument to its achievements in the years up until 1982.⁷ It remains the single most important modern book on medieval philosophy.

The 'analytic' approach to medieval philosophy championed by these scholars searches for passages of philosophical interest in medieval works, extracting them where necessary from their wider theological or other context. The aim is to set out as clearly as possible the arguments used by medieval philosophers, especially where they relate to concerns shared by modern philosophers, and to examine them critically, in much the same way as a philosopher now would examine the arguments of one of his contemporaries. The great success of this method is that it enables the medieval philosophers to be understood. Understanding a philosophical argument or position involves being able to explain the claims it makes and the distinctions it involves, and being able to see what would count as an argument against it. Most

non-analytical discussions of medieval philosophy fail to do this, both from lack of close attention to the stages of each argument and from the decision not to attempt translation of medieval terms into modern ones, which we now can meaningfully manipulate in our reasoning. In this sense, the analytical method sets a standard which any conscientious student of medieval philosophy should emulate: to retreat from its demands is to seek refuge in antiquarian obscurantism.

None the less, there is reason to doubt that the analytical method, without further development and change, provides the path which will lead medieval philosophy, as the editors of the *Cambridge History* hoped ([Intr. 8] 3), from the 'philosophical ghetto' and make its study 'intellectually continuous' with the activity of contemporary philosophy. Despite the impression to the contrary that the last two paragraphs might have engendered, the study of medieval philosophy is *not* flourishing in English-speaking philosophy departments. Its exponents there are few and thinly spread. For most students of philosophy, and professional philosophers, medieval philosophy is a non-subject, while medieval historians continue to approach philosophical texts in ignorance of the analytical method or hostility to it. The failure of the analytical approach to medieval philosophy to win many converts may be blamed partly on academic narrow-mindedness, but partly it must be traced to the nature of its results. Although the analytical approach has made a number of medieval arguments and positions comprehensible, it has done little to show why it is worth studying and understanding them. At best, the medieval authors are demonstrated to have anticipated modern discoveries. More often, their arguments, although ingenious, are exposed as flawed. The analysts are, indeed, eager to emphasize, despite these results, the greatness of the best medieval philosophers as philosophers, but philosophy students, even if convinced by these protestations, might be excused for preferring to study other great philosophers of the past, whose overall positions link up more obviously with modern concerns, whilst historians will be left puzzled about what exactly all this detailed scrutinizing of argument and counter-argument is supposed to have revealed. At the root of the problem is the way in which the analytical approach strips away the context of medieval discussions and pays scant regard to the overall aims and presuppositions of the writers, in order to isolate a core of philosophical argument. Yet, it might be thought, its exponents have no alternative. Whereas the wider contexts of early modern and, strangely, ancient philosophical arguments have strong connections with modern concerns, the contexts of the medieval arguments—very often theological—seem irremediably strange and foreign to present-day concerns. This judgement, however, is too swift. The wider contexts of medieval philosophical arguments need to be grasped thoroughly and

in their relation to general problems and tensions in medieval culture, rather than seen superficially and in isolation. Then their interest, and their connections with modern concerns, will emerge.

A third trend, evident in the work of some of the leading scholars of medieval philosophy in Europe (such as Kurt Flasch, Alain de Libera, Ruedi Imbach and Burkhard Mojsisch),⁸ shows just such a willingness to explore and explain the wider contexts of medieval philosophy. Each of these scholars has concentrated especially on areas which have traditionally been thought marginal to medieval philosophy: the Platonic tradition which flourished in late thirteenth- and fourteenth-century Germany, philosophical works written for or by laymen, philosophical writing in the vernacular by figures such as Dante and Eckhart. Their claim is not merely that this material deserves attention, but also that it helps to provide a new picture of the underlying concerns and aims, and of the range, of medieval philosophy.

This volume does not seek to represent any one method of treating medieval philosophy. Its contributors were chosen because of their specialist knowledge of the individual areas they discuss, and also with the aim of producing a book which would *not* follow a single approach to the area, but show something of the diversity of approaches now current. The various approaches have, however, been carefully matched to the subject-matter, so as to provide different points of entry to the subject for readers from different academic backgrounds. To take just the most striking examples. Later medieval logic and the work of Ockham are the two areas of medieval philosophy with the most obvious links with modern analytical philosophy. The chapters devoted to them (17 and 14) have been written by scholars able to bring out and explain these links; readers from an analytical background might wish to begin here. In his chapter on Eriugena and Anselm (6), Stephen Gersh has drawn on a different strand of modern philosophy, the semiotic theories originating in France. These theories are not to everyone's taste (Gersh himself makes clear how distant his own approach is from the editor's!), but Eriugena's work, especially, raises questions about reading, interpretation and polysemy, which are now of wide interest and have rarely been recognized in medieval philosophy. Latin philosophy of the early Middle Ages is often anonymous and needs to be studied not just by looking at individual texts and authors, but also by a careful examination of the manuscript evidence of teaching and learning. Rosamund McKitterick brings a manuscript specialist's attention to this area. Readers with a historical background may find her chapter (5) a good starting place or, if they are interested in broader questions about the relation between religion and the transmission of culture, they might look to the chapter on Boethius (1), or that by Jean

Jolivet on earlier Arab philosophy (2) or by Zénon Kaluza on late medieval philosophy (18). The general reader, unsure perhaps whether or not medieval philosophy has anything at all to offer, could not do better than begin with the chapter (11) on the most celebrated medieval thinker of all, Aquinas, where Brian Davies brings out, in simple, non-technical terms, some of the themes in his work which are still important today.

The chapters of this volume may, then, be taken individually, as essays in different styles on various, related (and chronologically ordered) subjects. But there is also a way in which this volume should be seen and used as a whole. Both those coming new to medieval philosophy, and those already familiar with the area, need a chronological and geographical/linguistic map of the subject. This volume offers a map of the subject as it is seen now by specialists—and it is a map strikingly different in two ways from that offered by existing general histories of medieval philosophy in English.⁹ First, most histories treat Arab and Jewish philosophy almost exclusively with regard to their influence on Latin philosophy, almost as if Avicenna, Averroes and Maimonides had written so that one day they could be studied by Aquinas and Duns Scotus. By contrast, the chapters on Arab and Jewish philosophy here are the work of experts in Arab and Jewish thought and culture and emphasize both the cultural context of these philosophers and their achievement in absolute terms.¹⁰ Second, in most histories of medieval philosophy, the thirteenth century is seen as the period of greatest achievement in Latin philosophy, epitomized by the work of Thomas Aquinas, with the centuries before leading up to it by way of preparation and the centuries after representing a decline, slow at first, then steep. In this *History*, by contrast, the early medieval period and twelfth century is seen as an important area of philosophy in its own right, and the later medieval centuries are not overshadowed by the thirteenth. Although Aquinas is recognized as an outstandingly great thinker, his work is seen as belonging to the first generation of Latin philosophers who had thoroughly absorbed the new translations of Aristotle and the Arab and Jewish writers: the tradition of medieval philosophy became more sophisticated in the century following his death and it remained lively (despite the vicissitudes of the fifteenth and sixteenth centuries) until the early 1600s.

❁ ❁ ❁ NOTES ❁ ❁ ❁

- 1 This point is brought out very clearly in de Libera [Intr. 9].
- 2 A.C.Grayling (ed.) *Philosophy: a Guide through the Subject*, Oxford, 1995, p. 3.

- 3 Hostility to medieval philosophy (and especially to medieval logic) goes, of course, far further back: to the fourteenth century, when early humanists began to attack what they perceived as the obscurity and barbarous Latin of the university logicians. But these critics did not complain about the connections between philosophical concerns and revealed doctrine. On the historiography of medieval philosophy, see also Marenbon [Intr. 10, 83–90] and Van Steenberghen [Intr. 13] and, especially, Imbach and Maierù [Intr. 6].
- 4 The most distinguished recent exponent of the approach described in this paragraph is Fernand Van Steenberghen (see, for example, [Intr. 12]). His approach has influenced English-language readers both through translations of his work (for instance [Intr. 13]) and through David Knowles's widely read textbook [Intr. 8] which is heavily indebted to Van Steenberghen.
- 5 There is not space here properly to consider Etienne Gilson, whose work still provides many with their first and only glimpse of medieval philosophy. Gilson was both a remarkable scholar and a brilliant, independent (and often idiosyncratic) thinker, influenced by modern philosophers, especially Heidegger. In the course of his life, he moved further and further away from the model of medieval philosophy as a discipline separable from Christian doctrine, as he developed his notion of 'Christian philosophy', impossible without revelation, yet distinct from theology. See A. de Libera, 'Les Etudes de philosophie médiévale en France d'Etienne Gilson à nos jours', in Imbach and Maierù [Intr. 6] at 22–33.
- 6 Especially important pioneering books are Geach [Intr. 3] and Moody [Intr. 11].
- 7 There have, of course, been many important studies of medieval philosophy using the analytical method in the fifteen years since then. Two of the most impressive are Marilyn McCord Adams's two-volume study of Ockham [14.12] (discussed in Chapter 14) and Simo Knuuttila's work on modality [1.21]. (For complicated historical reasons, philosophy in Finland has tended to belong to the English-language analytical school, though without the indifference towards the history of philosophy, found in many English and American philosophy departments.)
- 8 See Flasch [Intr. 2] and Imbach [Intr. 5]. For the work of de Libera and Mojsisch, see especially Chapter 10. This chapter is intended merely as a digest of some of the important ideas proposed by these scholars, and to provide basic information on Bonaventure and the translations which would not otherwise have been included in the volume. Its author is not a specialist in the area!
- 9 It is close, however, to that provided by Alain de Libera in [Intr. 9], which is strongly recommended to all who can read French.
- 10 The space allocated to Arab and Jewish philosophy here is, however, less than it deserves. And Byzantine philosophy, although less important, ought not, practical considerations aside, to have been excluded (for a good survey, see de Libera [Intr. 9] 9–51). My excuse as editor is that, given severe pressures on the space available, it seemed sensible to angle the volume towards the material which would be most readily accessible, in translation and in the original, to readers.


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- Intr. 14 ——— *Introduction à l'Étude de la Philosophie Médiévale*, Louvain, 1974.

to be brought to light have been those on the immediately subsequent generation. Thus, Eriugena's studies of the Latin Fathers are known to have influenced one set of Carolingian glosses on Augustine's *De Musica* (edited by Boeuff [6.45]) and his studies of Latin secular authors of various glosses of the same period on the pseudo-Augustinian *Ten Categories*.⁶⁷ These latter glosses have been extensively discussed in recent scholarship. From passages now published it is possible to see that various commentators had grasped the semiotic ramifications of Eriugena's work. Indeed, certain glosses recall the structural preoccupations of his thought in elaborating the notion of 'nature',⁶⁸ and others its polysemic tendency by applying ideas concerning homonymy, synonymy, and paronymy or etymological arguments to metaphysics.⁶⁹

If Eriugena had exercised influence over later thinkers, it would undoubtedly have run counter to the norm of medieval intellectual development. In general, writers of this period went back directly to antique sources for their material, and during the tenth and eleventh centuries this meant primarily Boethius, whom Eriugena had only partially exploited.⁷⁰ For example, Notker Labeo makes extensive use of Boethius' translation of Aristotle's *Categories* (see [6.63]), Abbo of Fleury of the Boethian monographs on logical division and on various kinds of syllogism (see [6.64]), Gerbert of Aurillac of Boethius' first commentary on Porphyry's *Isagoge*, etc. Gerbert is arguably the most important member of this group.⁷¹ His treatise *De rationali et ratione uti* (*On 'rational' and 'to use reason'*) is a discussion of logical problems surrounding the extension of the two predicates 'rational' and 'using reason' ([6.16] 1. 299) more interesting for the ideas arising *en route* to the solution than for the solution itself. Here, Gerbert reveals the structural preoccupation of a typical Platonist in establishing three 'semiotic' categories:⁷² act without potency, act with potency, and potency without act, which are applied to hierarchies of physical and metaphysical principles,⁷³ yet a desire to reduce polysemy more characteristic of the re-emergent Aristotelianism ([6.16] 9. 304).

🌀 ANSELM OF CANTERBURY 🌀

The next major figure in the Western intellectual tradition and the dominant thinker of the late eleventh century is Anselm of Canterbury.⁷⁴ Marenbon arrives at an ambivalent judgement in his case, on one hand denying him the title of 'philosopher' because his argumentation does not arrive finally at its conclusions but assumes them from the outset, and on the other conceding it in recognition of his contributions to the study of the language—thought relation and of the logic of possibility

and necessity. Yet it is possible to reevaluate Anselm's philosophical contribution under the three headings proposed earlier: structure, text and polysemy (see p. 125).

Anselm exploits the notion of structure in developing a variant of the classical Platonic Theory of Forms during the early chapters of *Monologion* which combines ontological and 'semiotic' criteria. The ontological viewpoint is clearly indicated when he describes a set of transcendent i.e. atemporal and non-spatial principles, each of which is termed an 'exemplar' (*exemplum*), 'form' (*forma*), or 'rule' (*regula*) (*Monologion* 9, 24. 7–20). It is either present in the divine mind or an aspect of the divine essence,⁷⁵ and is somehow the cause of lower i.e. spatio-temporal things.⁷⁶ The semiotic viewpoint is adopted implicitly when Anselm introduces the set of transcendent principles with a discourse based on semantic permutation.⁷⁷

In the first place, there is an argument in the abstract. This is founded on the following inventory of semantic elements: two terms—the plurality of things having property x (a_1, a_2, \dots) and the single property x (b); two relations constitutive of terms—effect of another ($R \rightarrow$) and effect of itself ($R \leftarrow$); two terms constituted by relations—the plurality of things having property x through another (aa_1, aa_2, \dots) and the single property x through itself (bb); and three relations—greater than ($R >$), less than ($R <$), and equal to ($R =$). The inventory is activated gradually as the argument proceeds through six stages:

- 1 There are things having property x [a_1, a_2, \dots];
- 2 A thing having property x to greater, lesser, or equal degree than another thing having property x has this through the property x [$(a_1 R \cong a_2) R \rightarrow b$];
- 3 The property x is itself x [$b R \leftarrow$];
- 4 Things having property x are things having property x through another [$a_1, a_2, \dots R = aa_1, aa_2, \dots$];
- 5 The property x is the property x through itself [$b R = bb$];
- 6 The property x through itself is greater than things having property x through another [$bb R > aa_1, aa_2, \dots$].

In the second place, the argument is applied to three concrete instances: where property x is identified with 'good' sensed or understood, 'great' sensed or understood, and 'existent' sensed or understood respectively.⁷⁸

Important features of Anselm's philosophical method are revealed here. For example, it seems that there is less an alternation of premisses and conclusions—as in formal logic—than a permutation of semantic properties. In fact, the whole discourse can be understood in semantic terms with the exception of the idea (point 3 above) that the property x is itself x . This is purely ontological in character, since it makes no

sense to say that the semantic property x has the semantic property x .⁷⁹ Furthermore, it appears that the permutation of semantic properties follows a largely symmetrical pattern, the clearest indication of a writer's thinking in structural terms.

It would be inappropriate to seek the relation to textual authorities here which was apparent in Eriugena. The difference between the two philosophers seems extreme, given that Anselm's works—especially *Monologion* and *Proslogion*—are attempts to construct a discourse 'by reason alone' (*sola ratione*) without explicit dependence on sources.⁸⁰ Nevertheless, Anselm's relation to textual authorities is different from that of his predecessor rather than non-existent.

Although numerous Latin patristic sources are mentioned in the extant letters, the only authority cited in the treatises themselves is Augustine. But this citation is of overwhelming interpretative significance. In the preface to *Monologion*, the writer diverts potential criticism that he is advocating novel or false teachings by stressing the complete agreement between the doctrines of his book and those of Augustine's *On the Trinity* ([6.11] I:8. 8–14). Some modern scholars would interpret this as the typical statement of a medieval writer endeavouring to conceal the novelty of his thought behind a declaration of traditionalism. However, Anselm's remarks are more than a rhetorical commonplace. This becomes clear on analysing the *Monologion* into an assemblage of Augustinian materials reorganized according to the structural principles described above.

Anselm's relation to textual authorities is even indicated by the *Proslogion*, which cites no source at all. This treatise contains a famous passage where a premiss that God is 'something than which nothing greater can be thought' (*aliquid quo nihil maius cogitari possit*) is postulated as self-evident, the premiss then being used as the starting point for an argument allegedly proceeding by the application of reason alone to the conclusion that God exists ([6.11] I:101. 1–4, 104. 7). But even if one were to concede the premiss to be self-evident—a dubious point in itself—one could not consider it independent of textual background. In fact, the premiss corresponds to a definition of God found in Christian texts like Augustine's *On the Customs of the Catholic Church and those of the Manicheans* ([6.11] I:11. 24) and Boethius' *On the Consolation of Philosophy* ([6.11] I:10, 57–8), and in secular works like Cicero's *On the Nature of the Gods* ([6.11] I:77) and Seneca's *Natural Questions*⁸¹ to name only the most obvious parallels. So Anselm's purpose was perhaps to recommend the faith to non-Christians by deducing it from a premiss stated by Christian and non-Christian authors alike.

Anselm obviously does not exploit the notion of multiple meanings in texts; indeed, the ideal of univocity would seem more consistent with his method. Nevertheless, some of his ideas about signification,

had they been extended in a different direction, would have supported the exploitation of polysemy.

One suggestive idea is the distinction between appellation and signification elaborated in the treatise *De grammatico*. Here, he argues that in statements like 'the horse is white', the adjective is 'appellative' (*appellativum*) of the white thing but 'significative' (*significativum*) of its possession of the property ([6.11] I:159. 12–15, 161. 21). Since he stresses that what is appellated is an existent object but what is signified is not, the distinction seems to approximate that between reference and sense in modern linguistic theory.⁸² However, any Platonist would maintain that in the statement 'the horse is x ', the x signifies a transcendently existent x -ness in which Socrates participates. This is the viewpoint which also seems to underlie the argument about divine attributes in *Monologion* 1–4.⁸³

Another aspect of Anselm's theory of signification conducive to the systematic exploitation of polysemy is his notion of a 'speaking' (*locutio*) within the divine nature. By explaining that the exemplar in the divine mind according to which all things are created is a speaking (see p. 133), he follows traditional patristic teachings regarding the Word as second person of the Trinity.⁸⁴ However, the use of the term 'speaking' also requires a rational justification. Anselm therefore proposes to distinguish three ways of speaking about an object:⁸⁵

- 1 Speaking of things by employing sensible signs in a sensible manner e.g. signifying a man by using the word 'man'—such signs being unmotivated and non-universal;⁸⁶
- 2 Thinking by employing sensible and external signs in an insensible and internal manner e.g. silently thinking the word 'man'—these signs also being unmotivated and non-universal;
- 3 Speaking things themselves by employing sensible signs in neither a sensible nor an insensible manner e.g. perceiving a man either by imagining his sensible shape or by thinking his universal essence 'animal, rational, mortal'—such signs being motivated and universal.⁸⁷

It is the third type of speaking which can be attributed to the divine mind.⁸⁸ The exemplar in the latter, according to which all things are created, can therefore be described as a thinking process coextensive with rather than anterior to the manipulation of signs.⁸⁹ With this argument, Anselm points towards that elimination of the distinction between cognitive and verbal characteristic of post-Saussurian linguistic theory albeit from a restricted theological perspective (cf. pp. 128–9).

Another suggestive idea is the application of metaphor to philosophical method underlying the entire *Monologion*. Towards the end of that text Anselm raises an important question: given that the divine nature

surpasses human understanding and is accessible only through words whose meaning is transformed, how true are all the inferences constructed from such words in respect of the divinity?⁹⁰ He answers that there is a certain truth in things signified ‘not properly but through some likeness’ (*non proprie...sed per aliquam similitudinem*). The passage should be noted by those modern scholars who agonize over the cogency of Anselm’s arguments about God, since he shows clearly that the ‘logic’ which they contain is intended to be not the embodiment but only the reflection of truth.⁹¹ Apparently, logical metaphor is to logic in the *Monologion* what arithmetical metaphor was to arithmetic in Eriugena’s exposition of the divine names.

❁ ❁ ❁ NOTES ❁ ❁ ❁

- 1 See Leonardi, ‘Glosse eriugeniane a Marziano Capella in un codice leidense’, in Roques [6.57].
- 2 For Eriugena and Greek Neoplatonism, see esp. Beierwaltes [6.44] and Gersh [6.49]. Dermot Moran [6.54] explores the connections with German Idealism; cf. also W.Beierwaltes, ‘Zur Wirkungsgeschichte Eriugenas im deutschen Idealismus. Ein kurze, unsystematische Nachlese’, in [6.44] 313–20. Accounts more directed to the historical context will be found in Jeauneau [6.51], Marenbon [5–75] and Schrimpf [6.59].
- 3 On Anselm’s knowledge of logic, see Henry [6.69] and his editions of *De grammatico* [6.14 and 6.15].
- 4 See Bibliography [6.75–6.82] for some modern treatments of the ontological proof.
- 5 On *De grammatico*, see the works by Henry listed in n. 3 above; on Anselm’s theory of modality and philosophy of action, see Serene [6.73].
- 6 In addition, Marenbon stresses the relation between logic and language in general explored by Fredegisus (p. 51), Gottschalk (pp. 55, 105), ninth-century writers at St Gall (p. 105), the anonymous eleventh-century glossator of Priscian (p. 106ff), etc.
- 7 The most useful books providing a general introduction to Eriugena’s life and works are Cappuyns [6.24] and Moran [6.54]. See O’Meara and Bieler [6.55], Allard [6.38], Beierwaltes [6.42] and [6.43], Jeauneau [6.51], for essays on specific aspects of his thought.
- 8 This is true not only of the original ‘structuralists’ but also of the semioticians and even the deconstructionists who have followed them.
- 9 On these criteria see Lévi-Strauss, C., *Structural Anthropology*, English trans., New York, 1964, pp. 279–80 and Greimas, A.J., *Structural Semantics*, English trans., Lincoln, Neb. 1983, pp. 18ff.
- 10 See Saussure, F. de *Course in General Linguistics*, English trans., New York, 1959, pp. 114–15.
- 11 This theory is conveniently summarized by Barthes, R., *Elements of Semiology*, English trans., London, 1984, pp. 135ff.

- 67 Edited by Marenbon [5.84] 173ff. Eriugena also influenced the gloss tradition on Martianus Capella in a manner now difficult to describe precisely; see Schrimpf [6.58].
- 68 Gloss I in Marenbon’s edition.
- 69 Gloss IIIb in Marenbon’s edition.
- 70 On the Boethian logical tradition in the Middle Ages see van de Vyver [6.37] and Minio-Paluello [6.34].
- 71 On Gerbert’s work in general see the collection *Gerberto, Scienza, Storia e Mito* [6.61]. This includes papers by Riché [6.62]—stressing the important of Boethius—and Frova [6.60].
- 72 On the term ‘semiotic’ see note 14.
- 73 Gerbert, [6.16] 6, pp. 301ff. Gerbert here systematizes material in Aristotle, *On Interpretation* 13. 23a 21–5.
- 74 The most useful book providing a general introduction to Anselm’s life and works is Hopkins [6.22]. Among other modern studies, Kohlenberger [6.70] and Evans, G.R., *Anselm and Talking about God*, Oxford, 1978 should be mentioned.
- 75 The first interpretation predominates at 9, 24. 7 to 10, 25. 27, the second at 1, 13. 1 to 4, 18. 3. Both are perfectly standard in the Augustinian tradition which Anselm represents.
- 76 The type of causality (efficient) is discussed at 6, 18. 18 to 7. 22, 10.
- 77 The semiotic always implies the semantic even though the reverse is not the case.
- 78 [6.11] I: 14. 5ff. ‘It is therefore easy for someone to say to himself silently: Since the goods are so numerous whose great diversity we both perceive through the bodily senses and discern by the reason of the mind, should we believe that there is one thing through which alone whatever things are good are good or are things which are good good through one another? But it is absolutely certain and clear to all those willing to pay attention that whatever things are called something in such a way as to be called this in greater or lesser or equal degree in respect of one another, are called this through something which is understood not differently in different things but the same in each case, whether it be considered as equally or unequally present in them... Therefore, since it is certain that all good things, if compared to one another, are either equally or unequally good, it is necessary that all good things are good through something which is understood as the same in different things, although sometimes good things seem to be called good through one another... But who would doubt that that through which all good things are good is a great good? So it is good through itself, since every good is good through it. Therefore it follows that all other goods are good through something other than that which they are themselves, and that only this other is good through itself. But no good which is good through another is equal to or greater than that good which is good through itself. So that alone is supremely good which is only good through itself, for that is supreme which so excels others that it has neither an equal nor a superior.’
- 79 This is one feature reinforcing the picture of Anselm as a Platonic realist. That he was moving away from this position was argued by Schmitt [6.72]. However, the only evidence for such an interpretation is an apparently non-realist handling of abstract terms to be discussed on p. 135. Anselm’s position as a Platonic realist is examined by Flasch [6.67] and Adams [6.65].

- 80 In Anselm's writing, the term *ratio* itself has a multiplicity of connotations given by the earlier textual tradition: ontological, theological, epistemological, psychological and logical. See Gersh [6.68].
- 81 [6.11] I, pr. 13 On the textual background to Anselm's argument see Audet [6.66] and Nothdurft [6.35].
- 82 The modern discussion seems to have begun with Frege about 1892. See Frege, G., 'On sense and reference', pp. 118–40 and Russell, B., 'On denoting', pp. 143–58, both in F.Zabeh (ed.) *Readings in Semantics*, Urbana, Ill., 1974.
- 83 Cf. note 79. To the question whether Anselm saw any inconsistency between these two positions the answer is uncertain. However, since he probably viewed the signifieds of *De grammatico* but apparently not the transcendent properties of *Monologion* as universals in the logical sense, the philosophical problems raised by the two treatises were more easily separated for him than they are for his modern reader. The issue of universality is first raised at *Monologion* 27, [6.11] I. 45. 1–22.
- 84 See Augustine, *On the Trinity* X. 1ff., XV. 10–16. On the history of this theory see Colish [6.28] 50–1, 99.
- 85 The threefold division in this text: sensible signs+sensible manner, sensible signs+insensible manner, sensible signs+neither sensible nor insensible manner, juxtaposes semiotic categories in a manner recalling Eriugena. See n. 19.
- 86 Anselm does not himself employ the terms 'unmotivated' and 'non-universal' here. However, he clearly views the first type of sign as defined negatively with respect to the third type. The latter will be specified as motivated and universal.
- 87 Anselm says that the third type of sign is 'natural' (*naturalis*) apparently meaning that it is motivated. In modern linguistic theory, a motivated sign is one whose signifier and signified are related analogically. See Barthes, SZ pp. 114ff.
- 88 *Monologion* 10 [6.11] I:24. 29ff. 'It is noted in common usage that we can speak of a single thing in three ways. We speak of things either by using sensible signs—that is, signs which can be perceived by bodily senses—in a sensible manner; or by thinking the same signs which are sensible externally in an insensible manner within ourselves; or by neither using these signs in a sensible nor an insensible manner but by speaking of the things themselves inwardly in our mind through imagination of the bodily or through a rational understanding in place of the diversity of things themselves. For I speak of the man in one way when I signify him with the name "man", in another when I think the same name silently, and in another when my mind contemplates that same man either through an image of the bodily or through reason. It is through an image of the bodily when the mind imagines his sensible shape, but it is through reason when it thinks his universal essence which is "animal, rational, mortal". Of these three ways of speaking each consists of its own kind of words. However, the words of that speech which I have posited as third and last—when they are of things which are not unknown—are natural and the same among all races.' In this passage, Anselm develops the theory which he found in Aristotle's *On Interpretation*; see p. 129.
- 89 Anselm states unambiguously that even the third type of speaking constitutes sign-manipulation of a sort.
- 90 *Monologion* 65 [6.11] I:75. 17–65, 77. 3. The reference to transformation of meaning indicates metaphoricality.

- 91 It is possible to treat the statement at *Proslogion* 15 [6.11] I:112. 12–17 that God is 'something greater than can be thought' (*quiddam maius quam cogitari possit*) as a correction of the famous premiss of *Proslogion* 2 [6.11] I:101. 4–5. If so, Anselm is pointing out that the ontological argument is in the final analysis only an image of the truth.

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CHAPTER 11

Thomas Aquinas

Brian Davies OP

Thomas Aquinas, son of Landulf d'Aquino and his wife Theodora, was born sometime between 1224 and 1226 in what was then the Kingdom of Naples.¹ After a childhood education at the Benedictine monastery of Monte Cassino, he studied at the university of Naples. Here, possibly under Irish influence, he encountered the philosophy of Aristotle, which subsequently became a major source of philosophical inspiration to him.² The thinking of Aristotle and Aquinas differ in many ways. So it would be wrong to say, as some have, that Aquinas is just an 'Aristotelian', implying that he merely echoed Aristotle.³ But he certainly used Aristotle to help him say much that he wanted to say for himself. And he did more than any other medieval philosopher to make subsequent generations aware of the importance of Aristotle.

In 1242 or 1243 Aquinas entered the Dominican Order of preaching friars founded by St Dominic (c. 1170–1221).⁴ He subsequently studied under St Albert the Great (c. 1200–80) in Cologne and Paris, and by 1256 he was a professor at the University of Paris. The rest of his life was devoted to teaching, preaching, administration and writing—not only in Paris, but elsewhere as well. He taught, for example, at Orvieto and Rome. He was assigned to establish a house of studies in Rome in 1265. In 1272 he moved to Naples, where he became responsible for studies at the priory of San Domenico. But by 1274 his working life was over. In December 1273 he suffered some kind of breakdown. At around the same time he was asked to attend the second Council of Lyons. He set out for Lyons, but he became seriously ill on the way and he died in the Cistercian Abbey of Fossanova.

After his death Aquinas came near to being condemned at the University of Paris. And teachings thought to derive from him were condemned at Oxford in 1277. But his standing as a thinker grew steadily and, in spite of continued opposition to his teaching, he was canonized as a saint of the Catholic Church in 1323. Later medieval

authors often quote him and discuss him, and, though his influence waned between the later medieval period and the age of the Counter-Reformation, his impact on post-Reformation figures was considerable, chiefly because St Ignatius Loyola arranged for his writings to be used in the training of Jesuits. After another period in which his thinking came to be lightly regarded, the study of Aquinas was encouraged by the papacy in the nineteenth century.

 PHILOSOPHER OR THEOLOGIAN? 

Does Aquinas deserve a place in a book on the history of philosophy? Anthony Kenny has described him as 'one of the dozen greatest philosophers of the western world' ([11.27] 1). But others have expressed a different view. Take, for example, Bertrand Russell. According to him:

There is little of the true philosophic spirit in Aquinas. He does not, like the Platonic Socrates, set out to follow wherever the argument may lead. He is not engaged in an inquiry, the result of which it is impossible to know in advance. Before he begins to philosophize, he already knows the truth; it is declared in the Catholic faith.⁵

Russell had little time for Aquinas considered as a philosopher. And even Aquinas's supporters have sometimes characterized him as a theologian rather than a philosopher. According to Etienne Gilson, the philosophy in Aquinas is indistinguishable from the theology.⁶ The same opinion is expressed by Armand Maurer. Commenting on Aquinas's *Summa theologiae*, he says that, in this work,

everything is theological, even the philosophical reasoning that makes up such a large part of it. The water of philosophy and the other secular disciplines it contains has been changed into the wine of theology. That is why we cannot extract from the *Summa* its philosophical parts and treat them as pure philosophy.⁷

Russell's judgement will strike most modern philosophers as a dubious one. And, as Kenny nicely observes, it 'comes oddly from a philosopher who [in *Principia Mathematica*] took three hundred and sixty dense pages to offer a proof that $1+1=2$ ' ([11.27] 2). But there are good reasons for agreeing with Gilson and Maurer. Aquinas was a priest and a Dominican friar. And most of his writings can be properly classed as 'theology'. We have reason to believe that his greatest literary

achievement, the *Summa theologiae*, was chiefly intended as a textbook for working friars.⁸ And there is reason to suppose that his second best-known work, the *Summa contra Gentiles*, had an equally pastoral and Christian motive.⁹

Yet any modern philosopher who reads Aquinas will be struck by the fact that he was more than your average theologian. His writings show him to have been expert in matters of philosophical logic. And, like many medieval theology teachers, he presented his theology with an eye, not just on Scripture and the authority of Christian tradition, but also on what follows from what, what it is *per se* reasonable to believe, and what it makes sense to say in general. If Aquinas is first and foremost a theologian, he is also a philosopher's theologian who is worthy of attention from philosophers. He had an enviable knowledge of philosophical writings and he was deeply concerned to theologize on the basis of this knowledge. He was also a writer of considerable ability with theses of his own, which are not just restatements of positions received from the Christian tradition and the history of philosophy. Whether one calls him a 'theological' thinker or a 'philosophical' thinker does not really matter. The fact remains that his writings are full of philosophical interest.

🌀 AQUINAS AND GOD 🌀

Readers who want to get an overall sense of Aquinas's teaching are best advised to see it as defending what is usually called an *exitusreditus* picture of reality ([11.12] ch. 11). God, says Aquinas, is 'the beginning and end of all things'.¹⁰ Creatures derive from God (*exitus*), who is therefore their first efficient cause (that which accounts for them being there).¹¹ But God is also the final cause of creatures, that to which they aim, tend, or return (*reditus*), that which contains the perfection or goal of all created things.¹² According to Aquinas, everything comes from God and is geared to him. God accounts for there being anything apart from himself, and he is what is aimed at by anything moving towards its perfection. Aristotle says that everything aims for its good (*Ethics* I, i, 1094a3). Aquinas says that any created good derives from God who contains in himself all the perfections found in creatures. In so far as a creature moves to its perfection, Aquinas goes on to argue, the creature is tending to what is to be found in God himself.¹³ As Father, Son, and Spirit, Aquinas adds, God is the special goal of rational individuals. For these can share in what God is by nature.¹⁴

Aquinas is sometimes reported as teaching that someone who claims rationally to believe in the existence of God must be able to prove that God exists. But this is not what Aquinas teaches. He says that people

can have a rational belief in the existence of God without being able to prove God's existence.¹⁵ And he holds that, apart from the question of God's existence, people may be rational in believing what they cannot prove. Following Aristotle, he maintains that people may rationally believe indemonstrable principles of logic.¹⁶ He also maintains that one may rationally believe what a teacher imparts to one, even though one is in no position to demonstrate the truth of what the teacher has told one.¹⁷ He does, however, contend that belief in God's existence is one for which good philosophical reasons can be given. This is clear from *Summa theologiae* Ia, 2, 2 and *Summa contra Gentiles* I, 9, where he says that 'we can demonstrate...that God exists' and that God can be made known as we 'proceed through demonstrative arguments'. 'Demonstrative arguments' here means what it does for Aristotle, i.e. arguments using premisses which entail a given conclusion on pain of contradiction.

Aquinas denies that proof of God's existence is given by arguing that 'God does not exist' is a contradiction. So he rejects the suggestion, commonly associated with St Anselm, that the existence of God can be demonstrated from the absurdity of denying that God exists.¹⁸ He also rejects the view that human beings are naturally capable of perceiving or experiencing God as they perceive or experience the things with which they are normally acquainted. According to Aquinas, our perception and seeing of things is based on sensory experience.¹⁹ Since God is not a physical object, Aquinas concludes that there can be no natural perception or seeing of God on the part of human beings.²⁰ He does not deny that people might have a knowledge of God without the medium of physical objects. In talking of life after death, he says that people can have a vision of God which is nothing like knowing a physical object.²¹ But he denies that human beings in this world have a direct and unmediated knowledge of God. On his account, our knowledge of God starts from what we know of the world in which we live. According to him, we can know that God exists because the world in which we find ourselves cannot account for itself.

Aquinas considers whether we can prove that God exists in many places in his writings. But his best-known arguments for the existence of God come in Ia, 2, 3 (the 'Five Ways'). His thinking in this text is clearly indebted to earlier authors, especially Aristotle, Maimonides, Avicenna and Averroes.²² And it would be foolish to suggest that the reasoning of the Five Ways can be quickly summarized in a way that does them justice. But their substance can be indicated in fairly uncomplicated terms.

In general, Aquinas's Five Ways employ a simple pattern of argument. Each begins by drawing attention to some general feature of things known to us on the basis of experience. It is then suggested that none

of these features can be accounted for in ordinary mundane terms, and that we must move to a level of explanation which transcends any with which we are familiar.²³

Another way of putting it is to say that, according to the Five Ways, questions we can raise with respect to what we encounter in day to day life raise further questions the answer to which can only be thought of as lying beyond what we encounter.

Take, for example, the First Way, in which the influence of Aristotle is particularly prevalent.²⁴ Here the argument starts from change or motion in the world.²⁵ It is clear, says Aquinas, that there is such a thing—he cites as an instance the change involved in wood becoming hot when subjected to fire.²⁶ How, then, may we account for it?

According to Aquinas, anything changed or moved is changed or moved by something else. *Omne quod movetur ab alio movetur*. This, he reasons, is because a thing which has changed has become what it was not to begin with, which can only happen if there is something from which the reality attained by the thing as changed somehow derives.²⁷ Therefore, he concludes, there must be a first cause of things being changed or moved. For there cannot be an endless series of things changed or moved by other things. If every change in a series of connected changes depends on a prior changer, the whole system of changing things is only derivatively an initiator of change and still requires something to initiate its change. There must be something which causes change or motion in things without itself being changed or moved by anything. There must be an unchanged changer or an unmoved mover.

Anything which is moved is moved by something else... To cause motion is to bring into being what was previously only able to be, and this can only be done by something that already is... Now the same thing cannot at the same time be both actually *x* and potentially *x*, though it can be actually *x* and potentially *y*: the actually hot cannot at the same time be potentially hot, though it can be potentially cold.

Consequently, a thing which is moved cannot itself cause that same movement; it cannot move itself. Of necessity therefore anything moved is moved by something else... Now we must stop somewhere, otherwise there will be no first cause of the movement and as a result no subsequent causes... Hence one is bound to arrive at some first cause of things being moved which is not itself moved by anything, and this is what everybody understands by God.

(*Summa theologiae* I q. 2, a. 3)

If we bear in mind that Aquinas believes that time can be said to exist because changes occur, the First Way is arguing that the reality of time is a reason for believing in God.²⁸ Aquinas is suggesting that the present becomes the past because something non-temporal enables the present to become past.

The pattern of the First Way is repeated in the rest of the Five Ways. According to the Second Way, there are causes in the world which bring it about that other things come to be. There are, as Aquinas puts it, causes which are related as members of a series. In that case, however, there must be a first cause, or something which is not itself caused to be by anything. For causes arranged in series must have a first member.

In the observable world causes are found to be ordered in series; we never observe, nor ever could, something causing itself, for this would mean it preceded itself, and this is not possible. Such a series of causes must however stop somewhere; for in it an earlier member causes an intermediate and the intermediate a last... Now if you eliminate a cause you also eliminate its effects, so that you cannot have a last cause, nor an intermediate one, unless you have a first.

(*ibid.*)

According to the Third Way²⁹ there are things which are perishable (e.g. plants) and things which are imperishable (in Aquinas's language, imperishable things are 'necessary' beings or things which 'must be').³⁰ But why should this be so? The answer, says Aquinas, has to lie in something imperishable and dependent for its existence on nothing.³¹

Now a thing that must be, may or may not owe this necessity to something else. But just as we must stop somewhere in a series of causes, so also in the series of things which must be and owe this to other things.

(*ibid.*)

In the Fourth and Fifth Ways Aquinas turns to different questions. Why are there things with varying degrees of perfection?³² And how does it come about that in nature there are things which, while not themselves intelligent, operate in a regular or goal-directed way?³³ Aquinas suggests that perfections in things imply a source of perfections. He thinks that where there are degrees of a perfection there must be something which maximally embodies that perfection and which causes it to occur in other things. And he thinks that the goal-directed activity of non-rational things suggests that they are governed by what is rational.

Some things are found to be more good, more true, more noble, and so on, and other things less. But such comparative terms describe varying degrees of approximation to a superlative; for example, things are hotter and hotter the nearer they approach to what is hottest. Something therefore is the truest and best and most noble of things. Now *when many things possess some property in common, the one most fully possessing it causes it in the others: fire, to use Aristotle's example, the hottest of all things, causes all other things to be hot.* There is therefore something which causes in all other things their being, their goodness, and whatever other perfections they have.

Some things which lack awareness, namely bodies, operate in accordance with an end... Nothing however that lacks awareness tends to a goal except under the direction of someone with awareness and with understanding... Everything in nature, therefore is directed to its goal by someone with understanding.

(ibid.)

WHAT IS GOD LIKE?

Aquinas is often described as someone who first tries to prove the existence of God and then tries to show that God has various attributes. But, though this description can be partly defended, it is also misleading. For Aquinas holds that the attributes we ascribe to God are not, in reality, anything distinct from God himself. According to Aquinas, God is good, perfect, knowledgeable, powerful and eternal. But he does not think that, for example, 'the goodness of God' signifies anything other than God himself. In the thinking of Aquinas, God does not *have* attributes or properties. God *is* his attributes or properties.³⁴ Aquinas also maintains that, though we speak of God and ascribe certain attributes to him, we do not know what God is. Aquinas is often thought of as someone with a precise or definite concept of God, someone who thinks he can explain just what God is. But in a passage immediately following the text of the Five Ways, he writes,

Having recognized that a certain thing exists, we have still to investigate the way in which it exists, that we may come to understand what it is that exists. Now we cannot know what God is, but only what he is not; we must therefore consider the ways in which God does not exist, rather than the ways in which he does.

(ibid.)

The same move is made in the *Summa Contra Gentiles*. Book I, Chapter 13 of the treatise is called 'Arguments in proof of the existence of God'. Chapter 14 begins with the assertion, 'The divine substance surpasses every form that our intellect reaches. Thus we are unable to apprehend it by knowing what it is.'

In saying that God and his attributes are identical, Aquinas is not saying that, for example, 'God is good' means the same as 'God exists'. And he is certainly not saying that God is a property.³⁵ He means that certain things that are true of creatures are not true of God. More precisely, he means that God is nothing material. On Aquinas's account, material things possessing a nature cannot be identified with the nature they possess. Thus, for example, Socrates is not identical with human nature. But what is it that allows us to distinguish between Socrates and other human beings? Aquinas says that Socrates is different from other human beings not because of his nature but because of his matter. Socrates is different from me because he was one parcel of matter and I am another. It is materiality which allows Socrates to be a human being rather than human nature. And, since Aquinas denies that God is something material, he therefore concludes that God and his nature are not distinguishable. He also reasons that angels and their natures are not distinguishable. The angel Gabriel is not a material object. And neither is the angel Michael. So, says Aquinas, Gabriel is his nature, and Michael is his nature. Or, as we may put it, God, Gabriel and Michael are not individual members of a species or genus.³⁶

With respect to the question of knowing what God is, we need to be warned that Aquinas does not deny that we can know ourselves to speak truly when we make certain statements about God.³⁷ Aquinas spends a great deal of time arguing that many propositions concerning God can be proved to be true in philosophical terms. But he denies that we can understand the nature of God. On his account, our knowledge of what things are depends on our ability to experience them by means of our senses and to classify them accordingly. Since he holds that God is nothing material, he therefore denies that God is known by the senses and classifiable on the basis of sensory experience.

The knowledge that is natural to us has its source in the senses and extends just so far as it can be led by sensible things; from these, however, our understanding cannot reach to the divine essence... In the present life our intellect has a natural relation to the natures of material things; thus it understands nothing except by turning to sense images... In this sense it is obvious that we cannot, primarily and essentially, in the mode of knowing that we experience, understand immaterial substances since they are not subject

to the senses and imagination... What is understood first by us in the present life is the whatness of material things...[hence]... we arrive at a knowledge of God by way of creatures.

(*Summa theologiae*, Ia, 12, 12; 88, 1; 88, 3)

On Aquinas's account, our knowledge of God is derived from what we know of things in the world and from what we can sensibly deny or affirm of God given that he is not something in the world. So, says Aquinas, God is not a physical object which can be individuated as a member of a class of things which can be distinguished from each other with reference to genus and species. Among other things, Aquinas also argues that God is unchangeable and non-temporal (since he is the first cause of change, and since time is real since changes occur).³⁸

In distinguishing God from creatures, however, Aquinas lays the greatest stress on the teaching that God is uncreated. One way in which he does so is to say that there is no 'potentiality' in God. To understand his teaching on God it will help if we try to understand what he means by saying this.

We can start by noting what Aquinas means by 'potentiality'. And we can do so by thinking of my cat Fergus. He is a lovely and loving creature, and I am deeply fond of him. But he is no Platonic form. Plato thought of the forms as unchangeable. But Fergus is changing all the time. He gets fat as I feed him. And he is constantly changing his position. So he is a serious threat to the local mice.

Aquinas would say that when Fergus weighs nine pounds he is also potentially eight and ten pounds in weight. Fergus might weigh nine pounds, but he could slim to eight pounds or grow to ten pounds. Aquinas would also say that when Fergus is in the kitchen, he is potentially in the living room. For Fergus has a habit of moving around.

What if Fergus ends up strolling on to a busy road? He stands a strong chance of becoming a defunct cat. Or, as Aquinas would say, Fergus is actually a cat and potentially a corpse. Fergus is vulnerable to the activity of things in the world. And some of them can bring it about that he ceases to be the thing that he is.

We can put this by saying that Fergus is potentially non-existent as a cat. And that is what Aquinas would say. But he would add that there is a sense in which Fergus is potentially non-existent quite apart from the threat of a busy road and the like. For there might be no Fergus at all, not just in the sense that there might never have been cats who acted so that Fergus was born, but in the sense that Fergus might not continue to exist. According to Aquinas, anything created is potential since its existence depends on God (since anything created is potentially non-existent). In his view, we are entitled to ask why

anything we come across is there. And, so he thinks, in asking this question we need not be concerned with temporally prior causes or identifiable causes in the world which sustain things in the state in which they are. We can be asking about the fact that there is anything there to be produced or to be sustained. What accounts for the fact that such things exist at all? What accounts for there being a world in which we can ask what accounts for what within it?

Aquinas holds that, if we take these questions seriously, we must believe in the existence of something which is wholly lacking in potentiality, i.e. God. Fergus can change physically and he has potentiality accordingly. But God is no physical thing, and, since he accounts for there being a world, he cannot be potentially non-existent. He does not 'have' existence. His existence is not received or derived from another. He is his own existence (*ipsum esse subsistens*) and the reason why other things have it.

Properties that belong to a thing over and above its own nature must derive from somewhere, either from that nature itself...or from an external cause... If therefore the existence of a thing is to be other than its nature, that existence must either derive from the nature or have an external cause. Now it cannot derive merely from the nature, for nothing with derived existence suffices to bring itself into being. It follows then that, if a thing's existence differs from its nature, that existence must be externally caused. But we cannot say this about God, whom we have seen to be the first cause. Neither then can we say that God's existence is other than his nature.

(*Summa theologiae*, Ia, 3, 4)

In Aquinas's view, this would be true even if the created order contained things which are not material. For suppose there were immaterial beings other than God, as Aquinas took angels to be.³⁹ They would differ from material things since they would have no in-built tendency to perish or move around. In the language of Aquinas, they would be 'necessary' beings rather than 'contingent' ones. They would also be identical with their natures, for, as we have seen, Aquinas held that there are no two angels of the same kind or 'species'. But they would still be potentially non-existent since they would receive their existence from God. And, though they could not decay or perish at the hands of other creatures, it would be possible for God to de-create (annihilate) them. They would not therefore exist simply by being what they are. 'Without doubt', says Aquinas, 'the angels, and all that is other than God, were made by God. For only God is his existence; in all else essence and existence are distinct.'⁴⁰ Or, as he also explains,

Some things are of a nature that cannot exist except as instantiated in individual matter—all bodies are of this kind. This is one way of being. There are other things whose natures are instantiated by themselves and not by being in matter. These have existence simply by being the natures they are: yet existence is still something they *have*, it is not what they are—the incorporeal beings we call angels are of this kind. Finally there is the way of being that belongs to God alone, for his existence is what he is.

(*Summa theologiae*, Ia, 12, 4)

🌀 GOD AND HIS CREATION 🌀

How does Aquinas think of God as relating to his creation? In writing about the relation between God and creatures, one of the things he says is that God is not really related to creatures, though creatures are really related to God. In his own words:

Since God is altogether outside the order of creatures, since they are ordered to him but not he to them, it is clear that being related to God is a reality in creatures, but being related to creatures is not a reality in God.⁴¹

But what does he mean in saying this? And how does what he says connect with his belief that God is the creator and sustainer of everything other than himself?

One might suppose that the words of Aquinas just quoted constitute a flagrant violation of obvious truths. If A is related to B, then B must be related to A. What could be more obvious than that? But Aquinas's teaching on God and his relation to creatures is not a denial of the principle 'If aRb, then bRa'. If one reads him on the question of God's relation to creatures, one will find him endorsing all of the following propositions.

- 1 We can speak of God as related to his creatures in view of the purely formal point that if one thing can be said to be related to another, then the second thing can be said to be related to the first.
- 2 Since God can be compared to creatures, since he can be spoken of as being like them, he can be thought of as related to them.
- 3 Since God knows creatures, he can be said to be related to them.
- 4 Since God moves creatures, he can be said to be related to them.
- 5 Since God can be spoken of as 'first', 'highest' and so on, he can be said to be related to creatures since these terms are relational ones.⁴²

In saying that 'being related to creatures is not a reality in God', Aquinas's primary concern is to deny that God is changed because he has created. Aquinas denies that God is something which has to create. In his view, God creates freely, and to understand what God is essentially would not be to see that he is Creator of the world. God, indeed, has created the world. But, says Aquinas, he does not produce the world as kidneys produce urine. For him, God is able to create, but he is not essentially a creator (as kidneys are essentially producers of urine).⁴³ So Aquinas reasons that the essence of God is in no way affected by the existence of created things and that being the Creator of creatures is not something in God. God does not become *different* by becoming the Creator of things. Nor does he change because his creatures change. For Aquinas, the fact that there are creatures makes no difference to God, just as the fact that my coming to know that Fred is bald makes no difference to Fred (my coming to know that Fred is bald does not change him, even though he might be deeply affected by learning that I have come to know of his baldness). In Aquinas's view, God is unchangeably himself. And he remains so even though it is true that there are things created and sustained by him.

This aspect of Aquinas's teaching allows him to take a view of God's activity which is quite at odds with that to be found in the work of many philosophers and theologians both ancient and modern. It has often been said that the action of God is a process undergone by God with effects in the world of created things. When I act, I do something in addition to what I have been previously doing. I go through a series of successive states. And my going through these states sometimes leads to changes in things apart from myself. By the same token, so it has often been argued, God acts by being a subject under-going successive states some of which have effects in things other than him. But this is not Aquinas's position. On his account, the action of God is not a process undergone by him. It is a process undergone in things other than God. For Aquinas, God's action is the history of created things.

One of the things which Aquinas takes this to mean is that God cannot, strictly speaking, be thought of as intervening in the world. According to the usual sense of 'intervene', to say that X has intervened is to say that X has come to be present in some situation from which X was previously absent. Thus, for example, to say that I intervened in a brawl is to say that I moved into a fight of which I was not originally a part. But Aquinas holds that God can never be absent from anything. On his account, God is everywhere as making all places.⁴⁴ He also says that God is in all things as making them to be. Hence, for example, he refuses to think of miracles as cases of divine intervention. It is often said that to believe in miracles is to believe in a God who can intervene. The idea seems to be that a God capable of performing miracles must be one who observes a given scenario and then steps in to tinker with

it. But God, for Aquinas, can never intervene in his creation in this sense. He therefore maintains that God is as present in what is not miraculous as he is in the miraculous. Miracles, for him, do not occur because of an extra added wonder ingredient (i.e. God). They occur because something is *not* present (i.e. a cause other than God, or a collection of such causes).⁴⁵

This thought of Aquinas should be connected with another of his prevailing theses: that free human actions are caused by God. He frequently alludes to arguments suggesting that people cannot be free under God's providence. In *On Evil* VI, for instance, we find the three following arguments, from the twenty-four in all, against the thesis that human beings have a free choice of their actions:

If change is initiated in the human will in a fixed way by God, it follows that human beings do not have free choice of their actions. Moreover, an action is forced when its originating principle is outside the subject, and the victim of force does not contribute anything to it. So if the originating principle of a choice which is made voluntarily is outside the subject—in God—then it seems that the will is changed by force and of necessity. So we do not have free choice of our actions. Moreover, it is impossible that a human will should not be in accordance with God's will: as Augustine says in the *Enchiridion*, either a human being does what God wills or God fulfils his will in that person. But God's will is changeless; so the human will is too. So all human choices spring from a fixed choice.

A similar kind of argument constitutes the third objection to Ia, 83, 1:

What is *free is cause of itself*, as the Philosopher says (*Metaphysics* 1.2). Therefore what is moved by another is not free. But God moves the will, for it is written (Prov. 21:1): *The heart of the king is in the hand of the Lord; whithersoever He will He shall turn it*; and (Phil. 2:13): *It is God Who worketh in you both to will and to accomplish*. Therefore people do not have free-will.

Yet Aquinas insists that the reality of providence (which means the reality of God working in all things as first cause and sustainer) is not incompatible with human freedom.

To begin with, he says, people certainly have freedom. For one thing, the Bible holds that they do (in Ia, 83, 1 Aquinas cites *Ecclesiasticus* 15:14 to this effect). For another, people, as rational agents, have it in

them to choose between alternative courses of action (unlike inanimate objects or animals acting by instinct).⁴⁶ They also have it in them to act or refrain from acting. In fact, says Aquinas, human freedom is a prerequisite of moral thinking.

If there is nothing free in us, but the change which we desire comes about of necessity, then we lose deliberation, exhortation, command and punishment, and praise and blame, which are what moral philosophy is based on.
(*On Power*, VI; *Summa theologiae*, Ia, 83, 1)

Secondly, so Aquinas continues, human actions falling under providence can be free precisely because of what providence involves. In his view we are not free *in spite of* God, but *because of* God.

God does indeed change the will, however, in an unchanging manner, because of the manner of acting of God's change-initiating power, which cannot fail. But because of the nature of the will which is changed—which is such that it is related indifferently to different things—this does not lead to necessity, but leaves freedom untouched. In the same way divine providence works unfailingly in everything, but nevertheless effects come from contingent causes in a contingent manner, since God changes everything in a relative way, relative to the manner of existence of each thing... The will does contribute something when change is initiated in it by God: it is the will itself that acts, though the change is initiated by God. So though its change does come from outside as far as the first originating principle is concerned, it is nevertheless not a forced change.

(*On Evil*, VI)

In other words, human freedom is compatible with providence because only by virtue of providence is there any human freedom. God, for Aquinas, really does act in everything. And since 'everything' includes human free actions, Aquinas concludes that God works in them as much as in anything else.

People are in charge of their acts, including those of willing and of not willing, because of the deliberative activity of reason, which can be turned to one side or the other. But that someone should deliberate or not deliberate, supposing that one were in charge of this too, would have to come about by a preceding deliberation. And since this may not proceed to infinity, one would finally have to reach the point at which a person's free

decision is moved by some external principle superior to the human mind, namely by God, as Aristotle himself demonstrated. Thus the minds even of healthy people are not so much in charge of their acts as not to need to be moved by God.
(*Summa theologiae*, Ia2ae, 109, 3, ad. 1)

The same idea is expressed in Aquinas's commentary on Aristotle's *On Interpretation*:

If divine providence is, in its own right, the cause of everything that happens, or at least of everything good, it seems that everything happens of necessity... God's will cannot be thwarted: so it seems that whatever he wants to happen happens of necessity... [But] we have to notice a difference as regards the divine will. The divine will should be thought of as being outside the ordering of existent things. It is the cause which grounds every existent, and all the differences there are between them. One of the differences between existents is between those that are possible and those that are necessary. Hence necessity and contingency in things have their origin in the divine will, as does the distinction between them, which follows from a description of their proximate causes. God lays down necessary causes for the effects that he wants to be necessary, and he lays down causes that act contingently—i.e. that can fail of their effect—for the effects that he wants to be contingent. It is according to this characteristic of their causes that effects are said to be necessary or contingent, even though they all depend on the divine will, which transcends the ordering of necessity and contingency, as their first cause... The will of God cannot fail: but in spite of that, not all its effects are necessary; some are contingent.
(*On 'On Interpretation'*, Bk I, lectio 14)

By 'necessary' here Aquinas means 'determined' or 'brought about by causes necessitating their effects'. By 'contingent' he means 'undetermined' or 'able to be or not to be'. His suggestion, therefore, is that God wills both what is determined and what is undetermined. Since he believes that each must derive from God's will, he locates them within the context of providence. But since he also believes that the determined and undetermined are genuinely different, he concludes that providence can effect what is undetermined as well as what is determined. And, on this basis, he holds that it can effect human free actions.

One may, of course, say that if my actions are ultimately caused by

God then I do not act freely at all. But Aquinas would reply that my actions are free if nothing in the world is acting on me so as to make me perform them, not if God is not acting in me. According to him, what is incompatible with human free will is 'necessity of coercion' or the effect of violence, as when something acts on one and 'applies force to the point where one cannot act otherwise'.⁴⁷ As Herbert McCabe explains, Aquinas's position is that 'to be free means not to be under the influence of some other *creature*, it is to be independent of other *bits of the universe*; it is not and could not mean to be independent of God'.⁴⁸ For Aquinas, God does not interfere with created free agents to push them into action in a way that infringes their freedom. He does not act *on* them (as Aquinas thinks created things do when they cause others to act as determined by them). He makes them to be what they are, namely freely acting agents. In Aquinas's words,

Free-will is the cause of its own movement, because by their free-will people move themselves to act. But it does not of necessity belong to liberty that what is free should be the first cause of itself, as neither for one thing to be the cause of another need it be the first cause. God, therefore, is the first cause, who moves causes both natural and voluntary. And just as by moving natural causes he does not prevent their acts being natural, so by moving voluntary causes he does not deprive their actions of being voluntary: but rather is he the cause of this very thing in them; for he operates in each thing according to its own nature.

(*Summa theologiae*, Ia, 83, 1, ad. 3)

🐾 HUMAN BEINGS 🐾

On this account, people are totally dependent on God for all that they are. But the account is a very theological one. And one might wonder how Aquinas thinks of people without also thinking about God. What, for example, would he write if asked to contribute to a modern philosophical book on the nature of human beings?²⁴⁹

The first thing he would say is that human beings are animals. So they are, for example, capable of physical movement. And they have biological characteristics. They have the capacity to grow and reproduce. They have the need and capacity to eat. These characteristics are not, for Aquinas, optional extras which people can take up and discard while remaining people. They are essential elements in the make-up of any human being. And they are very much bound up with what is physical or material.

This line of thinking, of course, immediately sets Aquinas apart from writers who embrace a ‘dualistic’ understanding of human beings—writers like Descartes, for instance.⁵⁰ For Aquinas, my body is not distinct from me because it is a different substance or thing from me. On his account, if a human being is there, then so is a human body.

For as it belongs to the very conception of ‘this human being’ that there should be this soul, flesh and bone, so it belongs to the very conception of ‘human being’ that there be soul, flesh and bone. For the substance of a species has to contain whatever belongs in general to every one of the individuals comprising that species.

(*Summa theologiae*, Ia, 75, 4)

Aquinas often refers to the thesis that people are essentially substances different from bodies on which they act (a view which he ascribes to Plato). But he emphatically rejects this thesis.

Plato and his followers asserted that the intellectual soul is not united to the body as form to matter, but only as mover to movable, for Plato said that the soul is in the body ‘as a sailor in a ship’. Thus the union of soul and body would only be by contact of power... But this doctrine seems not to fit the facts.

(*Summa contra Gentiles*, II, 57)

If our souls moved our bodies as sailors move ships, says Aquinas, my soul and my body would not be a unity. He adds that if we are souls using bodies, then we are essentially immaterial, which is not the case. We are ‘sensible and natural realities’ and cannot, therefore, be essentially immaterial.⁵¹

But this is not to say that Aquinas thinks of people as irreducibly material. He is not, in the modern sense, a philosophical ‘physicalist’.⁵² We have just seen that he is prepared to speak about people as having souls. And, on his account, a proper account of the human soul (*anima*) will deny that it is wholly material. By ‘soul’, Aquinas means something like ‘principle of life’. ‘Inquiry into the nature of the soul’, he writes, ‘presupposes an understanding of the soul as the root principle of life in living things within our experience’.⁵³ And, in Aquinas’s thinking, the root principle of life in human beings (the human soul) is non-material. It is also something ‘subsisting’.

In arguing for the non-corporeal nature of the human soul, Aquinas begins by reminding us what *anima* means, i.e. ‘that which makes living things live’. And, with that understanding in mind, he contends that soul cannot be something bodily. There must, he says, be some principle of life which distinguishes living things from non-living things, and

this cannot be a body. Why not? Because if it were a body it would follow that any material thing would be living, which is not the case. A body is alive not just because it is a body. It is alive because of a principle of life which is not a body.

It is obvious that not every principle of vital activity is a soul. Otherwise the eye would be a soul, since it is a principle of sight; and so with the other organs of the soul. What we call the soul is the root principle of life. Now though something corporeal can be some sort of principle of life, as the heart is for animals, nevertheless a body cannot be the root principle of life. For it is obvious that to be the principle of life, or that which is alive, does not belong to any bodily thing from the mere fact of its being a body; otherwise every bodily thing would be alive or a life-source. Consequently any particular body that is alive, or even indeed a source of life, is so from being a body of such-and-such a kind. Now whatever is actually *such*, as distinct from *not-such*, has this from some principle which we call its actuating principle. Therefore a soul, as the primary principle of life, is not a body but that which actuates a body.

(*Summa theologiae*, Ia, 75, 1)

In other words, if bodily things are alive just because they are bodies, all bodily things (e.g. my alarm clock) would be alive, which they are not. So what makes something a living thing cannot be a body.

But why say that the human soul is something subsisting? The main point made by Aquinas in anticipating this question is that the human animal has powers or functions which are not simply bodily, even though they depend on bodily ones. For example, people can know and understand, which is not the case with that which is wholly material. As Aquinas puts it, people enjoy an intellectual life and they are things of the kind they are (rational animals) because of this. Aquinas calls that by virtue of which people are things of the kind they are their ‘souls’. So he can say that human beings are bodily, but also that they are or have both body and soul. The two cannot be torn apart in any way that would leave what remained a human being. But they can be distinguished from each other and the soul of a human being can therefore be thought of as something subsisting immaterially.

The principle of the act of understanding, which is called the human soul, must of necessity be some kind of incorporeal and subsistent principle. For it is obvious that the understanding of people enables them to know the natures of

all bodily things. But what can in this way take in things must have nothing of their nature in its own, for the form that was in it by nature would obstruct knowledge of anything else. For example, we observe how the tongue of someone sick with fever and bitter infection cannot perceive anything sweet, for everything tastes sour. Accordingly, if the intellectual principle had in it the physical nature of any bodily thing, it would be unable to know all bodies. Each of them has its own determinate nature. Impossible, therefore, that the principle of understanding be something bodily. And in the same way it is impossible for it to understand through and in a bodily organ, for the determinate nature of that bodily organ would prevent knowledge of all bodies. Thus if you had a colour filter over the eye, and had a glass vessel of the same colour, it would not matter what you poured into the glass, it would always appear the same colour. The principle of understanding, therefore, which is called mind or intellect, has its own activity in which body takes no intrinsic part. But nothing can act of itself unless it subsists in its own right. For only what actually exists acts, and its manner of acting follows its manner of being. So it is that we do not say that heat heats, but that something hot heats. Consequently the human soul, which is called an intellect or mind, is something incorporeal and subsisting.

(*Summa theologiae*, Ia, 75, 2)

Aquinas's notion that the human soul 'subsists' does not entail that it is a complete and self-contained entity, as, for example, Descartes thought the soul to be. For Aquinas, my human soul subsists because I have an intellectual life which cannot be reduced to what is simply bodily. It does not subsist as something with its own life apart from me, any more than my left hand does, or my right eye. Both of these can be spoken of as things, but they are really parts of me. We do not say, 'My left hand feels' or 'My right eye sees'; rather we say, 'I feel with my left hand' and 'I see with my right eye'. And Aquinas thinks that something similar should be said about my soul. I have a human soul because I have intellect and will. But it is not my soul which understands and wills. I do.

One might put this by saying that my soul is not I. And Aquinas says exactly this in his Commentary of St Paul's first letter to the Corinthians.⁵⁴ In that case, however, what happens to me when I die? Aquinas maintains that people are essentially corporeal. This means that I am essentially corporeal. For I am a human being. So am I to conclude from what Aquinas holds that I cease to exist at death? Can I look forward to nothing in the way of an afterlife?

Aquinas has a number of answers to these questions. Since he thinks of people as essentially corporeal, he agrees that there is a sense in which they cease to exist at death. But, since he believes that God can raise the dead to bodily life, he denies that the fact that I die entails that I cease to exist. On the other hand, he does not believe that most of those who have died have been raised to bodily life. He is certain that Christ has been raised to bodily life. But he would deny that the same can be truly asserted of, for example, Julius Caesar. He would therefore say that the soul of Caesar survives, though Caesar himself does not.

Given what we have now seen of Aquinas's teaching, it should be evident why he would deny that now, when he has not been raised to bodily life, Caesar survives his death. But why should Aquinas think that Caesar's soul would survive his death? Does he subscribe to the view that the human soul is immortal? Does he maintain that, though Caesar might die, his soul must survive the death of his body?

The answer to the last two questions is 'Yes'. Aquinas does believe that human souls are immortal. He also believes that they must survive the death of human beings. That by virtue of which I understand and think, he reasons, is not the sort of thing which can die as bodies can die.⁵⁵ He is well aware that people die and that their bodies perish. As we have seen, however, people, for Aquinas, are rational, understanding animals who are what they are by virtue of what is not material. He therefore concludes that there must be something about them capable of surviving the destruction of what is material. He does not think we can prove that the soul of Caesar must survive his death. In Aquinas's view, whether or not Caesar's soul survives the death of Caesar depends on whether God wills to keep it in being. And Aquinas does not think that we are in any position to prove that God must do that. For him, therefore, there is no 'proof of the immortality of the soul'. He holds that Caesar's soul could cease to exist at any time. But he also thinks that it is not the sort of thing of which it makes sense to say that it can perish as bodies can perish.

On the other hand, however, he does not think of it as the sort of thing which can survive as a human animal can survive. So the survival of Caesar's soul is not the survival of the human being we call 'Julius Caesar'. People, for Aquinas, are very much part of the physical world. Take that world away and what you are left with is not a human person. You are not, for example, left with something able to know by means of sense experience.⁵⁶ Nor are you left with something able to undergo the feelings or sensations that go with being bodily. On Aquinas's account, therefore, a human soul can only be said to survive its body as something purely intellectual, as the *locus* of thought and will.

Understanding through imagery is the proper operation of the soul so far as it has the body united to it. Once separated from the body it will have another mode of understanding, like that of other disembodied natures... It is said, people are constituted of two substantial elements, the soul with its reasoning power, the flesh with its senses. Therefore when the flesh dies the sense powers do not remain... Certain powers, namely understanding and will, are related to the soul taken on its own as their subject of inhesion, and powers of this kind have to remain in the soul after the death of the body. But some powers have the body-soul compound for subject; this is the case with all the powers of sensation and nutrition. Now when the subject goes the accident cannot stay. Hence when the compound corrupts such powers do not remain in actual existence. They survive in the soul in a virtual state only, as in their source or root. And so it is wrong to say, as some do, that these powers remain in the soul after the dissolution of the body. And it is much more wrong to say that the acts of these powers continue in the disembodied soul, because such powers have no activity except through a bodily organ.

(*Summa theologiae*, Ia, 75, 6 ad. 3 and Ia, 77, 8)

Peter Geach observes that Aquinas's description of the life that would be possible for disembodied souls is 'meagre and unattractive'.⁵⁷ And many will agree. But the description now in question is all that Aquinas feels able to offer as a philosopher. As a Christian theologian he feels able to say that the dead will be raised to a newness of life of a highly attractive kind. His final position is that, following the Incarnation of God in Christ, people can be raised in their bodies to share in God's life.⁵⁸ But the truth of this position, on Aquinas's own admission, is in no way demonstrable by means of philosophical argument. It follows from the teachings of Christ. On Aquinas's account, we are warranted in believing what Christ taught. For Christ was divine. Yet, so Aquinas adds, though we can give some rational grounds for believing in the divinity of Christ, we cannot prove that Christ was God.⁵⁹ Belief in the divinity of Christ is a matter of faith. It is not a matter of knowledge. Though it is not unreasonable, it is not demonstrably true. If we subscribe to it, that can only be because God has given us the theological virtue of faith.⁶⁰

FAITH AND PHILOSOPHY

Aquinas's writings on faith provide good examples of texts which should lead us to challenge a view of medieval philosophy which has been referred to as 'separationism'.⁶¹ Some students of Aquinas try rigidly to separate his theology from his philosophy. They then go on to write about him on the assumption that some of his texts are 'theological' while others are 'philosophical'. But Aquinas himself made no such sharp distinction between theology and philosophy. And even what he says of faith shows him to be weaving together what later authors separate under the headings 'theology' and 'philosophy'. The object of faith is God, he says.⁶² Some will call this a statement of theology. The virtue of faith, he continues, involves holding fast to truths which philosophy cannot demonstrate.⁶³ That, too, might be called a theological conclusion. But in calling God the object of faith Aquinas draws on views about truth, falsity, belief and propositions which, in his opinion, ought to seem rationally acceptable to anyone. And in arguing that philosophy cannot demonstrate the truths of faith he defends himself with reference to what he thinks about human knowledge in general (apart from revelation) and what he thinks we must conclude given what our reason can tell us of God. So his teaching on faith can also be viewed as philosophical.

These facts bring us back again to the question touched on earlier. Is Aquinas really a philosopher? From what we have now seen of his thinking, it should be clear why the question cannot be answered if an answer must presume on our being able to draw a clear and obvious distinction between the philosophy of Aquinas and the theology of Aquinas. In his writings, philosophical arguments and theses are used to reach conclusions of theological import. And theses of theological import lead to judgements which can readily be called philosophical. And the result can be studied as something containing matters of interest to thinkers with any religious belief or none. In this chapter I have tried to give some indication of what these matters are. A complete account of Aquinas's thinking would have to report more than space here allows me. Those who read Aquinas for themselves, however, will quickly get a sense of what that might involve.

NOTES

- 1 For discussion of the date of Aquinas's birth see Tugwell [11.8], 291ff.
- 2 For the Irish influence on Aquinas see Michael Bertram Crowe, 'Peter of Ireland: Aquinas's teacher of the ARTES LIBERALES', in *Arts Liberaux et Philosophie au Moyen Age*, Paris, 1969.

- 3 As well as being influenced by Aristotle, Aquinas was also indebted to elements in the thought of Plato and to later writers of a 'Platonic' caste of mind. He commented on the *Book about Causes (Liber de causis)*, an excerpted and adapted version of the *Elements of Theology* by the late Neoplatonist Proclus (c. 410–85). He also commented on Dionysu the Areopagite. And 'Platonic' theories and styles of argument abound in his writings.
- 4 Readers interested in understanding the origins and spirit of the Dominicans are best advised to consult Simon Tugwell OP (ed.) *Early Dominicans*, New York, Ramsey and Toronto, 1982.
- 5 Bertrand Russell, *A History of Western Philosophy*, London, 1946, pp. 484ff.
- 6 For an exposition of Gilson on this matter see John F. Wippel, 'Etienne Gilson and Christian philosophy', in [11.40].
- 7 *St Thomas Aquinas: Faith, Reason and Theology: Questions I–IV of his Commentary on the De Trinitate of Boethius*, translated with introduction and notes by Armand Maurer, Toronto, 1987, p. xv. Pegis elaborates his position in 'Sub ratione Dei: a reply to Professor Anderson', *The New Scholasticism* 39 (1965). Pegis is here responding to James Anderson's 'Was St Thomas a Philosopher?', *The New Scholasticism* 38 (1964). Anderson asked whether Aquinas was a philosopher and replied that he was.
- 8 Cf. Leonard E. Boyle, *The Setting of the Summa Theologiae of Saint Thomas* (Etienne Gilson Series 5), Toronto, 1982, pp. 17 and 30.
- 9 On the basis of a fourteenth-century life of St Raymund of Peñafort (c. 1178–1280), tradition holds that the *Summa contra Gentiles* was commissioned as an aid for Dominican missionaries preaching against Muslims, Jews and heretical Christians in Spain and North Africa. This theory has been subject to recent criticism, but it has also been recently defended. Cf. *Summa contra Gentiles*, I, text and French translation, with an Introduction by A. Gauthier, Paris, 1961, and A. Patfoort, *Thomas d'Aquin: les Clés d'une Théologie*, Paris, 1983.
- 10 Introduction to *Summa theologiae*, Ia, 2.
- 11 *Summa theologiae*, Ia, 44, 1.
- 12 *Summa theologiae*, Ia, 44, 4
- 13 *Summa theologiae*, Ia, 6, 1.
- 14 Cf. *Summa theologiae*, Ia, 12, 5; Ia2ae, 62, 1; Ia2ae, 110, 1; Ia2ae, 112, 1.
- 15 Cf. *Summa theologiae*, 2a2ae, 2, 4.
- 16 For Aristotle, see *Posterior Analytics*, I, 10. For Aquinas, see *Summa theologiae*, Ia, 2, 1; *On Truth*, I, 12; XV, 1. I am using 'believe' here in the loose sense of 'take to be true or accept'. Aquinas himself would not speak of believing first principles of demonstration. These, for him, are known or understood.
- 17 Cf. *Summa theologiae*, Ia, 1, 1; 2a2ae, 2, 3. See also Aquinas's inaugural lecture (*principium*) as Master in Theology at Paris (1256). This text can be found in the Marietti edition of Aquinas's *Opuscula theologica*, Turin, 1954, and is translated in Tugwell [11.8], 355ff.
- 18 For Anselm, see *Proslogion*, II and III. For Aquinas, see *Summa theologiae*, Ia, 2, 1; *Summa contra Gentiles*, I, 11. The argument discussed in the passages from Aquinas just cited was not so much Anselm's as a version of Anselm's argument current in the thirteenth century and offered by writers such as Alexander of Hales (c. 1186–1245). For a discussion of the matter, see Jean Chatillon, 'De Guillaume d'Auxerre à saint Thomas d'Aquin: l'argument de saint Anselme chez les premiers scholastiques

- du XIIIe siècle', in Jean Chatillon, *D'Isidore de Séville à saint Thomas d'Aquin*, London, 1985.
- 19 Cf. *On Truth*, X, 4–6; *Summa theologiae*, Ia, 84–8. For reasons of space I am not here going into details on Aquinas's teaching on the source of human knowledge. For an introductory account see Marenbon [Intr. 10], 11631 and 134–5.
- 20 Cf. *Summa contra Gentiles*, I, 14; *Summa theologiae*, Ia, 12, 4 and 11.
- 21 Cf. *Summa theologiae*, Ia, 12, 1.
- 22 See William Lane Craig, *The Cosmological Argument from Plato to Leibniz*, London, 1980, ch. 5; Elders [11.16], ch. 3; van Steenberghen [11.36], 165ff.
- 23 One might reasonably deny that God is an 'explanation' of anything for Aquinas. One might say that an explanation of such and such is something we understand better than the thing with respect to which we invoke it as an explanation. Aquinas would agree with this observation. But if 'explanation' means 'cause', he would insist that God is an 'explanation' of what we find around us.
- 24 Aristotle presents an argument like that of Aquinas in *Physics* VII. Aquinas acknowledges his debt to Aristotle's argument in *Summa contra Gentiles*, I, 13 where he offers a longer version of what appears in the *Summa theologiae* as the First Way.
- 25 Aquinas here is concerned with what he calls *motus*. For him this includes change of quality, quantity or place (hence the legitimacy of translating *motus* as 'change' or 'movement').
- 26 Aquinas calls the First Way 'the most obvious' (*manifestior*) proof. That, I presume, is chiefly because what he calls *motus* is something which impinges on us all the time. Maimonides and Averroes are two other authors who thought that the truth of the reasoning which surfaces in the First Way is particularly evident. Cf. Maimonides (see [4.13], I, 70) and Averroes (see [3.17] IV).
- 27 Aquinas does not mean that the world does not contain things which can be thought of as changing themselves, e.g. people. He means that nothing in the world is wholly the source of its change. Cf. Christopher Martin [11.22] 61.
- 28 For Aquinas on time and change see *Summa theologiae*, Ia, 10, 1 and Lectures 15–20 of Aquinas's commentary on Aristotle's *Physics*. That the First Way is an argument from the reality of time is suggested by David Braine, *The Reality of Time and the Existence of God*, Oxford, 1988.
- 29 Some of the key concepts in the Third Way are found in Aristotle. Maimonides offers an argument very similar to that of the Third Way in *The Guide of the Perplexed* II, 1. One can also compare the Third Way with a proof of God's existence given by Avicenna (cf. Arthur J. Arberry, *Avicenna on Theology*, London, 1951, p. 25 for the text in English). But Aquinas's Third Way is a distinct argument and not just a straightforward repetition of earlier arguments with which it may be compared.
- 30 Cf. Patterson Brown, 'St Thomas' doctrine of necessary being', in Kenny [11.27].
- 31 There is a textual problem concerning the Third Way which my brief account of it bypasses. For a discussion of the issues and for a treatment of different interpretations of the Third Way see van Steenberghen [11.36] 188–201, and Craig, *Cosmological Argument*, pp. 182–94.
- 32 In the Fourth Way the background to the argument seems chiefly Platonic. Aquinas holds that perfection admits of degrees, a notion found in Plato, St Augustine, St

- Anselm and many others. The Platonic theory which seems to lie behind the Fourth Way is expounded with reference to the Way in Kenny [11.28] ch. 5.
- 33 Here Aquinas invokes the notion of final causality or teleological explanation, which can be found in Book II of Aristotle's *Physics*. For Aristotle, a final cause or a teleological explanation was an answer to the question 'To what end or purpose is this happening?' For an exposition and discussion of Aristotle on purpose in nature, see Richard Sorabji, *Necessity, Cause and Blame: Perspectives on Aristotle's Theory*, London, 1980, chs 10 and 11. The argument of the Fifth Way is given in more detail by Aquinas in *On Truth*, V, 2.
- 34 For a more detailed account of this proposal see Brian Davies, 'Classical theism and the doctrine of divine simplicity', in Brian Davies (ed.) *Language, Meaning and God*, London, 1987.
- 35 In *Does God have a Nature?*, Milwaukee, 1980, Alvin Plantinga erroneously attributes to Aquinas the suggestion that God is a property.
- 36 *Summa theologiae*, Ia, 50, 4.
- 37 P.T.Geach properly draws attention to this point in *Three Philosophers*, Oxford, 1973, p. 117.
- 38 Cf. note 27 above.
- 39 Cf. *Summa theologiae*, Ia, 50, 2.
- 40 *Summa theologiae*, Ia, 61, 2.
- 41 *Summa theologiae*, Ia, 13, 7. Cf. also *Summa contra Gentiles*, II, 11 and *On Power*, VII, 8–11. For modern philosophical discussion of the suggestion, see Peter Geach, 'God's relation to the world', *Sophia* 8, 2 (1969):1–9 and C.J. F.Williams, 'Is God really related to his creatures?', *Sophia* 8, 3 (1969):1–10.
- 42 *On Power*, VII, 10.
- 43 Cf. *Summa theologiae*, Ia, 19, 1, 3, 10.
- 44 *Summa theologiae*, Ia, 8, 2.
- 45 Aquinas therefore holds that only God can produce miracles (*Summa theologiae*, Ia, 110, 4). Aquinas treats of miracles at some length in *Summa theologiae*, Ia, 105, *Summa contra Gentiles*, III, 98–102, and *De potentia*, VI.
- 46 *Summa theologiae*, Ia, 83, 1 and *On Evil*, VI.
- 47 *Summa theologiae*, Ia, 82, 1.
- 48 Herbert McCabe OP, *God Matters*, London, 1987, p. 14.
- 49 The honest answer to the question is, 'We do not know'. What follows is merely an opinion based on what Aquinas actually said.
- 50 Cf. René Descartes, *Meditations on First Philosophy*. For modern presentations of dualism see H.D.Lewis, *The Elusive Self*, London, 1982 and R.G.Swinburne, *The Evolution of the Soul*, Oxford, 1986.
- 51 *Summa contra Gentiles*, II, 57, 3–5.
- 52 I take physicalism to be the belief that people are nothing but bodies operating in certain ways. Cf. J.J.C.Smart, 'Sensations and brain processes', *Philosophical Review*, 68 (1950): 141–56.
- 53 *Summa theologiae*, Ia, 75, 1.
- 54 *Lecture on the first letter to the Corinthians*, XV; cf. *Summa theologiae*, Ia, 77, 8.
- 55 Cf. *Summa theologiae*, Ia, 75, 6.
- 56 Cf. *On Truth*, XIX.
- 57 Anscombe and Geach [11.11] 100.
- 58 *Summa contra Gentiles*, IV, 82–6.

- 59 Cf. *Summa theologiae*, 2a2ae, 1, 4, ad. 2.
- 60 For Aquinas on the virtue of faith see *Summa theologiae*, 2a2ae, 1–16.
- 61 Marenbon [Intr. 10], 83ff.
- 62 *Summa theologiae*, 2a2ae, 1, 1.
- 63 *Summa theologiae*, 2a2ae, 1, 4–5.

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Introduction

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The philosophy that is discussed in this volume covers a period of some three hundred and fifty years, from roughly the middle of the fourteenth century to the early years of the eighteenth. What is offered, however, is not a comprehensive history of the philosophy of this period. Topics such as the later stages of scholasticism, and the beginnings of British empiricism in the seventeenth century, are not discussed here, but are reserved for other volumes in this series. The substance of the volume is the history of certain important philosophical movements that occurred during this period: namely, Renaissance philosophy and seventeenth-century rationalism. But the volume does not deal with these movements exclusively. If one is to understand Renaissance philosophy, one must also examine the scholastic thought against which it reacted and with which it frequently interacted. Similarly, if one is to understand the seventeenth-century rationalists, one must also understand some of their contemporaries who were not rationalists—men such as Bacon, Gassendi and Hobbes. They therefore find a place here, as do Renaissance scholastics such as Pomponazzi and Cremonini.

The division of the history of philosophy into a number of movements is a procedure that has often been followed, but it has its critics. In recent years, historians of philosophy have emphasized what one might call the individuality, the ‘thisness’ of philosophers, and have argued that to try to force this or that individual into pre-set categories can lead to distortions. There is indeed a danger of such distortions; on the other hand, it seems fair to say that during certain epochs certain philosophical questions came to the forefront, and that philosophers provided answers which (although different) had some kinship, so that it is possible to speak of a ‘movement’ in such cases. Such, at any rate, is the assumption made in this volume; whether the assumption is a fruitful one, the volume itself will show.

The term ‘Renaissance philosophy’ is a controversial one, as indeed is the term ‘seventeenth-century rationalism’. It has been argued that the very notion of the Renaissance is a myth,¹ and one may wonder how it can be useful to speak of the philosophy of a myth. But it is important not to exaggerate. Scholars are in general agreement that there was in Western Europe, between roughly 1350 and the first decades of the seventeenth century,² a cultural movement which may

usefully be called ‘the Renaissance’, and that a philosophy or group of philosophies formed a part of this movement. What is at issue, when people talk of the myth of the Renaissance, is the making of certain inflated claims on behalf of this movement.

In explaining what is meant here by ‘Renaissance philosophy’, I will begin by stating a commonplace. This is, that the area covered by the term ‘philosophy’ has shrunk in the course of the centuries; that, for example, what was once called ‘natural philosophy’ is now called ‘physics’, and an important part of what was once called ‘mental philosophy’ is now called ‘psychology’. In the Renaissance, the term ‘philosophy’ had a very wide sense indeed, covering not only physics and psychology, but also such subjects as rhetoric, poetics and history, and even magic and astrology.³ However, the term also covered what would now be called ‘philosophy’; scholars speak of Renaissance logic and metaphysics, Renaissance theory of knowledge, and Renaissance moral and political philosophy. It is Renaissance philosophy in this sense that will be the concern of the present volume.

I have already implied a distinction between Renaissance philosophy and scholasticism—a movement which, incidentally, continued to exist up to the seventeenth century. This indicates that when ‘Renaissance philosophy’ is spoken of here the term is not taken to mean every philosophy which existed during the period of the Renaissance. Rather, it means a philosophy which was distinctively Renaissance in character. At this stage, it is necessary to try to be a little clearer about the term ‘Renaissance’. I have spoken of the period which the Renaissance is generally agreed to have covered; there is also general agreement that the movement began in Italy and spread to the rest of Western Europe. It was a movement in which (to quote one eminent specialist in the field) ‘there was a revival of interest in the literature, styles and forms of classical antiquity’.⁴ But this definition generates a problem. I have distinguished Renaissance philosophy from scholasticism; but it is well known that the scholastics, too, derived much inspiration from classical philosophy. The question is, then, what distinguishes Renaissance philosophy from scholasticism. Here, one must first consider what the term ‘scholasticism’ means. As a philosophical movement, scholasticism reached its peak during the Middle Ages, and for some people the terms ‘scholasticism’ and ‘medieval Christian philosophy’ are interchangeable.⁵ There is a more precise sense of the term, however. In this sense, scholasticism begins in cathedral schools in the eleventh century, and reaches its peak in the universities of Paris and Oxford during a period that lasted from the early thirteenth to the middle of the fourteenth century. As a guide to the nature of scholasticism, taken in this sense, it is helpful to follow the account given by Dom David Knowles in his book *The Evolution of Medieval Thought*.⁶ Knowles argues that scholasticism was distinguished by its goal, form and technique. Its goal was to provide a preparation for theology and to explain and defend Christian doctrines. In its form, it depended heavily on ancient philosophy, and in particular on Aristotle. Its technique was, *par excellence*, the method of

quaestio, *disputatio* and *sententia*: the posing of a problem which was such that authorities differed about the correct answer, arguments concerning the problem, and a solution.⁷

Although Renaissance philosophy did not follow the method of *quaestio*, *disputatio* and *sententia*, it might be argued that it resembled scholasticism in respect of the fact that it was a book-centred philosophy, deriving its inspiration from the writings of the ancients. It would be granted that Renaissance scholars rediscovered many classical texts, with the result that their knowledge of ancient philosophy was much wider than that which the medievals had. But it may be said that this would not of itself justify one in regarding the Renaissance as a separate movement; it might simply be a movement that did more effectively what the scholastics had tried to do. In order to answer this point, it is necessary to examine more closely the relation between Renaissance writers and classical texts. More specifically, one has to consider that aspect of the culture of the Renaissance which is called 'humanism'. The abstract noun 'humanism', like the term 'the Renaissance', is a nineteenth-century coinage; however, the term 'humanist' is much older. It originated in Italy in the late fifteenth century and was used to refer to a teacher or student of the *studia humanitatis*—the humanities—a term which was used to mean the study of classical texts concerning, in the main, five subjects: grammar, rhetoric, poetics, moral philosophy and history.⁸ The deeper knowledge of classical Latin and Greek that the humanists acquired led them to scorn both the scholastics' translations of the classics and their barbarous misuse of the Latin language.⁹ Instead of using the cumbrous Latin of the scholastics, the humanists wanted to write about philosophical topics in elegant Latin of the kind that Cicero might have written.

I have said that the philosophy that most concerned the humanists was moral philosophy: that is, a branch of philosophy that concerns human beings and their relations with each other. This concentration of interest upon human beings was emphasized by the Swiss scholar Jakob Burckhardt in his influential book *The Civilisation of the Renaissance in Italy* (1860). Burckhardt saw the Renaissance as an epoch in which man for the first time became a genuine individual; an epoch in which the modern age began. Modern critics are sceptical of Burckhardt's claim, arguing that although the writers and artists of the Renaissance distanced themselves from the Middle Ages, they were in fact more medieval than they realized. When such scholars speak of 'the myth of the Renaissance' it is above all Burckhardt's picture of the Renaissance that they have in mind.¹⁰

What, then, was the importance of the Renaissance in the history of Western philosophy? Some scholars point to the way in which late Renaissance philosophy questioned 'all authorities, even the classics'; they also see it as leading to seventeenth-century attempts to establish the unity and coherence of knowledge.¹¹ To this it may be replied that the philosophers of the Middle Ages were by no means uncritical in their response to the classical philosophers, and that the establishment of the unity of knowledge was surely the aim of the

authors of the great medieval *Summae*. That must be granted; but if one is concerned, not with what was new, but rather with what is important about Renaissance philosophy, then what has been said may stand. There is at least one further respect in which the Renaissance did differ from the Middle Ages—though here we are concerned with the Renaissance in general rather than with Renaissance philosophy in particular, and with the sociology of philosophy rather than with philosophy as such. It was during the Renaissance that there began what one may term the laicization of the European culture of the Christian era.¹² Some of the humanists were in holy orders—one may mention Petrarch and Erasmus—but most were not. From the time of the Renaissance onwards, a clerk (in the sense of a scholar) no longer had to be a cleric. In this way, the first moves were made towards loosening the hold that Christian institutions had upon philosophy.

I must emphasize that by the laicization of European culture I do not mean what has been called 'the secularisation of the European mind';¹³ that is, the decline in the importance that religious ideas, and more specifically Christian ideas, have had for European thinkers. It is plausible to argue that the two were connected; but they were different from each other. To speak of laicization in this context is to speak of the people who were the bearers of culture, and it is to say that they ceased to be predominantly clerical; it is not to say anything about the content of what such people believed. In fact, what were regarded as Christian concepts and Christian truths continued to be dominant in Renaissance philosophy, just as they had been dominant in the Middle Ages. Humanists might disagree over the answer to the question whether Plato or Aristotle was more compatible with Christianity; but that a sound philosophy should be so compatible was not in dispute. Even the arguments of the ancient sceptics, whose writings became widely available in the sixteenth century, were made to serve religious purposes.¹⁴

From the Renaissance we move to the beginnings of what may be regarded as modern (as opposed to ancient, medieval or Renaissance) philosophy. For the majority of contemporary philosophers, the first modern philosopher was Descartes. There are two main reasons for this view. One of the main features of the European philosophy of the eighteenth and nineteenth centuries was the role played in it by one form or other of philosophical idealism, and it is argued that one can trace this idealism back to Descartes's view that the human mind is known before any physical object is known. But even those philosophers for whom idealism is no longer a live issue find that Descartes is relevant to their concerns. When Gilbert Ryle published his influential book *The Concept of Mind* shortly after the end of the Second World War,¹⁵ he presented Descartes as the source of philosophical views about the human mind which were profoundly wrong. However, if one's concerns include science and its philosophy, then there is a case for regarding as the first modern philosopher someone who was born thirty-five years before Descartes. This was Francis Bacon.

Born in 1561, Bacon is sometimes discussed in books on Renaissance philosophy,¹⁶ but it is better to regard him as a modern in whom some traces of the Renaissance remained. Certainly, he agreed with the Renaissance philosophers in his scorn for the scholastics; he agreed, too, with some Renaissance writers in his view that magic was not to be rejected entirely, and his views about the nature of knowledge have a Renaissance ancestry.¹⁷ But he was as dismissive of Renaissance authors as he was of the scholastics, saying of them that their concern was primarily with words.¹⁸ He saw himself as a revolutionary, the provider of a new logic—a ‘Novum Organum’—which was to supercede the old ‘Organon’ of Aristotle. Aristotle’s logic had already been attacked by humanist logicians, of whom the most influential in the sixteenth and seventeenth centuries was Ramus (Pierre de la Ramée, 1515–72).¹⁹ But the aims of Bacon and Ramus were quite different. Ramus was concerned with thinking in general, and his aim was to replace the Aristotelian syllogism by a less formal logic, which would correspond more closely to the way in which people actually think.²⁰ Bacon, on the other hand, was concerned chiefly with scientific thinking.

It has been said of Bacon that he made ‘the first serious attempt to formulate and justify the procedure of natural scientists’.²¹ For many, this attempt is to be found in Bacon’s discussions of induction—that is, of that type of argument in which one reaches universal conclusions from particular instances. His ‘Novum Organum’, his ‘New Instrument’, was to be a systematic way of reaching such conclusions. Tables of observations were to be drawn up, and universal laws were to be derived from these by the application of certain rules.²² Such laws, Bacon thought, were not wholly satisfactory, in that they told us nothing about the fundamental structure of reality; none the less, they were *known*, in that they provided us with rules for the manipulation of nature.²³ This introduces Bacon’s distinctive view about the nature of knowledge: namely, that to know is to make. As mentioned earlier, the view has Renaissance antecedents, but Bacon applies it to what we now regard as the beginnings of modern science. It is his emphasis on the fact that the inquirer should not just observe, but should also intervene in nature, that has led him to be called, not the first philosopher of induction, but the first philosopher of experimental science.²⁴

Whatever its merits, Bacon’s philosophy of science also had serious deficiencies; it is widely recognized that Bacon has no grasp of the importance that mathematics has for the sciences.²⁵ This cannot be said of the philosophers whose ideas are the concern of over half of this volume: namely, the seventeenth-century rationalists. As mentioned earlier,²⁶ the term has generated some controversy. It is used to pick out a number of seventeenth-century philosophers, the chief of whom were Descartes, Spinoza and Leibniz, though Malebranche and the Flemish philosopher Geulincx are also included. Now, it must be admitted that none of these ever called himself a rationalist, nor can they be said to have constituted a school, in the sense of a group of people who saw themselves as separated from others by virtue of their adherence to certain shared principles. They seem, indeed, to have been more conscious of their disagreements

with each other than with the respects in which they agreed; so, for example, Spinoza criticized Descartes, Malebranche criticized Spinoza, and Leibniz criticized Descartes, Spinoza and Malebranche. Again, those who regard these philosophers as a group often contrast them with the ‘British empiricists’, namely Locke, Berkeley and Hume. Yet Locke’s use of the important term ‘idea’ owed something to Descartes, and Malebranche influenced both Berkeley and Hume. Despite all this, the philosophers who are commonly called the seventeenth-century rationalists did have a number of basic views in common. All agreed that it is possible to get to know the nature of reality simply by means of *a priori* reasoning; that is, that we can get to know by means of the reason, without any appeal to the senses, truths about reality that are *necessary* truths. It is these points of resemblance, above all, that the term ‘rationalist’ picks out. In this sense, rationalism is not peculiar to the seventeenth century; the ‘dialectic’ that is described in Plato’s *Republic* (510–11, 532–4) is a rationalist theory. Nor did rationalism come to an end after the death of Leibniz. It continued to exist, not just in the writings of Leibniz’s follower Christian Wolff, but also in the form of the ‘objective idealism’ of Hegel, and perhaps even after that.²⁷ Our concern, however, is with its seventeenth-century manifestations.

The time-span of the movement is well enough indicated by the name given to it. Its first public manifestation was in Descartes’s *Discourse on Method*, published in 1637; it ended in 1716, the year in which Leibniz—still philosophically active—died. Though not as widespread as the Renaissance, it was by no means confined to one country. Descartes worked in France and the Netherlands; Malebranche worked in France; Geulincx and Spinoza worked in the Low Countries, and Leibniz worked mainly in Germany (though one should not overlook a very productive period which he spent in Paris between 1672 and 1676). Seventeenth-century rationalism also spanned the religions. Descartes and Malebranche were Roman Catholics (Malebranche, indeed, was a priest); Geulincx was initially a Catholic but became a convert to Protestantism after being persecuted for Cartesian views; Spinoza was an excommunicated Jew, with friends among some of the smaller Protestant sects.

Like Bacon, the rationalists saw themselves as making a new start. Most of them were contemptuous of Aristotle and the scholastics;²⁸ indeed, they rejected everything that passed for received wisdom in their time, as long as it did not meet the demands of rational scrutiny. This is very clearly expressed in Descartes’s resolve, stated in the first part of his *Meditations*,²⁹ ‘to demolish everything completely and start again right from the foundations’. But no one philosophizes in an intellectual vacuum, and it is important to note that the rise of rationalism in the seventeenth century occurred at the same time as, and was closely associated with, the rise of what one now calls ‘modern science’. The new science is discussed at length in [Chapter 3](#) of this volume; here it must be sufficient to say that the old and largely Aristotelian science stressed the qualitative aspect of nature, and was primarily concerned to classify, whereas the new science stressed the quantitative aspect of things, offering explanations that

were mathematical in character. Of the seventeenth-century rationalists, some played an important part in the new science. Descartes was philosopher, mathematician and scientist; so, too, was Leibniz. Spinoza and Malebranche, for their part, made no serious contribution to science or mathematics, but were well informed about them. The question is how the seventeenth-century rationalists saw philosophy as related to the natural sciences.³⁰ For present-day philosophers of science, the sciences stand in no need of justification by philosophy, the business of the philosopher being exclusively one of analysis: the clarification of the nature of scientific propositions and of the methods of science. But it is clear that this was not Descartes's attitude; his search for foundations included a search for the foundations of science,³¹ and it is generally held that this is true of the other seventeenth-century rationalists.³²

For the seventeenth-century rationalists, the foundations that they sought could be discovered only by *a priori* reasoning. Perhaps the clearest arguments for this thesis are provided by Descartes's account of systematic doubt in the *Meditations*, from which it emerges that he regards as known only those propositions whose truth cannot be doubted, and also takes the view that such propositions cannot be empirical. There would be general agreement that there is such knowledge of the truths of logic and of mathematics; but Descartes argued that these truths are only hypothetical, stating that *if*, for example, there is such a figure as a triangle, then its interior angles must equal two right angles.³³ What distinguishes the rationalists is their view that there are existential propositions whose truth can be known *a priori*. Mathematics, although concerned only with hypothetical truths, provided them with methods of procedure.³⁴ Roughly speaking, what the rationalists tried to do was first of all to obtain *a priori* knowledge of certain basic truths about what exists, and then to derive further truths from these by means of pure reasoning.

As is well known, Descartes stated that the existential truth that he knew first of all was the proposition that he existed as a thinking being, a proposition that he could not doubt as long as he was actually thinking. But it is evident (and it did not escape Descartes's notice) that the truth of this proposition was in a way far from fundamental, in that Descartes's existence depended on that of many other beings. Ultimately, the rationalists argued, it depended on the existence of a supreme being. In a sense, therefore, the fundamental item of knowledge is the knowledge that there must exist such a supreme being, or, as the rationalists said, a 'most perfect' or a 'necessary' being. Belief in the existence of such a being was not peculiar to the rationalists, but their arguments for its existence were distinctive. These arguments had to be *a priori*, and the rationalists based them on the concept of God. One argument offered by Descartes was that this concept was such that only a God could have implanted it in us. Alternatively, Descartes argued that the concept was such that one could not, without self-contradiction, deny that God existed. This was the celebrated 'ontological argument', whose soundness was accepted by Spinoza and Leibniz also.³⁵

Given a knowledge of the existence and nature of the supreme being, the task of the rationalist was, as it were, to build on this foundation by deriving the consequences which followed. But there were important differences between the ways in which the seventeenth-century rationalists saw this being. For all of them except Spinoza, the supreme being was a personal deity, creator of the universe, and choosing freely to create it. Spinoza argued that such a concept was incoherent, and that a consistent account of the necessary being must present it as an impersonal being, within which particular things exist, and which cannot rationally be regarded as exercising free will. This was clearly opposed to orthodox Christian doctrine; however, one should not exaggerate Spinoza's role in ending the predominance of Christian ideas in philosophy.³⁶ His philosophy, at first bitterly attacked, was later largely forgotten until its revival by the German romantics towards the end of the eighteenth century. A more important factor in the loosening of the ties between Christianity and philosophy was the rise in the seventeenth and eighteenth centuries of deism; that is, of belief in a creative deity, unaccompanied by any belief in a divine revelation. With this, rationalism had little to do.³⁷

Today, there is widespread agreement that the seventeenth-century rationalists failed to provide an *a priori* proof of the existence of God, however that God was conceived by them. It would also be agreed that they failed to find, by pure reason, necessary connections between the nature of God and the laws of science.³⁸ But these failures do not deprive their philosophy of all value. For them, science was not merely something that had to be justified; it was also something that posed problems, and their attempts to solve these problems are still found interesting.

The question whether human beings can strictly speaking be called free had long exercised philosophers. Before the seventeenth century, the problem took a theological form. Philosophers, such as Boethius in the sixth century AD and Lorenzo Valla in the fifteenth, asked how human freedom could be consistent with the foreknowledge and providence of God. These problems continued to be discussed in the seventeenth century, but in that era there was a new problem of freedom. For the new science, all physical events were determined by necessary laws; so the question arose how there could be any human freedom, given that we are (even if only in part) physical objects. Spinoza and Leibniz offered solutions which took the form of what are now called 'compatibilist' theories, arguing, in very different ways, that freedom and determinism can be reconciled.³⁹

Science posed another problem for the seventeenth-century rationalist. One of Descartes's best known theses is his view that mind and body are 'really distinct', that is, that each can exist without the other. Behind this, there lay a view about scientific explanation: namely, that bodies are to be understood solely in terms of physical concepts, and minds solely in terms of mental concepts.⁴⁰ To explain physical events, therefore, we do not need to postulate the intervention of incorporeal agents (such as, for example, the planetary intelligences). But this

raised the philosophical problem of how mind and body could influence each other, and could also constitute one human being. Descartes's solution was notoriously unsatisfactory, and other rationalists took up the problem. Spinoza offered a classical version of the double-aspect theory of mind-matter relations; Malebranche, Geulincx and Leibniz offered various versions of a theory which denied that any created thing strictly speaking acts on any other, and asserted that the apparent interaction was really a divinely produced order that existed between the states of created things—that is, finite minds and bodies.

When Descartes's rationalist successors tried to solve the problem about mind-matter relations that he had bequeathed to them, there were already other solutions in the field. These took the form of saying that there really was no problem, in that mind and matter did not form different kinds of existence. The philosophers who offered these solutions were Gassendi and Hobbes, who were among the contributors to the 'Objections' which were published together with Descartes's *Meditations* in 1641. Neither was a rationalist, but both influenced some of Descartes's rationalist successors,⁴¹ and for this reason their philosophy finds a place in this volume.

Both Gassendi and Hobbes offered materialist theories, though Gassendi was not an out-and-out materialist. A Catholic priest, he resembled the philosophers of the Renaissance in a certain respect, in that he found inspiration in the writings of the ancients. In his case, the inspiration came from the writings of Epicurus; but Gassendi's version of atomism was tailored to fit Christian requirements. In particular, Gassendi shrank from giving a totally materialist account of the human mind, saying that, although the non-rational soul could be explained in materialist terms, such an account could not be given of the rational, immortal soul. In explaining the rational soul and its relation to the human body, Gassendi fell back on the ideas of the scholastics, viewing the soul as the substantial form of the body.

Such Aristotelian ideas were rejected firmly by Hobbes, who offered a materialism of a more radical son. He was, as his biographer Aubrey put it, 'in love with geometry',⁴² and this love was manifested in a theory of method which has undertones of rationalism. Science, Hobbes asserted, is 'the knowledge of consequences, and dependence of one fact on another';⁴³ what we must do, therefore, is define our terms correctly and argue deductively from them.⁴⁴ Like the rationalists, too, Hobbes offered a far-reaching metaphysical system, within the context of which he placed a theory of man and society. But there were also important differences between Hobbes and the rationalists. Although rationalism is not obviously inconsistent with materialism, none of the seventeenth-century rationalists was a materialist; but Hobbes was. A more important difference lies in the field of the theory of knowledge, Hobbes arguing (contrary to the rationalists) that the ultimate source of all our knowledge of what exists is provided by the senses.⁴⁵

The philosophy of Hobbes was found deeply offensive by seventeenth-century divines, who accused him of atheism. If they were right, then we must add the

name of Hobbes to the list of those philosophers who began to weaken the links between Christianity and philosophy. But it is not certain that they were right; the subject is one on which scholars still disagree.⁴⁶ What is certain is that Hobbes's political philosophy, with its sombre view that a life that satisfies the demands of reason can be lived only under conditions of absolute rule, still fascinates philosophers.⁴⁷

NOTES

- 1 The arguments for this view have been clearly set out by Peter Burke in his book *The Renaissance* (London, Macmillan, 1987), pp. 1–5. Burke himself does not accept these arguments, saying (p. 5) that the term 'the Renaissance' is 'an organising concept which still has its uses'.
- 2 See, for example, C.B.Schmitt and Q.Skinner (eds) *The Cambridge History of Renaissance Philosophy* (Cambridge, Cambridge University Press, 1988: abbreviated, *CHRP*), p. 5.
- 3 *CHRP*, Introduction, p. 3.
- 4 C.B.Schmitt, in R.Sorabji (ed.) *Philoponus and the Rejection of Aristotelian Science* (London, Duckworth, 1988), p. 210.
- 5 See, for example, the entries for 'scholasticism' and 'medieval philosophy' in J. O.Urmson and J.Réé (eds), *The Concise Encyclopaedia of Western Philosophy and Philosophers* (London, Unwin Hyman, 1989).
- 6 London, Longman, 2nd edn, 1988, pp. 76–82. Dom David's account applies to what one might call the golden age of scholasticism, up to the middle of the fourteenth century; on the new scholasticism of the late sixteenth century, see Stuart Brown in *Chapter 2* of this volume, pp. 76, 81–3.
- 7 cf. R.W.Southern, *Grosseteste* (Oxford, Clarendon, 1986), p. 32.
- 8 See, for example, P.O.Kristeller, 'Humanism', in *CHRP*, pp. 113–37. One should stress the phrase 'in the main'; humanism, like the Renaissance, has a long history, and in the late fifteenth and sixteenth centuries humanists became involved in a range of subjects from logic and science that do not fall within a simple five-part scheme. On this, see the chapters on humanism and science and humanism and philosophy in Jill Kraye (ed.) *The Cambridge Companion to Renaissance Humanism* (Cambridge, Cambridge University Press, forthcoming). See also Anthony Grafton, 'Humanism, Magic and Science', in A. Goodman and A.Mackay (eds) *The Impact of Humanism on Western Europe* (London, Longman, 1990), pp. 99–117.
- 9 See especially some remarks of the fifteenth-century Florentine chancellor Leonardo Bruni, quoted by B.P.Copenhaver, *CHRP*, p. 106.
- 10 cf. Burke, *op. cit.*
- 11 Cesare Vasoli, 'The Renaissance Concept of Philosophy', *CHRP*, p. 73.
- 12 See especially J.Stephens, *The Italian Renaissance* (London, Longman, 1990), pp. xvi, 54, 137, 149.
- 13 The phrase comes from Owen Chadwick, *The Secularisation of the European Mind in the Nineteenth Century* (Cambridge, Cambridge University Press, 1975).

- 14 A Latin translation of Diogenes Laertius' *Life of Pyrrho* was available in the late 1420s; but it was above all the printing of Latin versions of Sextus Empiricus in 1562 and 1569 which stimulated interest in the ancient sceptics. See CHRP, pp. 679–80, and Richard Popkin, *The History of Scepticism from Erasmus to Spinoza* (Berkeley, Calif., University of California Press, 1979), p. 19.
- Superficially, the sceptical thesis that one must suspend judgement about everything might seem incompatible with Christian claims to knowledge. In the sixteenth century, however, Catholics employed sceptical arguments against Protestants, arguing that sceptical doubts about the worth of reason meant that it was unsafe to base religion on such a foundation. Religious beliefs must be based on faith, and more specifically on the faith of a community which had endured through the centuries—the Catholic Church. See Popkin, op. cit., pp. 55, 58, 70–3, 78–82, 90, 94–5.
- 15 London, Hutchinson, 1949.
- 16 E.g. B.P. Copenhaver, 'Astrology and Magic', CHRP, pp. 296–300.
- 17 Bacon and the scholastics: *The Advancement of Learning*, Book I, ch. 4 (Everyman's Library Edition, London, Dent, 1973), p. 26. Bacon and magic: Copenhaver, op. cit. Bacon and knowledge: A. Pérez-Ramos, [Chapter 4](#) of this volume, pp. 145–7.
- 18 Theirs, said Bacon, was a 'delicate learning', as opposed to the 'fantastical learning' of the scholastics, and they 'began to hunt more after words than matter': *The Advancement of Learning*, Book I, ch. 4, p. 24.
- 19 Bacon knew of Ramus's work, and gave it his (highly qualified) approval (Bacon, op. cit., Book II, ch. 17, p. 144). On Ramus's logic, see for example Lisa Jardine, 'Humanistic Logic', CHRP, pp. 184–6, and William and Martha Kneale, *The Development of Logic* (Oxford, Clarendon, revised edn, 1984), pp. 301–6.
- 20 CHRP, pp. 185, 673.
- 21 W. Kneale, *Probability and Induction* (Oxford, Clarendon, 1949), p. 48.
- 22 In this connection, Bacon is praised for having seen the importance of the negative instance—that is, of eliminative induction as opposed to induction by simple enumeration. See Bacon, *Novum Organum*, I, secs 46, 105, and Anthony Quinton, *Francis Bacon* (Oxford, Oxford University Press, 1980), p. 56.
- 23 cf. A. Pérez-Ramos, [Chapter 4](#) of this volume, p. 151.
- 24 Ian Hacking, *Representing and Intervening: Introductory Topics in the Philosophy of Natural Science* (Cambridge, Cambridge University Press, 1983), p. 246.
- 25 See, for example, Quinton, op. cit., p. 47.
- 26 See p. 2 above.
- 27 For an interesting survey of rationalism as a whole, see J. Cottingham, *Rationalism* (London, Paladin, 1984).
- 28 Leibniz is an exception: cf. N. Jolley, [Chapter 11](#) of this volume, p. 384.
- 29 J. Cottingham, R. Stoothoff and D. Murdoch (eds), *The Philosophical Works of Descartes* (Cambridge, Cambridge University Press, 3 vols, 1985, 1991: abbreviated, CSM), ii, p. 12; cf. *Discourse on Method*, CSM i, pp. 111–19.
- 30 The term, incidentally, is to be found in Spinoza, who speaks of believers in miracles as hostile to natural scientists—'iis, qui scientias naturales colunt'. *Tractatus Theologico-Politicus*, ch. 6; Spinoza, *Opera*, ed. C. Gebhardt (Heidelberg, Winter, 4 vols, 1924–6), vol. 3, p. 81.
- 31 cf. to Mersenne, 11 October 1638 (CSM iii, p. 124), where Descartes criticizes Galileo on the grounds that 'his building lacks a foundation'. (See also G. Molland, [Chapter 3](#) of this volume, p. 129.)
- 32 This view has been challenged, where Spinoza is concerned, by Alan Donagan (*Spinoza*, Brighton, Harvester, 1988, esp. p. 68). Donagan argues that Spinoza did not so much try to justify the principles of the new physics as generalize from them. It has also been argued by Stuart Brown that Leibniz was a foundationalist only during his early years, but later took the view that the philosopher should seek out and explore fruitful hypotheses (Stuart Brown, *Leibniz*, Brighton, Harvester, 1984). I have discussed this thesis in my paper, 'Leibniz's Philosophical Aims: Foundation-laying or Problem-solving?', in A. Heinekamp, W. Lenzen and M. Schneider (eds) *Mathesis Rationis: Festschrift für Heinrich Schepers* (Münster, Nodus, 1990), pp. 67–78.
- 33 *Meditations* V, CSM ii, 45. Compare Leibniz, *Nouveaux Essais*, IV. 11.14, on the 'eternal truths' of mathematics.
- 34 There were two such methods, traditionally known as 'analysis' and 'synthesis'. These are discussed in this volume in [Chapter 3](#) (pp. 107–9), [Chapter 5](#) (pp. 183–6) and [Chapter 8](#) (pp. 279–80).
- 35 Though Leibniz added the qualification that it must first be shown that the concept of God—i.e. of a most perfect or necessary being—is self-consistent. See, for example, Leibniz, *Discourse on Metaphysics*, sec. 23.
- 36 cf. p. 4 above.
- 37 The main sources of deism were Lord Herbert of Cherbury, *De Veritate* (1624), and Locke, *The Reasonableness of Christianity* (1695). However, they were not the sole sources; as Professor Stuart Brown has pointed out to me, there is reason to believe that the seventeenth-century rationalists had some influence on deistic thought. Deism has a long history, and the term meant different things to different people. (Samuel Clarke, in his *Demonstration of the Being and Attributes of God* (1704–6), recognized no fewer than four types of deism.) What matters here is that many deists believed in a creative deity whose wisdom and power are such as to make it irrational to suppose that he should intervene in the workings of the universe, once he has created it. This position is close to that taken by seventeenth-century rationalists. Pascal declared that he 'could not forgive' Descartes for reducing God's role in the workings of the universe almost to nothing (*Pensées*, Brunschvicg ed., No. 77), and a similar position is implied by what other seventeenth-century rationalists said about miracles. For Spinoza, it was impossible that any miracles should occur; for Leibniz and Malebranche, God's miraculous intervention in the universe was a possibility, but such interventions were very few. See, for example, G.H.R. Parkinson, 'Spinoza on Miracles and Natural Law', *Revue internationale de philosophie* 31 (1977) 145–57, and *Logic and Reality in Leibniz's Metaphysics* (Oxford, Clarendon, 1965), pp. 102, 155–6; Daisie Radner, *Malebranche* (Assen, Van Gorcum, 1978), p. 32.
- 38 Descartes tried to derive universal laws of science from the immutability of God. Spinoza seems to have thought that no scientific laws other than those that actually hold are strictly speaking thinkable, though in his attempt to establish such laws he was compelled to appeal to experience. (See [Chapter 8](#), pp. 289, 298, on Spinoza's 'postulates'. See also [Chapter 3](#), pp. 131–2, for Descartes's views about hypotheses

and experience.) Leibniz rejected both these approaches, and argued that scientific laws have to be seen in relation to the wise and good purposes of God.

- 39 Spinoza argued that human beings have no free will, since everything in the mind is determined by a cause, and that by another, and so on to infinity (*Ethics*, Pt II, Proposition 48). His way of reconciling determinism and freedom was to say that freedom consists, not in an absence of determination, but in self-determination. Such self-determination occurs when the reason controls the passions, which are in a way outside us. This view—which amounts to saying that to be free is to be master of oneself—is a form of what Isaiah Berlin has called the concept of ‘positive freedom’ (Berlin, ‘Two Concepts of Liberty’, *Four Essays on Liberty* (Oxford, Oxford University Press, 1969), pp. 118–72). Leibniz, for his part, discussed both the theological forms of the problem of freedom and the problems posed by the thesis that every event is caused. He accepted this thesis, but argued (contrary to Spinoza) that there is freedom of the will. In essence, his argument was that human actions are indeed necessary, but that they are only *hypothetically* necessary. That is, given that X is, at the moment, my strongest motive, then I must act in accordance with this motive. But I still could have acted otherwise—that is, my will is free—in that my acting in some other way is always *logically* possible.

On Spinoza’s views about determinism see (besides [Chapter 8](#), pp. 294–5, and [Chapter 9](#), pp. 323–6) Jonathan Bennett, *A Study of Spinoza’s ‘Ethics’* (Cambridge, Cambridge University Press, 1984), pp. 315–29; R.J.Delahanty, *Spinoza* (London, Routledge, 1985), pp. 35–48, 155–65; G.H.R.Parkinson, ‘Spinoza on the Power and Freedom of Man’, in E.Freeman and M.Mandelbaum (eds) *Spinoza: Essays in Interpretation* (La Salle, Ill., Open Court, 1975), pp. 7–33. A general survey of Leibniz’s views about human freedom is provided by G.H.R.Parkinson, *Leibniz on Human Freedom* (Wiesbaden, Steiner, 1970). See also, for example, A.Burms and H.de Dijn, ‘Freedom and Logical Contingency in Leibniz’, *Studia Leibnitiana* 11 (1979) 124–33; Lois Frankel, ‘Being Able to do Otherwise: Leibniz on Freedom and Contingency’, *Studia Leibnitiana* 16 (1984) 45–59; Pauline Phemister, ‘Leibniz, Free Will and Rationality’, *Studia Leibnitiana* 23 (1991) 25–39.

- 40 In Descartes’s terminology, I can have a ‘clear and distinct idea’ of a mind as a being which is thinking and non-extended, but I have a clear and distinct idea of a body in so far as this is non-thinking and extended. See *Meditations* VI, CSM ii, p. 54, and *Replies to First Objections*, CSM ii, p. 86.
- 41 Gassendi’s atomism influenced the young Leibniz (see especially K.Moll, *Der junge Leibniz* (Stuttgart, Frommann-Holzboog, 1982), vol 2, who was also influenced by Hobbes (see, for example, J.W.N.Watkins, *Hobbes’ System of Ideas* (London, Hutchinson, 2nd edn, 1973), pp. 87–94). Whether Spinoza borrowed from Hobbes is a matter of controversy, but he certainly defined his position by reference to Hobbes. See, for example, A.G.Wernham, *Benedict de Spinoza: The Political Works* (Oxford, Clarendon, 1958), pp. 11–36.
- 42 John Aubrey, *Brief Lives and Other Selected Writings*, ed. Anthony Powell (London, Cresset Press, 1949), p. 242.
- 43 *Leviathan* (Oxford, Blackwell, 1946), ch. 5, p. 29.
- 44 *ibid.*
- 45 *ibid.*, ch. 7, p. 40.

- 46 For a recent discussion of this issue, see Arrigo Pacchi, ‘Hobbes and the Problem of God’, in G.A.J.Rogers and Alan Ryan (eds) *Perspectives on Thomas Hobbes* (Oxford, Clarendon, 1988), pp. 171–88.

- 47 I am very grateful to Dr Jill Kraye and Professor Stuart Brown for their helpful comments on an earlier draft of this introduction.

Introduction

Stuart Brown

This volume is concerned with European philosophy from the late seventeenth century through most of the eighteenth—the period of ‘the Enlightenment’ as broadly conceived. Some apology is due for the overall emphasis on what is commonly referred to as ‘British philosophy’. But the attention to English early Enlightenment figures, such as Newton and Locke, is easily justified, since they were important influences on the Enlightenment elsewhere. Philosophy flourished in Britain and Ireland in the eighteenth century. Wales produced Richard Price,¹ while Ireland could boast of Berkeley and Burke.² Ireland also produced Francis Hutcheson, to whom Hume and the Scottish Enlightenment owed a considerable debt.³ The Scots in turn had a considerable influence on the Enlightenment or *Aufklärung* in Germany, not least on the thought of Kant.⁴

The opening chapter focusses on the Cambridge Platonists, in whose thought the Enlightenment emphasis on reason and toleration is already prefigured. The concluding chapter deals with the beginnings of the reaction against Enlightenment concepts and values towards the end of the eighteenth century. ‘Enlightenment’ is thus something of a unifying concept. At the same time it should be acknowledged that histories of philosophy do not always make use of it. Sometimes, rather, they use the term ‘empiricism’ to characterize the philosophy of the period and to contrast it with the ‘rationalism’ of the earlier period.

There are indeed other notions that have been or might be put forward as central to understanding the development of philosophy in this period. For instance, the development of the laity or the use of ordinary language as the vehicle for articulating philosophical ideas are possible centres of focus. Alternatively one might attend to the secularization of philosophy or the growth of the demand for rational religion. But, while each of these perspectives can enrich our understanding of the period, serious distortions can result from focussing on a single perspective to the exclusion of others. For this reason there are some scholars who distrust the application of any period and ‘school’ labels. Descartes, Spinoza, Malebranche and Leibniz, for instance, are often classed as ‘rationalists’,⁵ on the one hand, and Locke, Berkeley and Hume as ‘empiricists’, on the other. But critics consider that these labels distort historical realities and misrepresent at least some of the individual philosophers concerned.⁶ There are also those who think the period of the so-called ‘Enlightenment’ is too diverse to be accurately presented as if it were a coherent and unified cultural phenomenon.

Though I will address these doubts later in this introduction, my main purpose is not so much to lay them entirely to rest as to set the scene for the individual chapters that comprise the substance of the volume. The reader will find that some of these chapters are devoted to a major figure, as are the chapters on Berkeley and Vico, or even, in the case of Locke and Hume, to part of the thought of an individual philosopher. More

commonly, the chapters deal with two or more figures as a group. Thus there are two chapters on the *philosophes* of the French Enlightenment and a chapter each on the Enlightenment in Scotland and in Germany. Had space permitted there might have been chapters on the Enlightenment in other countries.⁷ The various national Enlightenment movements took place at rather different times and in widely different circumstances.

This introduction will concentrate to a large extent on the Enlightenment in England. English intellectual and political culture was much admired by Voltaire and other *philosophes* of the early French Enlightenment. Attention to it can be a way of announcing some of the themes of the volume as a whole and also linking together some of the figures dealt with in later chapters.

THE ENGLISH ‘ENLIGHTENMENT’

Defenders of what is called ‘the Enlightenment’, such as the *philosophe* d’Alembert, commonly used the metaphor of spreading light to refer to the kind of intellectual and cultural progress they believed in. Furthermore there was a debate in Germany as to what ‘*Aufklärung*’ (usually translated ‘Enlightenment’) was. So enlightenment was a concept which was establishing itself during the period as one in terms of which the *avant garde* thought of themselves and their projects. But the phrase ‘the Enlightenment’ itself was not adopted until the nineteenth century, when it began to be used in retrospect of a period as a whole.⁸ Historians have challenged the extent to which, as had previously been supposed, the Enlightenment can be represented as a single European cultural phenomenon. But there is no doubt there were important interconnections, such as the English influence on the *philosophes*.⁹ At the same time the Enlightenment in England itself, for instance, followed a quite different course from that in France.

The English Enlightenment was in some respects prefigured by Herbert of Cherbury and the Cambridge Platonists. But it is convenient, customary and defensible to fix 1688—the year of the Whig revolution—as a starting-date. Until then the High Church party had dominated. Books had been subject to censorship and religious diversity had been discouraged. After the ‘Revolution’, when William and Mary were offered the British crowns, liberals had more influence in politics and the ‘latitudinarians’, as they were known, in the Church. Symbolically perhaps, Spinoza’s *Tractates Theologico-Politicus*, which argued the case for freedom of expression in religious matters, appeared for the first time in English tradition in 1689. That work was published anonymously and illegally. But, by the middle of the 1690s, controversial works could be published legally. Though anonymity was still usual, it was no secret that Locke was the author of *The Reasonableness of Christianity* or John Toland the author of *Christianity not Mysterious*. These words were denounced as dangerous but they were not suppressed and no action was taken against the authors. Books could still be burned¹⁰ and a Blasphemy Act was passed by the English Parliament in 1698. Yet there was a new tolerance of theological deviation, moderately expressed. For instance, Samuel Clarke—remembered by philosophers for his translations and defences of Newton—had a successful career as an Anglican clergyman notwithstanding the suspicion and even charge of heresy certain of his publications gave rise to.¹¹

The early English Enlightenment is marked by vigorous controversy between two extremes—the anti-authoritarian ‘deists’ and the High Church defenders of hierarchy and orthodoxy. The latitudinarians and the moderate Whig intellectuals sought to distance themselves from either extreme but sometimes found themselves accused of ‘deism’.¹² Though there had been, in the 1690s, anti-clerical materialists who were inclined to republicanism, by the middle decades of the eighteenth century there were few prominent English intellectuals who defended such extreme positions. The philosophical scene came to be dominated by moderate opinion. The leading figures included moderate Anglican clergy, such as Joseph Butler and William Paley.¹³ Deism declined and Thomas Chubb, one of its last representatives, was so moderate that he even retained some Church connections. Radicalism re-emerged later on and is represented, for instance, by the scientist and Unitarian minister, Joseph Priestley (1733–1804). The radical Enlightenment is also reflected later in the writings of William Godwin (1756–1836) and Mary Wollstonecraft (1759–97). But during the peak of the French Enlightenment in the mid-eighteenth century English philosophy generally lacked the anti-clerical, anti-Establishment materialism common amongst the French *philosophes*.

The *philosophes*, as we have noted, developed what they took from Locke and others in a radical way.¹⁴ But the English radicals in the late eighteenth and early nineteenth century were themselves influenced by their French counterparts. For instance, Jeremy Bentham (1748–1832) was indebted to Helvétius, from whom he derived some of his utilitarian ideas. Utilitarianism became a feature of the Enlightenment and Bentham might be regarded as a late Enlightenment figure. In fact he is a transitional figure who, particularly in relation to his later thoughts, can be treated as the beginning of a new phase of British philosophy. He is so treated in this series and is, accordingly, discussed in a later volume. But it is worth noting that the anti-metaphysical character of the ‘positivist’ movement of the nineteenth century (which Bentham helped to encourage) was also shared by some of the Enlightenment philosophers, such as Condillac and Hume. This anti-metaphysical tendency reflects one point of continuity between the periods covered by this volume and that on *The Nineteenth Century*.

The Enlightenment as it has emerged so far was characterized by more weight being given than formerly to certain values, such as toleration, freedom and reasonableness. It was associated with opposition to authoritarianism. Its rejection of an excessive emphasis on the authority of the clergy was combined with a greater respect for lay opinion. In this way it is also linked, as I have already indicated, with what was known as ‘deism’ as well as with scepticism. Confidence in the progress being made in the sciences was matched by scepticism about dogmatic (‘rationalist’) metaphysical systems. Both were associated with a broad empiricism.

By focussing on one or other of these features we may obtain different perspectives on our period and I will attend to each in turn. The perspectives they provide may serve to provide some background to at least the secondary figures of the period. As in other periods, the great thinkers of the Enlightenment are, in one way or another, not entirely typical. But at least sometimes they can be better understood once it is seen where they are deviant or out of step with their times. This is true mostly obviously of Kant, who is certainly an Enlightenment figure (and wrote an essay on ‘*Was ist Aufklärung?*’), but who is the focus of a separate volume in this series.

LAY INVOLVEMENT IN THE NEW PHILOSOPHY

The growth of Protestantism in parts of northern Europe was accompanied by strong anti-clerical movements amongst the laity. The Catholic tradition had its Latin Bible and a clerical hierarchy who laid down how it was to be understood. But, in the wake of the Protestant Reformation, it was often replaced by a diametrically opposed tradition committed to a vernacular Bible that the common people were supposed to be able to understand just by reading. While most Protestant groups retained clergy and attached importance to their mission as teachers, they encouraged the laity, in varying degree, to learn to read and understand the Bible for themselves.

An authorized English version of the Bible was in use from 1611. A whole spectrum of religious parties and sects offered a variety of encouragements and discouragements to lay people who wished to engage in religious speculation and to that extent in philosophy. At one end of the spectrum was the High Church party of the Church of England, which believed in clerical authority and tended to favour censorship. At the other extreme there were sects like the Seekers and the Ranters, who had no clergy and who came to be associated in various ways with political radicalism. A home-spun metaphysics might serve as a way of integrating theology and politics. Thus, for example, the leader of one of the groups which was active in the aftermath of the Civil War in England—the Diggers—used a pantheistic metaphysics to underpin his rejection of all hierarchy, whether in religion or politics, and to make radical democratic and communist demands.¹⁵ At a more sophisticated level were the metaphysical ideas developed in the Quaker group centred on Ragley Hall, the home of Anne, Viscountess Conway.¹⁶

Those to whom I have been referring as ‘the laity’ included all those who were not clergymen. They also included ‘lay philosophers’, that is to say, those who were not trained in a university. The training of clergy (as well as doctors and lawyers) was a major part of the business of the universities throughout this period and, for some of them, through much of the nineteenth century as well. Students at Oxford and Cambridge had to subscribe to the doctrines of the Anglican church as expressed in the Thirty Nine Articles. The concept of ‘academic freedom’ was as yet unknown in the seventeenth century and universities were not generally associated with free-thinking. The place for any free exchange of ideas was either in a club, a salon or a private house; or, again, if less respectably, in the coffee-houses or taverns frequented by others of like mind.¹⁷

The participation of lay people in philosophy was not new in the Enlightenment. For centuries lay men and women, especially those from privileged backgrounds, might occasionally benefit from an education which brought them in touch with scholastic philosophy.¹⁸ But, without learning Latin, they could not hope to progress far, and it was not until humanist education diffused this learning more widely in the fifteenth and sixteenth centuries that it became available to a significant minority. By the beginning of the period covered in this volume, lay participation in philosophy was already noticeable and was set to increase considerably.¹⁹

Universities were not merely theologically correct but, for the most part, intellectually conservative places in the seventeenth century.²⁰ New ideas were not likely to take root

quickly in such an environment. The early history of modern philosophy shows how some laypeople were more receptive than most academics were. Philosophy had been written in French before Descartes, whose philosophy is discussed in a previous volume. What was new with Descartes was that he used French as a vehicle, not just for popular works, but to express and argue for a difficult and demanding set of doctrines. By writing in his native language he was able to win for his philosophy the support and patronage of influential lay people—women as well as men—and this helped Cartesianism to survive and even flourish despite being banned from French universities.

As well as writing in a vernacular language, Descartes sometimes adopted a literary style, as in his *Meditations* and *Discourse on Method*, that was more accessible to the laity than formal academic works. Indeed his conception of philosophy was that of a subject in which lay people were already equipped. Good sense was not the prerogative of the learned but, on the contrary, as Descartes announced right at the beginning of his *Discourse*, it 'is the best distributed thing in the world'. Everyone had ideas and Descartes played down any obstacles there were to learning how to distinguish those that are 'clear and distinct' and which could therefore give true knowledge. Scholastic philosophy required a long period of initiation, not only into a technical Latin but into a special way of thinking. Modern philosophy, by contrast, sought to deal in a currency ('ideas') which the whole of humankind was supposed to have in common.

Descartes's approach was taken further by Nicholas Malebranche (see Volume IV in this series), who not only wrote exclusively in French but very largely for a lay readership, especially when he wrote in the dialogue form. Philosophical discussion thus began to look continuous with the social world of conversation between equals, in which there is due consideration for how one's utterances may be received, respect for the judgement of others, and so on. This was not the philosophy of the cloister or the schoolroom but of the salon or country house.

By such means philosophy was becoming available to lay people in an unprecedented way. French replaced Latin as the language of modern philosophy in much of continental Europe. The use of the vernacular became more common in England and, by the end of the seventeenth century, the leading modern philosophers, such as Locke and Norris, were publishing exclusively in their native language.

These changes involved not only a new language but a new style of philosophy, in which liveliness and clarity were regarded as particular virtues. Thus Locke, in his Epistle to the Reader at the beginning of his *Essay*, thought it appropriate to apologize to his reader for the difficulties that remained because of the way the work had been composed. He had *not* written it for academics but for what he called 'polite company'. He hoped it would bring some pleasure to his reader and, most significantly, told his reader that 'this Book must stand or fall with thee, not by any Opinion I have of it, but thy own'.²¹

Locke's writings were not only accessible in the sense that lay people could follow them but also in the sense that they made available to lay people a method of doing philosophy which they could replicate. Thus the reader was invited to refer to his or her own 'observation and experience' as part of a process of clarifying his or her ideas. His friend and pupil, Damaris, Lady Masham, published books in which she used a Lockean method in order to resolve, at least to her own satisfaction, a controversy with Mary

Astell about the meaning of the word 'love' in a religious context.

There was a marked increase in the number of books by lay philosophers in the eighteenth century. But no less significant was the potentially large lay readership that had been established for philosophical works. New careers became possible for philosophical writers who wrote for this readership. The most striking success of this kind was Pierre Bayle's *Historical and Critical Dictionary*.²² With such writings the world of philosophy became part of the world of letters. Even the more difficult professional or semi-professional philosophers, like Berkeley and Hume, consciously sought to produce more accessible versions of their philosophy.²³ The leading *philosophes* of the French Enlightenment, such as Voltaire and Diderot, were men of letters as much as they were philosophers, concerned to entertain as well as instruct and convince.²⁴

One important difference between the contexts of French and English philosophy in the eighteenth century was that the *philosophes* were subject to censorship laws. Such laws dogged the publication of their great collaborative project, the *Encyclopédie*. Moreover, philosophers were discouraged from extending their speculations into areas bordering on religion. In England, on the other hand, the censorship laws lapsed in 1695 and were never renewed. In this relatively freepolitical climate there was, at least initially, a spate of heterodox publications, such as Toland's *Christianity Not Mysterious*.²⁵ It was at this point that the deist movement, with its stress on the sufficiency of reason in matters of religion, came to the fore.²⁶

DEISM AND 'THE AGE OF REASON'

There is no consistent usage for the term 'deism' in our period nor a complete consensus as to who the deists were. That is hardly surprising, since those who used the term of what they subscribed to often had no more in mind than a reasonable Christianity: whereas those who used it of their enemies had in mind a tendency that was subversive of true religion. The deists commonly dropped several of the core features of church Christianity like revelation, miracles, the means of grace, the Incarnation, the divine inspiration of Scripture and a divinely-ordained ecclesiastical hierarchy. At the same time they clung onto those beliefs they regarded as rationally defensible: for example, in a first cause, an intelligent general providence, immortality and, sometimes, retribution for wrong-doing. When we consider, however, that Spinoza was commonly regarded as the quintessential deist, and yet he did not believe in providence or immortality (as usually understood) or retribution, we see how difficult it is to define deism by doctrines.²⁷ The best we can do is to note the desire for a wholly rational religion or a rational replacement for Christianity. The deists were characteristically anti-clerical and they usually went well beyond mere heresy by rejecting the Bible or revelation as sources of truth. As to their politics, they rejected the idea that monarchs are divinely appointed—the so-called 'divine right of kings'—and, if they were not republican, they were often inclined to hold that the authority of the monarch was derived ultimately from the consent of the people.

Some of the 'rationalist' philosophers discussed in the previous volume could either readily be identified as deists, as in the case of Spinoza, or showed some tendency in that

direction, as did Leibniz and Malebranche.²⁸ For all that it was a rationalizing tendency within religion, however, deism was not a necessary accompaniment of 'rationalism' in the special sense used of certain philosophers, especially of the seventeenth century but also later. The rationalists, in the special sense, accepted an ideal of a system of knowledge built up, as geometry was taken to be, by demonstrations from self-evident truths. Moreover, the major rationalists of the seventeenth century believed it was possible to make some headway in building up a system of metaphysics that approximated to this ideal. But not all of them were led to encroach on theology, to depart from orthodoxy or to aspire to a kind of philosophical religion. Descartes was careful not to do so. Thus being a rationalist in philosophy did not necessarily mean being a rationalizer in matters of religion and hence being deistical in tendency.²⁹

To add to the confusion, the philosophers of the Age of Reason tended to reject the aspiration after metaphysical systems of the kind produced by the seventeenth-century rationalists. Philosophers often continued to espouse such rationalism in other areas. Thus, for instance, Locke and Richard Price are said to have been rationalists about ethics.³⁰ There were those too, like Samuel Clarke, who were rationalists in natural theology. None the less rationalism in metaphysics (and natural science) was characteristically rejected. The roots of rationalism in the special sense lie in the Aristotelian ideal of *scientia*³¹ and therefore in the Latin-based university philosophical tradition. That ideal had been attacked by sceptics as unattainable and the attack was continued in Locke's influential *Essay*. The certainty which sufficed for the purposes of practical life came to be regarded as sufficient also for our understanding of the world. Those who claimed more, especially in metaphysics and natural science, were no longer taken seriously. D'Alembert could write, in 1751, that 'the taste for systems...is today almost entirely banished from works of merit...a writer among us who praised systems would have come too late'.³²

Leibniz's 'optimism', i.e. his theory that this is the best of all possible worlds, is one example of what d'Alembert took to be a 'system' in an uncomplimentary sense. It resulted from Leibniz's belief—which he thought he could demonstrate—that the world has a perfect creator.³³ Voltaire lampooned such optimism in his enormously successful *Candide* and philosophies like that of Leibniz were largely rejected by the *philosophes*.³⁴ Again, the Cartesians rejected Newton's theory of gravity because it involved action at a distance. They thought they had a clear and distinct idea of matter on the basis of which action at a distance could be ruled out. The controversy dragged on for some time. But the Newtonian cause, of which Voltaire was one of the champions, prevailed. Systems that prescribed the nature of the world a priori fell into disrepute.

For all that rationalism in the more technical sense used by philosophers was in decline in the eighteenth century, the deists were rationalists in a perfectly clear sense, i.e. rationalizers of religion. Thus Matthew Tindal (1657?–1753), author of what came to be referred to as 'the Bible of Deism', suggested that Christianity was not new but already contained in 'the religion of Nature'.³⁵ Its truths, such as Tindal could accept, were ones that reason could discover without the need of revelation.

There was a large deist literature in early eighteenth century England and an even greater volume of refutations, especially books from the Anglican clergy. But by the mid-century deism had declined and the controversy it aroused had subsided. It is sometimes

suggested that the deists lost the arguments. More probably, however, Anglican Christianity itself had become less authoritarian or fideistic than it had been a century before and those who might otherwise have been tempted to deism could more readily be accommodated within the church. The liberal or latitudinarian wing of the Church of England became much stronger in the eighteenth century. From the Boyle lecturers on, the philosophical sermon became an established genre.³⁶ Though sermons were commonly published at that time, they were delivered in the first place to a captive audience. That church-goers should have been offered the arguments of natural religion is some evidence that the demand for a rational religion had taken root amongst the faithful as well as the dissenters. Whatever the extent of this demand, many of the clergy seemed intent on meeting it. Sophisticated arguments became available to support belief in miracles and in a providence.

Perhaps because the demand for a rational religion was in some measure being met by Anglican apologetics, the controversy about deism abated. In 1790 Burke claimed that no one read any of the deists any more and had not done so for some time.³⁷ Deism moderated and declined in England during a period when it became more radical and conspicuous in France. When it reappeared in England, for instance in Tom Paine's *Age of Reason* (1794–5), it assumed a more revolutionary form, hostile to organized religion, which the author claimed was a means 'to terrify and enslave mankind, and monopolize power and profit'. But, though there was a late flowering of the Enlightenment, in Britain and America, the excesses of the French Revolution provoked a reaction to the mechanistic, materialistic and egalitarian philosophies that had previously predominated.

SCPTICISM AND THE REJECTION OF METAPHYSICAL SYSTEMS

Deism involves scepticism about traditional beliefs and a demand for critical reconstruction. Scepticism, or what was taken to be such, was widespread during the Enlightenment—especially in relation to meta-physics. But there were few philosophers who were tempted by radical doubts about the possibility of knowledge.

Radical scepticism had been adopted by some of the ancient Greek philosophers and was codified by Sextus Empiricus in the third century AD. It had been revived during the religious turmoil of the sixteenth century, by Montaigne and others.³⁸ What emerged was a marriage of scepticism with 'fideism' (from the Latin word for 'faith'), in which all reliance on reason was totally demolished and the need for a total dependence on faith proposed instead. Doubts, if pressed far enough, were supposed to lead to a strengthening of faith. Such thinking was, however, subversive of the emerging sciences. And, in any case, the idea that faith might be confirmed by destroying all its rational bases did not sit well with the Catholic intellectual tradition, in which, following Aquinas and others, it was supposed that reason could make a good beginning in establishing the truths of religion. Descartes took upon himself the role of defeating the sceptics on their own terms. But no one seems to have been convinced by his *Meditations* and, ironically, they came to be valued more for the arguments they gave in favour of scepticism than for refuting it. Scepticism not only survived but was stimulated by Descartes's attempt to refute it.

One late seventeenth century French sceptic, Simon Foucher (1644–97) made a point of identifying the assumptions underlying the metaphysical writings of Descartes and his successors and then insisting that they neither had been nor could be demonstrated—hence that the system being offered was inadequately founded.³⁹ Foucher addressed himself critically to contemporary philosophy but the titles and contents of his books were off-putting. He presented himself unfashionably within a late Renaissance tradition of reviving ancient scepticism and he did not receive the attention he deserved from contemporaries. None the less, he anticipated or influenced the arguments of the best known sceptic of the late seventeenth century—Pierre Bayle.

Bayle (1647–1706) enjoyed a literary success rivalled by only a few other philosophers of his time. He wrote for a wide range of readers and could be witty as well as profound. At a time when being frank or direct was to court trouble he acquired the art of burying his most contentious remarks where his reader might least expect to find them. He could expound the most outrageous views or relate the most licentious stories and yet put an authorial distance between himself and the views and events he wrote about. His *Historical and Critical Dictionary*⁴⁰ aimed to be nothing less than a survey of human folly. Of the works first published in the late seventeenth century few had such a marked effect on eighteenth century philosophy. Bayle used his scepticism to defend tolerance towards those with whom one disagreed (still very controversial in religious matters in his time) and to underline the necessity of faith. His stress on faith was understood by the *philosophes* (almost certainly wrongly) as a mere subterfuge. And such a subterfuge of concealing total scepticism about revealed religion under the pretence of defending the necessity of faith became a convention.⁴¹

Typical of Bayle was the way he seized upon what was perceived as Descartes's failure to demonstrate the existence of a material world and Malebranche's insistence that, since it was taught in the Bible, the existence of such a material world must be received on faith even though it could not be demonstrated by philosophy. Bayle observed:

it is useful to know that a Father of the Oratory [Malebranche], as illustrious for his piety as for his philosophical knowledge, maintained that faith alone can truly convince us of the existence of bodies. Neither the Sorbonne, nor any other tribunal, gave him the least trouble on that account. The Italian inquisitors did not disturb Fardella, who maintained the same thing in a printed work. This ought to show my readers that they must not find it strange that I sometimes point out that, concerning the most mysterious matters in the Gospel, reason gets us nowhere, and thus we ought to be completely satisfied with the light of faith.⁴²

Of the Enlightenment philosophers, none apart from Hume took scepticism as far as Bayle did. And, if Hume had any antidote to scepticism, it was to be found in his belief in natural judgement.⁴³ The *philosophes*, for the most part, were sceptical about religion and metaphysics but not about science. Theirs was a moderate scepticism which followed more in the path trodden by Locke. Locke's French disciple, Condillac, wrote a critique of metaphysical systems of the kind produced by Malebranche and Leibniz.⁴⁴ Such

systems had, as Hume claimed, been dismissed from science and it was time they were dismissed elsewhere:

Men are now cured of their passion for hypotheses and systems in natural philosophy, and will hearken to no arguments but those which are derived from experience. It is full time they should attempt a like reformation in all moral disquisitions; and reject every system of ethics, however subtle or ingenious, which is not founded on fact and observation.⁴⁵

In these remarks Hume links scepticism about 'systems' and 'hypotheses' with a preference for empirical arguments. And indeed the eighteenth century is sometimes represented as a period when empiricism became prevalent, at any rate amongst those regarded as the most progressive thinkers. It is worth considering, briefly and in conclusion, how far this is true.

EMPIRICISM

The term 'empiricist' is used broadly of anyone who thinks that all knowledge *of the world* is based upon experience—or, slightly more narrowly, of anyone who thinks that all *substantive* knowledge is based upon experience. Those who are empiricists in the broad sense might allow that there is substantive knowledge not based upon experience if, for instance, they believed (as Locke did) that the existence of a God or the truths of ethics could be demonstrated. They might none the less believe the truths about the natural world could only be established by observation and experiment. Hume, in saying that 'men...will hearken to no arguments [in natural philosophy] but those which are derived from experience' might be understood as claiming that, by the middle of the eighteenth century, empiricism had established itself as the methodology for the natural sciences. He also thought, as the same passage makes clear, that people ought to go further, and be empiricists in moral philosophy as well as natural. And indeed he defended empiricism in a narrower, more rigorous sense, rejecting all rationalist metaphysics as well as ethics. For Hume, as for any strict empiricist, no substantive question could be settled except by reference to experience. Thus, in his *Dialogues Concerning Natural Religion*, he is brief and dismissive about the traditional a priori arguments for the existence of God. The argument discussed sympathetically and at length in the *Dialogues* is an argument from experience.

Hume was more thorough-going in his empiricism than Locke, in whom, as we have seen, it is possible to detect rationalist elements. But this is not to say that Locke was inconsistent inasmuch that such elements are compatible with a broad empiricism. Insofar as empiricism was widespread in the eighteenth century, it was of the broader sort. This is the empiricism or 'experimental philosophy' defended by members of the Royal Society.⁴⁶ Though it is natural to extend the demand that arguments are only drawn from experience into ethics and natural theology, there is no necessity to do so.

The best known defender of rationalism in ethics and natural theology in eighteenth century England was Samuel Clarke (1675–1729). In the first of his two series of Boyle

lectures,⁴⁷ Clarke argued a priori for the existence of God and, in the second, he sought to argue that there were eternal truths of ethics which, like those of mathematics, were grasped by reason. Clarke generated a very considerable controversy which lasted long after his death.⁴⁸ Some critics objected, not only to the details of his arguments, but to his use of a priori arguments to demonstrate the existence of God. Their point was that only a posteriori, i.e. empirical arguments, were appropriate to establish the existence of anything. And this view seems to have gained ground during the eighteenth century. The only argument for the existence of God Hume was willing to take seriously was the a posteriori one.⁴⁹ That was the argument used by apologists, such as Butler and Paley.⁵⁰

Clarke's rationalism in ethics was criticized by Francis Hutcheson amongst others. Hume regarded him as the leading exponent, after Malebranche and Cudworth, of the Abstract theory of morals' he sought to undermine. Clarke's 'eternal law of righteousness' did not commend itself to the sceptical, secular and empirical thinkers of the mid-eighteenth century. Their temper was suited by one or another form of utilitarianism. The utilitarian ethics of Hume and of certain of the *philosophes* (including Helvétius) was a direct influence on Bentham.

The association of empiricism with utilitarianism in ethics is a natural, though not a necessary one. Historically both are associated with the sceptical Epicurean tradition and so with both hedonism and materialism. Locke was mistaken by many of his critics for an adherent of this tradition. He was attacked by Aristotelians as a 'sceptic'.⁵¹ He was also commonly interpreted as a materialist, partly because of the agnosticism he expressed about whether matter could think, which occasioned a considerable controversy.⁵² Though Locke was not a materialist, his thought was taken in that direction, both by his British followers, such as Toland and Collins, and also the *philosophes*, such as Condillac and Helvétius, who developed his ideas in their own ways.⁵³ The empiricist tradition, as inherited by Bentham later in the century, was hedonistic and materialist. It is only one strand in Enlightenment thinking and was always controversial. But, after Locke, it had an intellectual respectability that it never had before.

One important contribution Locke made to developing empiricism as a philosophical doctrine was in relation to the theory of ideas. Whereas Descartes and others had held that certain ideas were 'innate', Locke held that all our ideas are ultimately derived from experience, either from the senses or from our mind turning 'its view inward upon itself'.⁵⁴ Against Descartes and others who held the concept of God to be innate Locke insists that we arrive at a concept of God through reflection. The concept of 'an eternal, most powerful, and most knowing being' is a complex one. Locke agreed with Descartes that the existence of such a being could be demonstrated a priori. His empiricism is not, therefore, straightforwardly to be contrasted with Descartes' rationalism. None the less, his rejection of innate ideas was taken up by many philosophers in the eighteenth century and became one of the hallmarks of the Enlightenment.

In this respect Kant was a typical product of the Enlightenment as well as a philosopher who pointed beyond it. In general Kant accepted as uncontroversial the Lockean view of the origin of our ideas in experience. Though he added the all-important qualification that this was not absolutely true, that there were certain categories that humans bring to experience, he accepted the need to argue for such a priori concepts. To that extent Kant's philosophy starts from a presumption of empiricism. But Kant and his

philosophy lie beyond the scope of this volume.

NOTES

- 1 Price is discussed in chapter 8, together with two English moralists, Shaftesbury and Joseph Butler.
- 2 The Irish context of Berkeley's writings, which is often played down, is brought out by David Berman in chapter 5 below. Burke is discussed in chapter 14.
- 3 See chapters 7 and n below.
- 4 See chapter 12 below.
- 5 The previous volume of the current series—*The Renaissance and Seventeenth Century Rationalism*—so classifies them. See also John Cottingham's *The Rationalists*, paired with R.S. Woolhouse, *The Empiricists* (Oxford, Oxford University Press, 1988) in the History of Western Philosophy series.
- 6 Louis E. Loeb, for instance, rejects the standard division of the major figures of seventeenth and eighteenth century philosophy into either 'continental rationalists' or 'British empiricists'. See his *From Descartes to Hume: Continental Metaphysics and the Development of Modern Philosophy*, Ithaca, NY, Cornell University Press, 1981. Loeb groups Berkeley with Malebranche and Leibniz (and others) as a 'continental metaphysician'.
- 7 It is regrettable, for instance, that there was no space for a chapter on the American Enlightenment, which included representative figures such as Thomas Paine and Jefferson.
- 8 There is a vast literature on the Enlightenment. As an introduction Norman Hanson's *The Enlightenment* (London, Penguin, 1968) can still be recommended, as can Peter Gay's fuller *The Enlightenment: An Interpretation* (2 vols, New York, Knopf, 1966, 1969). See also *The Blackwell Companion to the Enlightenment*, ed. John W. Yolton *et al.*, Oxford, Blackwell, 1991.
- 9 See chapter 10 below. See also N.L. Torrey, *Voltaire and the English Deists*, New Haven, Yale University Press, 1930.
- 10 Toland's book was indeed burned by the common hangman in Ireland. This fate befell books by the deist Matthew Tindal in England in 1709.
- 11 Clarke, in his Boyle Lectures, had established himself as one of the leading defenders of natural religion in the country. It was claimed that his heresy was what prevented him, despite being favoured at Court, from becoming Archbishop of Canterbury. He had, however, secured the comfortable living and fashionable pulpit of St James, Piccadilly. And the protracted campaign by the heresy-hunters within the Church of England failed to dislodge him. See J.P. Ferguson, *Dr. Samuel Clarke: An Eighteenth Century Heretic*, Kington, The Roundwood Press, 1976.
- 12 For a fuller account of some of these controversies see my "'Theological politics" and the Reception of Spinoza in the early English Enlightenment', *Studia Spinozana* 9 (1994).
- 13 Butler is discussed in chapter 8. William Paley (1743–1805) offered arguments from design in spite of Hume's critique of such arguments in his *Dialogues concerning Natural Religion*. None the less Paley was very influential and his books were set reading at Cambridge when Charles Darwin was there in 1829 and the years following.
- 14 See chapters 9 and 10.
- 15 For instance, Gerrard Winstanley's tracts *The Law of Freedom* and *The New Law of Righteousness* (1648), see *The Works of Gerrard Winstanley*, ed. G.H. Sabine, Ithaca, NY

- Cornell University Press, 1941. Radical sects seem to have been responsible for disseminated metaphysical ideas (like pantheism) amongst lay people during the early modern period.
- 16 See chapter 1.
 - 17 Locke was a founder of such a club, the Dry Club, in London and had been a member of a similar club in Rotterdam. When, due to ailing health, he retired to a country house (Oates, in Essex, the home of Lady Damaris Masham), he was visited by a wide range of liberal-minded thinkers. Salons, like country houses, enable women to play a more prominent part in philosophical discussion. They flourished in Paris. The free-thinker John Toland was disapproved of for discussing serious subjects in coffee-houses and taverns.
 - 18 This period shows a marked increase in the participation by English women in philosophical discussion. Some of the debates of the period, particularly between Norris and his critics, were pursued in print by women—notably Mary Astell, Damaris Masham (discussed in chapter 1) and Catharine Trotter. Access for women to the world of learning remained very limited right to the end of the nineteenth century. See Mary E. Waite (ed.), *A History of Women Philosophers*, Dordrecht, Kluwer Academic, 1991, vol. 3 (1600–1900).
 - 19 Herbert of Cherbury, who is discussed in chapter 1, is an early example and Shaftesbury was a later one. Shaftesbury, one of the major English moral philosophers of the period, is discussed in chapter 8 below.
 - 20 Big changes were, however, in motion towards the end of the century. Modern philosophy was being championed in the early 1690s by Oxford students, including the essayist Joseph Addison and the disciple of Malebranche, Thomas Taylor. There were attempts at Oxford to ban Locke's books but he seems to have been widely read by students. He was taught to the young Berkeley at Trinity College, Dublin at the turn of the century. Other universities, such as Edinburgh (attended by Hume), were reformed in the early eighteenth century.
 - 21 *Essay*, ed. P.H. Nidditch, Oxford, Clarendon Press, 1975, p. 7.
 - 22 Bayle's work went into many editions, including English editions, and seems to have been a significant influence on Hume. Some of the philosophically most important and interesting entries are included in *Pierre Bayle: Historical and Critical Dictionary: Selections*, trans. with an introduction by R.H. Popkin, Indianapolis, Hackett, 1991.
 - 23 Berkeley's *Treatise concerning the Principles of Knowledge* (1710) did not have the reception its author had hoped for and he sought to popularize it by writing his *Three Dialogues between Hylas and Philonous* (1713). Hume's formidable *Treatise of Human Nature* (1739) was initially a flop—it 'fell still-born from the press', according to its author—and he produced simplified versions that correspond to two of the three main parts of the original work: *An Enquiry Concerning Human Understanding* (1748) and *An Enquiry concerning the Principles of Morals* (1752).
 - 24 D'Alembert, who sought to act as a spokesman for the *philosophes*, took it for granted that philosophy aims to please, though he also insisted that it was intended principally to instruct. See *Preliminary Discourse to the Encyclopedia*, trans. R.N. Schwab, Indianapolis, Bobbs-Merrill, 1963.
 - 25 John Toland (1670–1722) concocted the word 'pantheism', though his philosophical views derive from, amongst others, Giordano Bruno. See R.E. Sullivan, *John Toland and the Deist Controversy: A Study in Adaptations*, Cambridge, Mass., Harvard University Press, 1982.
 - 26 Herbert of Cherbury (see chapter 1) was reputed to be 'the father of deism' and others, like Voltaire, were also deists. Others, like Berkeley and Burke (see chapter 14), reacted against it.
 - 27 Leslie Stephen, in his *History of English Thought in the Eighteenth Century* (London, 1876), claimed that 'the whole essence of the deist position may be found in Spinoza's Tractatus Theologico-Politicus' (London, Harbinger, 1962, p. 27). Some of the critics of deism around the turn of the eighteenth century, such as Matthias Earbury and William Carroll, would have agreed. But Hobbist and Lockean doctrines were often more prominent in summaries of deism by English authors.
 - 28 See my 'The Regularization of Providence in Post-Cartesian Philosophy', in R. Crocker (ed.), *Religion, Reason and Nature*, Dordrecht, Kluwer Academic, forthcoming.
 - 29 'Rationalism' is often used as a close synonym of 'deism'. Bernard Williams, in his entry on 'Rationalism' in the *Encyclopedia of Philosophy*, ed. P. Edwards, New York, Macmillan, 1967, acknowledges Enlightenment 'rationalism' and 'rationalism in theology' as 'two other applications' of the term in addition to the philosophically most important one, namely, to refer to 'the philosophical outlook or program which stresses the power of a priori reason to grasp substantial truths about the world' (op. cit., vol. VII, p. 69). Deism, though not essentially connected with rationalism in this sense, connects these two lesser applications of the term.
 - 30 Locke wrote that he was 'bold to think, that Morality is capable of Demonstration, as well as Mathematicks' (Essay III, xi. 16) Ian Tipton, in chapter 3, comments further on the 'strong rationalist streak in Locke'. Price's ethics are discussed in chapter 8.
 - 31 *Scientia* simply means 'knowledge' or 'science'. *Scientia*, according to the Aristotelian view, is arrived at on the basis of correct syllogistic reasoning on the basis of premises which are both necessary and certain. It is both universal and necessary. For a helpful account of *scientia* see R.S. Woolhouse, *Locke*, Brighton, Harvester, 1983, chapter 8.
 - 32 *Preliminary Discourse to the Encyclopedia of Diderot*, ed. R. Schwab, Indianapolis: Bobbs-Merrill, 1963, p. 94. For a further account, see my 'Leibniz and the Fashion for Systems and Hypotheses' in P. Gilmour (ed.), *Philosophers of the Enlightenment*, Edinburgh, Edinburgh University Press, 1989, pp. 8–30.
 - 33 Though Leibniz, in his book on the subject—his *Theodicy* of 1710—was content to show that the existence of evil in the world could be made consistent with belief in a perfect creator, other writings suggest he was not content personally to accept belief in a perfect creator merely as a matter of faith. For instance, in a paper of 1697 'On the Ultimate Origin of Things' argues that it is 'evident a priori' from considerations about the necessary origins of things that, contrary to the appearance of a chaotic world in which divine wisdom had no part, 'the highest perfection there could possibly be...is secured' (*Gottfried Wilhelm Leibniz: Philosophical Writings*, ed. and trans. G.H.R. Parkinson, London, Dent (Everyman), 1973, p. 141).
 - 34 Voltaire's reaction to optimism is discussed in chapter 10 below.
 - 35 The title of the book, in the obliging fashion of the period, declares its contents: *Christianity as Old as the Creation: Or, The Gospel A Republication of the Religion of Nature* (1730).
 - 36 Some of the sermons of Joseph Butler became a classic of eighteenth-century moral philosophy. See chapter 8 below.
 - 37 'Who born within the last forty years has read one word of Collins, and Toland, and Tindal, and Chubb, and Morgan, and that whole race that call themselves freethinkers? Who now reads Bolingbroke? Who ever reads him through?' ('Reflections', *Works* V: 172). Burke's attitude to deism is discussed in chapter 14 below.
 - 38 See R.H. Popkin, *The History of Scepticism from Erasmus to Spinoza*, Berkeley, University of California Press, 1979.
 - 39 See, for instance, his *Critique de la recherche de la vérité*, 1675, repr- New York, Johnson Reprint, 1969 and the editorial introduction by R.A. Watson. Watson regards Foucher as an important critic of Cartesianism. See his *The Breakdown of Cartesian Metaphysics*, Atlantic

Highlands, NJ, Humanities Press International, 1987.

- 40 The *Dictionnaire historique et critique* was first published in 1697 and Bayle made many alterations in the editions that went through during his lifetime.
- 41 Hume, for instance, seems to have adopted such a conventional subterfuge at the end of his essay ‘Of Miracles’ when he concluded that ‘the *Christian Religion* not only was at first attended with miracles, but even at this day cannot be believed by a reasonable person without one’ (*An Enquiry Concerning Human Understanding*, section X).
- 42 Op. cit., p. 376.
- 43 The question as to how radical Hume’s scepticism was is discussed by Anne Jaap Jacobson in chapter 6 below.
- 44 His *Traité des Systèmes*. See chapter 9.
- 45 *An Enquiry Concerning the Principles of Morals*, sect. I.
- 46 See chapter 2. See also R.S.Woolhouse, *The Empiricists* (History of Western Philosophy series), Oxford, Oxford University Press, 1988, chapter 5.
- 47 Clarke’s two sets of lectures were published as *A Demonstration of the Being and Attributes of God: more particularly, in answer to Mr. Hobbs, Spinoza, and their followers*, London, Knapton, 1705 and *A Discourse concerning the Unchangeable Obligations of Natural Religion*, London, Knapton, 1706.
- 48 The controversy is described in J.P.Ferguson, *The Philosophy of Dr. Samuel Clarke and its Critics*, New York, Vantage Press, 1974.
- 49 In his posthumously published *Dialogues concerning Natural Religion*, Hume gave careful consideration to the argument from design but was peremptory in his treatment of the a priori arguments.
- 50 See Butler’s *Analogy of Religion, Natural and Revealed, to the Constitution and Course of Nature*, London, 1736 and Paley’s *Natural Theology: or Evidences of the Existence and Attributes of the Deity, Collected from the Appearances of Nature*, London, 1802.
- 51 For instance by Henry Lee in *Anti-Scepticism*, London, 1702 (repr. New York, Garland, 1978).
- 52 See Yolton, John, *Thinking Matter: Materialism in Eighteenth Century Britain*, Minneapolis, University of Minnesota Press, 1984 and *Locke and French Materialism*, Oxford, Clarendon Press, 1991.
- 53 See chapter 9 below.
- 54 *Essay concerning Human Understanding*, book IV, ch. X, sect. 6.

CHAPTER 3

Locke: knowledge and its limits

Ian Tipton

I

That John Locke’s *Essay concerning Human Understanding* is one of the philosophical classics is something nobody would deny, yet it is not easy to pinpoint precisely what is so special about it. Locke himself has been described as the founder of British empiricism, but labels of this sort are increasingly treated with suspicion, and some affinities to Descartes, usually regarded as the first of the great rationalist philosophers, have also been widely acknowledged. Students studying his philosophy will spend some time pondering on his advocacy of a distinction between primary and secondary qualities, but they will also be told that the doctrine had a long history and that, in Locke’s own day, it was central to the theorizing of Robert Boyle and the ‘new science’ generally. They may dwell too on his talk of a material *substratum* of qualities, but they may also be told that his thinking here was confused, and that at this point anyway he was strongly influenced by the scholastic philosophy he saw himself as trying to break away from. They are likely to be puzzled by his talk of ‘ideas’ as the ‘Objects’ of thought—he tells us at one point that ‘the Mind...perceives nothing but its own *Ideas*’ (IV.iv.3)¹—if only because, on the face of it, this poses the obvious problem that, as Berkeley was to stress, it seems to rule out the possibility of the very knowledge of the ‘real’ world that Locke clearly took it for granted we have. Locke himself confesses that the *Essay* is too long—‘the way it has been writ in, by catches, and many long intervals of Interruption, being apt to cause some Repetitions’ (Epistle to the Reader)—and his style makes it neither easy nor attractive to read; yet it richly rewards study. That this would be agreed both by those who have thought him guilty of fundamental errors throughout and by those who see him as belonging most decidedly to our age, and as characteristically judicious and sane, merely adds to the fascination of his work and encourages deeper study. This fascination is increased when we realize that in his own time he was often considered a dangerous and subversive thinker.

Locke was born at Wrington, Somerset, in 1632. He attended Westminster School and Christ Church, Oxford, where he retained his Studentship until 1684. After an introduction to the world of diplomacy when he was involved in a mission to Brandenburg he set out to qualify in medicine, working at one stage with Thomas Sydenham, the great physician whom, in the Epistle to the Reader which prefaces the *Essay*, he describes, along with Robert Boyle, Christiaan Huygens, the Dutch astronomer and physicist, and ‘the incomparable Mr. Newton’, as one of the ‘Master-Builders, whose mighty Designs, in advancing the Sciences, will leave lasting Monuments to the Admiration of Posterity’. Locke had worked with Boyle too, and Boyle was clearly one

important influence on the *Essay*, just as Lord Ashley, afterwards Earl of Shaftesbury, to whom he became personal physician in 1667 and also a political adviser, influenced his personal fortunes. Locke was to serve Shaftesbury in various capacities, becoming, eventually, Secretary to the Council of Trade and Plantations, of which Shaftesbury was President. This body was dissolved in 1675. In the same year Locke's deteriorating health led to him departing for France. He stayed first in Montpellier, but in Paris was able to make new contacts, including François Bernier, a leading disciple of Gassendi, a philosopher who had almost certainly influenced the development of his thinking, even before this period.² Locke returned to England, and to an increasingly troubled political scene, in 1679. Before long Shaftesbury was forced to flee to Holland, where he died in 1683, and later that year Locke himself left for Holland, returning only after James II had been deposed and William of Orange had secured the English throne. Locke's *Essay* was published not long after, in 1690, and it was regarded at once as both important and controversial. However, apart from engaging in a time-consuming controversy with Edward Stillingfleet, Bishop of Worcester, Locke showed little inclination to get involved in arguments with his critics, not even Leibniz, who attempted repeatedly to engage in correspondence with him, though his *New Essays on Human Understanding* was not published until long after the death of both men. Locke published other works after his return from Holland, including the *Two Treatises of Government*, discussed in the next chapter, but his health continued to fail. He was to spend the last years of his life in the house of Sir Francis Masham and his wife Damaris, daughter of the Cambridge Platonist Ralph Cudworth, and herself a woman of impressive intellect with whom Locke, a lifelong bachelor, had, it seems, once been in love. He died in 1704.

Even this brief sketch of Locke's life will be sufficient to show that it was an eventful one, and each stage had its impact on the development of Locke's intellectual life. He did not publish anything of importance until he was in his fifties, but his *Some Thoughts concerning Education* (1693) reflects his critical attitude to the sort of education he had himself encountered at Westminster School. His dissatisfaction with the sort of philosophy taught at Oxford when he was there, which he described as 'perplexed with obscure terms and useless questions', influenced the development of the *Essay*, as, more positively, did his reading of Descartes who, he was to tell Stillingfleet, offered him 'my first deliverance from the unintelligible way of talking' of the schools. His association with Shaftesbury involved him in practical affairs, and it is no surprise that his publications should include *Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money* (1692), as well as *A Letter concerning Toleration* (1689), which championed religious toleration, of which Shaftesbury had been a proponent. The likely influence of Gassendi, which probably antedated Locke's acquaintance with Bernier, has already been mentioned, and R. I. Aaron is one commentator who has stressed the influence of the Cambridge Platonists, claiming that 'Much of the fourth book of the *Essay* might have been written by one of the Cambridge School'.³ One could go on, even in a way that might suggest that Locke was hardly an original thinker at all, though that would be grossly unfair. A fairer estimate would be to see him as a child of his time, certainly, but as making a major contribution to the debates and disputes which characterized the period in a way which led to a recognition of his importance at the time, though not always for the reasons that have been most widely

stressed since. In very general terms, he can be seen as a spokesman for his age who also helped mould that age. In addition, he was to come to be seen, somewhat distortedly, as the originator of a school, the British empiricists, diametrically opposed to the rationalism stemming from the philosophy of Descartes. From either point of view his *Essay concerning Human Understanding* will be seen as an important legacy, and to that we now turn.

II

There are two well-known passages in the Epistle to the Reader which help focus our minds on the aims and purposes of the *Essay*, one being that in which Locke praises the 'Master-Builders', scientists such as Boyle, with respect to whom he contrasts himself as 'an UnderLabourer...clearing Ground a little, and removing some of the Rubbish, that lies in the way to Knowledge'. This passage makes his project look modest, but it also suggests that, in so far as he sees himself as having opponents, these are not so much the Cartesians as the Aristotelians, or those proponents of the debased scholasticism which for many still constituted learning, but which was characterized by the 'frivolous use of uncouth, affected, or unintelligible Terms' which Locke goes on to complain of. There is much in the *Essay* that could be described as rubbish-removal, from the attack on innate principles in Book 1, to, for example, criticism of the doctrine of substantial forms. However, this passage does suggest that Locke's project is negative, so it must be added both that, in practice, rubbish-removal usually goes along with positive alternative doctrines, and that in the other passage in the Epistle he gives a rather different account of his aims. Here he tells us how the *Essay* came to be written, referring to a meeting with friends—usually thought to have taken place in the winter of 1670—I—when an issue 'Very remote' from that discussed in the *Essay* was being debated and they 'found themselves quickly at a stand, by the Difficulties that rose on every side'. Locke's response, he tells us, was to consider whether the question that perplexed them was one they could hope to resolve. More generally, he suggested, 'it was necessary to examine our own Abilities, and see, what Objects our Understandings were, or were not fitted to deal with'. This topic set the agenda for the *Essay*. Locke could indeed have given his work the title 'Human Knowledge: Its Scope and Limits', which was the title which, over two hundred years later, Bertrand Russell gave to one of his books.

Even this, however, can make Locke's project look very negative, but what he goes on to stress in the first chapter of Book I is the positive advantages of this approach which are, first, that an enquiry into the limits of the understanding will enable us to concentrate our minds upon matters we can tackle with some hope of success, and second, and as a consequence, that we will not retreat into a general scepticism because *some* issues are beyond human resolution. The same chapter makes it clear that Locke does not take the thought that there are areas in which we cannot expect to have *knowledge* to imply that in all such areas we must expect to remain *ignorant*, and that he is as interested in cases where certainty is not possible for us but in which we may have reasonable beliefs. Hence his announced programme, which is 'to enquire into the Original, Certainty, and Extent of humane Knowledge; together, with the Grounds and Degrees of Belief, Opinion, and

Assent'. Hence too a feature of the *Essay*, that where others might see their inability to solve some problem arising from their overall position on some topic as at least a prima facie objection to that position, Locke may see such difficulties as simply confirming that our powers of comprehension are limited. Sometimes this may strike the tough-minded critic as simply dodging the issues that matter, but this is certainly not Locke's attitude.

So far, then, we know something of Locke's purpose, but nothing of his strategy for achieving it which he sets out in I.i.3 as being, first, to 'enquire into the *Original* of those *Ideas*, Notions, or whatever else you please to call them, which a Man observes, and is conscious to himself he has in his Mind; and the ways whereby the Understanding comes to be furnished with them'; then 'to shew, what *Knowledge* the Understanding hath by those *Ideas*'; and finally to 'make some Enquiry into the Nature and Grounds of *Faith*, or *Opinion*'. However, while this may seem superficially clear, it in fact gives only an imperfect guide to the overall structuring of the *Essay*, and it leaves certain questions unanswered, one of these being precisely what Locke means by 'idea'. This question has vexed commentators ever since, who have not been greatly helped by the knowledge that Locke inherited the term and some of the obscurities that go with it. Locke offers some sort of explanation in I.i.8, but the overall impression one gets is that it strikes him as just obvious *that* we have 'ideas' in our minds—the ideas of, for example, whiteness, thinking, an elephant or an army—and that he is not concerned with what an idea *is*. Thus the important question becomes simply how we *come by* our ideas. His reply—'To this I answer, in one word, From *Experience*' (II.i.2)—is what has marked him out as an 'empiricist', or as one committed, using a dictionary definition, to 'The theory which regards experience as the only source of knowledge'. One need not quarrel with this ascription—Locke goes on to stress that 'In that, all our Knowledge is founded; and from that it ultimately derives it self—so long as one appreciates that, for Locke, it is experience that is the origin of *ideas*, or what he calls the 'materials' of knowledge, and that when, in book IV, he considers 'what *Knowledge* the Understanding hath by those *Ideas*', it might seem as appropriate to judge him a rationalist. Nor should we assume that because Locke takes it as evident that we have 'ideas', or conceptions, such as those of an elephant, existence or God, there is nothing problematic about his talk of 'ideas'. Locke encourages us to take a relaxed attitude to them, and it would indeed be rash to assume at the outset that they must be *images* as some have thought,⁴ but it would be just as rash to assume that questions don't arise concerning them. For the moment, however, we must just be clear that Book II of the *Essay* is not concerned with knowledge and belief as such, but with the 'ideas' that ground these. Locke will consider, for example, how we come by the ideas of God and existence. If we have *knowledge* that God exists, this will emerge in Book IV.

III

Though Locke announces his programme at the beginning of Book I by saying that his first concern will be with how we acquire our ideas, he in fact doesn't address this question directly until Book II. Instead, after the first chapter in Book I, which introduces the *Essay* as a whole, three chapters are devoted to what may strike the modern reader as

a tiresome digression: an attack on innate principles. It is important to realize, then, Both that the attack on innatism was deemed highly controversial at the time, and that these chapters complement the rest of the *Essay*. Putting it simply, Locke's positive claim that all our knowledge derives from experience really amounts to a claim that no knowledge is prior to it, and this would have been seen by his contemporaries as in itself denying that some knowledge is innate. The direct attack on innatism in Book I and the working out of his empiricism in the rest of the *Essay* are thus two sides of one coin, and both were judged subversive, even by those who insisted that he attacked too crude a version of innatism, leaving more sophisticated versions intact. Whatever precisely they *meant* by this, many felt it imperative to hold that certain principles which Locke calls 'practical', including the fundamental principles of morality and religion, were innate if their authority was not to be jeopardised, and many were convinced that certain 'speculative' principles, for example 'Whatever is, is' must equally be 'native' to the mind, and indeed fundamental to knowledge in general. When, much later in the *Essay* Locke attacks the scholastic notion that 'all Reasonings are *ex praecognitis, et praeconcessis*', explaining that this means that certain supposedly innate maxims are 'those Truths that are first known to the Mind' and those upon which 'the other parts of our Knowledge depend' (IV.vii.8), we have an illustration of how Locke could see himself as 'removing some of the Rubbish, that lies in the way to Knowledge'. We can also see that his attack on innatism was not peripheral to his programme.

In the event Locke devotes one chapter to the supposedly innate speculative truths, one to practical truths, and, finally, one largely to innate ideas on the basis that if, for example, the knowledge that God is to be worshipped were innate, the ideas of God and worship would have to be innate too. That the ideas are not innate Locke takes to be evident. As he says,

If we will attentively consider new born *Children*, we shall have little Reason, to think, that they bring many *Ideas* into the World with them. For, bating, perhaps, some faint *Ideas*, of Hunger, and Thirst, and Warmth, and some Pains, which they may *have* felt in the Womb, there is *not* the least appearance of any settled *Ideas* at all in them.

(I.iv.2)

Infants, then, patently lack them, but so too do some adults, both of which would be impossible were they innate.

To the modern reader, one problem with Locke's polemic is likely to be that what he takes to be obvious here—and he takes much the same line on supposedly innate principles—will seem just that, obvious, so that his attack on innatism is likely to seem unnecessarily prolix, particularly given that it might seem that nobody could seriously have held the view he attacks. Thus Descartes, for example, who we know did hold that the idea of God was innate, surely didn't believe that every infant, or indeed every adult, has the idea consciously formed in his mind. To be fair, Descartes can be found writing in a way that suggests that the idea will be there, fully formed but not attended to—the infant

has in itself the ideas of God, itself, and all truths which are said to be self-evident; it has these ideas no less than adults have when they are not paying attention to them, and it does not acquire them afterwards when it grows up

but elsewhere he takes the view that what is innate is, rather, a capacity or disposition, comparable to a natural disposition to gout.⁵ Both notions are designed to take account of the fact that the infant does not entertain conscious thoughts about God, which might seem to cut the ground from under Locke's objection. In fact, it is clear that neither move would trouble Locke. His tactic throughout the polemic is to take the claim that certain items of knowledge (or ideas) are in the mind from the first quite literally, so that the infant for example should be conscious of them, and then to represent any watering down of the doctrine as a retreat into obscurity or triviality. For example, dealing with the notion that what is innate is a natural capacity, he argues that 'if the Capacity of knowing be the natural Impression contended for, all the Truths a Man ever comes to know, will, by this Account, be, every one of them, innate', for, trivially, we must always have had the capacity to acquire any knowledge we eventually acquire, so that 'this great Point will amount to no more, but only to a very improper way of speaking' (I.ii.5). At this level, indeed, Locke's attack on innatism is quite effective; it was clearly necessary, for in one form or another the doctrine that there was innate knowledge was widely received; and even if it did not once and for all end any talk of innate impressions (Leibniz for one attempted to defend it against Locke) it increasingly lost its hold. It has been claimed that 'there has been no trace of it in recent thought'.⁶

IV

As already stated, Book I complements the rest of the *Essay* in the sense that the denial of innate knowledge is merely the negative face of the positive claim announced at the beginning of Book II. It follows that Locke himself sees the direct attack as in a way superfluous to his programme (see I.ii.i), though, by the same token, he sees that the attack in Book I will be 'more easily admitted' once it has been shown how experience does provide a sufficient basis for our ideas (II.i.1). What follows in the rest of the *Essay* is thus, in part, an account of how experience gives rise to our ideas, and the knowledge based on them, though, and in a way more importantly, it is an exploration of the implications of this account. The fascination of the work as a whole thus lies in large part in what Locke has to say on a variety of issues, ranging from what sorts of achievement we can expect in natural science, to the nature of the human mind and its relation to the body, personal identity, the status of moral truths, and whether God's existence can be proved. The emphasis throughout is of course epistemological—on what we can know and what we can reasonably surmise in this or that area—but firm conclusions are drawn, including that there is a God and that this can be proved. For the moment, however, we must stay with Locke's basic empiricist claim.

This is that all our knowledge derives from 'experience', but the gloss Locke immediately puts on this is important for three reasons. First, he makes it clear that there are *two* sources of experience, sensation and what he calls 'reflection', which provides the

mind with ideas of its own operations, such as perception, thinking and doubting; second because the derivation of an idea from experience is not seen as always a simple matter (on the model of deriving the idea of green from seeing green things), in that it will be necessary to take 'a full survey' of our ideas, including 'their several Modes, Combinations, and Relations', or as they are 'with infinite variety compounded and enlarged by the Understanding' (II.i.5); and, third, because, from the outset, the existence of external objects is apparently taken for granted. Ideas of sensible qualities, such as that of yellow, are thus *introduced* as those conveyed into the mind 'from external Objects' (II.i.3), and it is not until much later (IV.xi) that Locke dwells on the notion, which he even there treats as absurd, that there may be no external objects at all. This may seem surprising given that scepticism on this matter was very much in the air at this time, and indeed that, since Berkeley at least, we have been encouraged to see Locke's own philosophical position as positively inviting scepticism, so it needs stressing that Locke himself shows no such anxieties. It is worth noting too that the examples of ideas derived from sensation given in II.i.3—yellow, white, heat, cold, soft, hard, bitter, sweet—are all what Locke will call 'simple' ideas, and that this is no accident. It is an essential part of what is known as Locke's 'compositinalism' that 'simple' ideas are as it were the basic data, and that, given these, other, complex ideas can be formed, such as those of gold, a centaur or a lie. It would be possible to spend quite a lot of time on the distinction between simple and complex ideas, for there is no doubt that it is, at best, not as clear and straightforward as Locke seems to suggest and it has even been argued that he tacitly abandoned it when it becomes embarrassing. Here we can only note that chapters ii to viii of Book II are officially devoted to 'simple' ideas, that chapters ix to xi cover various faculties and operations of the mind, and that from chapter xii on Locke turns to 'complex' ideas. That it is not, however, the issue of Locke's basic compositionism that is of most interest or importance is suggested by the fact that many of the topics that have most engaged readers then and since can be examined without paying special attention to it.⁷ There is much in Book II we could linger on, and some things that we shall.

Book II of the *Essay* is in fact a mine of interesting and often important material, though the significance of much of it can only be fully understood in terms of the philosophical concerns of the time, and even then the significance may not be immediately recognizable, at least from the titles of the relevant chapters. Thus, the unpromising title of chapter xiii, for example, is '*Of simple Modes; and first, of the simple Modes of Space*', but it includes Locke's rejection of the Cartesian claim that a vacuum is inconceivable, building on a distinction between the ideas of body and space established in chapter iv, as well as observations on the notion of substance, though this will not be the main focus of interest until chapter xxiii. Similarly, chapter viii has the unexciting title '*Some farther Considerations concerning our Simple Ideas*', but it is here that we find Locke's classic defence of a distinction between primary and secondary qualities. Chapter xxi—'*Of Power*'—includes a long discussion of human freedom; while if we want to know how Locke takes the idea of God to be derived from experience, we must look to four sections (33–6) almost hidden away towards the end of chapter xxiii. One could go on. Suffice it to say that, though the *Essay* as whole can strike one as rambling and diffuse, so that it becomes tempting to focus on the isolated topics which

interest one, the work is better approached as a whole. Certainly, one needs to be alert to various developing *themes*.

V

Just which themes are the most important must be to some extent a matter of opinion, and it is certainly true that what was judged most significant in Locke's own day often differs from what has most exercised commentators more recently. This is hardly surprising, given Locke's successes in removing what he saw as rubbish, which has meant that what seemed to be important issues then have often ceased to exercise our minds since. Indeed this may be the point to reiterate that in his own time Locke was often regarded as subversive,⁸ to the extent that some were inclined to suspect a not too well hidden agenda. Stillingfleet or Leibniz could be cited here, but as good an example as any would be another critic, Thomas Burnet, who devoted the first of three sets of published *Remarks on the Essay* to polite queries, but who concluded the third set by laying his cards on the table and accusing Locke of not doing the same. The 'key' to deciphering Locke's philosophy, indeed 'the mystery aimed at all along', is he suggests, the supposition 'that God and matter are the whole of the universe'. For Burnet, Locke emerges as a deist, whose system provides for only an inadequate conception of both God and the human soul. Shortly afterwards Berkeley was yet another to be struck by what he saw as dangers implicit in Locke's philosophy, but he was only one of many to be struck by Locke's suggestion that matter might think. In fact, this particular suggestion occurs in just one section (IV.3.6), where Locke presents it only as an illustration of how limited our knowledge is, and it would be rash to assume that there was a hidden agenda. However, the suggestion can be seen as a natural culmination of much that had gone before. It provides one key, though certainly not the only one, to unravelling some of the intricacies of the *Essay*.

Thus the modern reader approaching even the first chapter of Book II may find it odd that, in defending his claim that we are dependent on experience for our ideas, Locke devotes many sections to an attack on the notion that the soul always thinks, either prior to an individual's first sensory experiences, or during the course of his life. For, while there is an obvious connection here with Locke's basic empiricist programme and his rejection of innatism, what we may miss is the significance of the fact that Locke is also undermining the notion that thought is the soul's *essence*. For Descartes at least, this notion was central to a proof that the soul was immaterial, so it is unsurprising that those immersed in this tradition could see Locke's attack on it, and indeed his attack on innatism too, as closely connected with doubts about the soul's immateriality. Indeed, the dangers could only become more apparent when, in II.xxiii, Locke makes it clear that we are ultimately in the dark about what the soul's essence is. Here there is a link between his observations on *corporeal* substance, or the supposed substratum of sensible qualities, which we shall return to, and his comments on the substance underlying mental operations, when he claims that, like the substance of body, 'The substance of Spirit is unknown to us' (sect. 30). Admittedly, chapter xxvii, which was added in the second edition, is for the most part devoted to an account of personal identity which attempts to

disentangle the idea of the continuance of a *person* from that of the persistence of *any* particular sort of substance, and he will hold in IV.iii.6 that our belief in immortality is not threatened whatever the nature of the soul. But the upshot is that Locke can find no *proof* of the natural immortality of the soul. For Locke, of course, this emerges as one illustration of the limits of human knowledge. For many readers, the dangers were clear.⁹

VI

There is, however, a much more dominant theme running through the *Essay*, which connects indeed with the last but underlies much that Locke says in Books II, III and IV, for many of Locke's concerns centre on what might best be described as an exploration of the implications of the corpuscular science associated in particular with Boyle. In Book II, two topics to which this concern is clearly very central are his treatment of primary and secondary qualities in II.viii, and of our idea of substance in II.xxiii. Both have given rise to much discussion, and indeed—with the possible addition of II.xxvii (on personal identity)—these have probably been the most widely discussed chapters in Book II. They are, I think, best treated together, though very often they have been treated separately.

Certainly, that Locke's concern in II.viii is with the implications of the new science can hardly be denied given what he himself says in section 22 where, after noting that 'I have in what just goes before, been engaged in Physical Enquiries a little farther than, perhaps, I intended', he adds that this was

necessary, to make the Nature of Sensation a little understood, and to make the *difference between the Qualities in Bodies, and the Ideas produced by them in the Mind*, to be distinctly conceived, without which it were impossible to discourse intelligibly of them.

Nor is it deniable that the natural philosophy Locke has in mind here is the corpuscular system, which, as Locke explicates it, entails that our ideas of colours, odours and tastes for example correspond to secondary qualities, which are but powers in objects depending on 'the Bulk, Figure, Texture, and Motion of their insensible parts' (sect. 10). There is indeed much that is problematic in Iviii—for example the implications of his claim that our ideas of primary qualities, but not of secondary qualities, are 'resemblances' of them, but the centrality of the new science to what Locke says is evident. What this *opposes* is, basically, Aristotelian science, which would account for our perception of colours for example by reference to the *forms* of the colours in the objects, so it seems reasonable to suppose that when Locke complains that

Men are hardly to be brought to think, that *Sweetness and Whiteness are not really in Manna*; which are but the effects of the operations of *Manna*, by the motion, size, and figure of its Particles on the Eyes and Palate

(sect. 18)

the men he has in mind will include, not just ordinary folk, but supporters of a soon to be defunct metaphysics.

Even if we accept that, however, there is much that could be discussed. It might be asked, for example, what right Locke had to appeal to the new science for the distinction, given that the new science remained controversial; how, if the ‘minute parts’ which are central to the story are ‘insensible’, we could know anything at all about them; and how Locke’s view that some of our ideas are, and some are not, ‘resemblances’ of qualities could ever be established, given, what he will say later, that ‘the Mind...perceives nothing but its own *Ideas*’. Here, so far as the first of the questions is concerned, it must suffice to say that Locke’s general attitude to the corpuscular hypothesis is that it is the best available (IV.iii.16); that, so far as the particles being ‘insensible’ goes, Locke takes this insensibility to be a merely contingent matter, which would be overcome if our senses were more acute; and that, ultimately it seems, his claims about which ideas are and which are not resemblances of qualities could be justified only in terms of an acceptance of the underlying scientific theory. All we need to add perhaps is that this acceptance was not simply dogmatic. Given this theory, and the distinction between ideas that goes with it, facts such that the same water can feel warm to one hand and cool to the other could be accounted for (II.viii.21).¹⁰ The question of what exactly Locke *means* when he says that ‘the Mind...perceives nothing but its own *Ideas*’, is perhaps better left for a while. There is more than one way of understanding it.

For the moment it is more important that we note that notions that figure prominently in II.viii do re-emerge in II.xxiii, where the attention of commentators has often been focused more on what Locke says about our idea of substance *in general*, particularly in the earlier sections, than on the topic suggested by the title, which is ‘*Of our Complex Ideas of Substances*’. On the first of these issues Locke talks of our “obscure and relative *Idea* of Substance in general’ as ‘something... *standing under*’, or supporting qualities; but on the second, where his concern is with our ideas of particular *sorts* of substances such as gold, his claim is that we form these ‘by collecting such Combinations of simple *Ideas*, as are by Experience and Observation of Men’s Senses taken notice of to exist together, and are therefore supposed to flow from the particular internal Constitution, or unknown Essence of that Substance’. As is so often the case with Locke’s *Essay*, there has been no clear consensus on precisely what is going on in this chapter,¹¹ but there is growing agreement that what he is struck by is the unhelpfulness of philosophical theorizing in terms of the abstract categories of *substance* and *accident*, even though he sees our ordinary ways of talking about objects as reflecting an idea of ‘something’ underlying the *observable* qualities of things. Suggestions such as that if we had ‘Senses acute enough’ we would ‘discern the minute particles of Bodies, and the real Constitution on which their sensible Qualities depend’ (sect, 11) give us a very obvious link with II.viii, and underwrite the view that, for Locke, speculations about substance in general bring us to the area of ‘obscure terms and useless questions’, contrasting with the intelligible theorizing of the new science. It remains the case, however, that we have here an area where, in Locke’s reasonable seventeenth-century view, the limits of human understanding are clear. Had we ‘Senses acute enough’ we would indeed be able to penetrate into the inner natures of things, but the truth is that we don’t.

VII

The programme announced in I.i.3 would lead one to expect that, having dealt with the ‘materials’ of knowledge, Locke would next consider knowledge itself. But, as he says at the very end of Book II, he has been struck by the fact that ‘there is so close a connexion between *Ideas* and Words...that it is impossible to speak clearly and distinctly of our Knowledge...without considering, first, the Nature, Use, and Signification of Language’. In Book III, therefore, he gives us his account of language.

The basic picture he offers in the first two chapters in Book III is fairly simple. Words are not necessary for thought itself, but primarily in order for men to communicate their thoughts to others, or ‘to record their own Thoughts for the Assistance of their own Memory’ (III.ii.2). Words, or significant sounds, are therefore signs of our internal conceptions, and can ‘properly and immediately signify nothing but the *Ideas*, that are in the Mind of the Speaker’ (sect. 4). Men do, however, give them a secondary or ‘secret’ reference in that, precisely because language is used to communicate, they assume that the words they use to signify their own ideas mark the same ideas in the minds of those they converse with, while, ‘Because *Men* would not be thought to talk *barely* of their own Imaginations, but of Things as they really are’ they often take them to stand for ‘*the reality of Things*’ (sect. 5). Locke’s cautionary words at this point—‘it is a perverting the use of Words, and brings unavoidable Obscurity and Confusion into their Signification, whenever we make them stand for any thing, but those *Ideas* we have in our own Minds’—may strike us as simply perverse—surely if I say ‘John is bald’ I do mean to refer to John himself, but the implications of the remark become much clearer later. Sticking for the moment with the opening chapters, it is necessary only to add that Locke is very conscious that most words do not signify only particular, individual things. Many stand for general ideas.

There are, however, nine chapters still to come in Book III, and it must be said at once that here, as quite often in the *Essay*, one becomes conscious of a mismatch between what probably most interests Locke himself—the points he most wants to get across—and what has most caught the attention of critics and commentators since. This can indeed be illustrated by the fact that Book III ends with three chapters on the ‘abuses’ and ‘imperfections’ of words, and the ‘remedies’ for these, which are clearly important to Locke, given his overall aims, though they have concerned commentators less. It is, however, also apparent even if one turns to chapter iii, which is certainly the most widely discussed. It is entitled ‘*Of General Terms*’.

Clearly the topic of general terms, and the general ideas which they signify, is important to Locke, if only because, as will become plain in Book IV, most of our knowledge will be found to consist in general propositions; but, since Berkeley at least, what has most caught the attention of commentators has been his account of what might be termed the mechanics of abstraction, or the process by which Locke takes it we form general ideas. Taking the word ‘man’ as an example, Locke holds that children will start with the ideas of individuals—Peter, James, Mary and Jane—and then, having noted certain resemblances, frame an idea in which they ‘leave out...that which is peculiar to

each, and retain only what is common to them all'. Berkeley was to devote the bulk of the Introduction to the *Principles* to attacking abstraction, insisting, for example, that 'the idea of man that I frame to my self, must be either of a white, or a black, or a tawny, a straight, or a crooked, a tall, or a low, or a middle-sized man' and that 'I cannot by any effort of thought conceive the abstract idea above described', and his criticisms have often focused minds on this aspect of Locke's thought. By contrast, what seems to matter most to Locke is the distinction between real and nominal essences which he spells out later on in the chapter, to which the account of abstraction is a prolegomenon.

Certainly, this distinction brings us right back to a dominant theme which we have already looked at, for 'the real Essences of corporeal Substances' are located in the 'real, but unknown Constitution of their insensible Parts, from which flow those sensible Qualities, which serve us to distinguish them one from another' (sect. 17). And the dominant notion that emerges now is that we rank things into sorts, neither on the basis of these real essences, which we do not know, nor on the basis of the real essences of the scholastics, which they think of as 'a certain number of Forms or Molds, wherein all natural Things, that exist, are cast, and do equally partake' (ibid.), but rather according to what Locke calls 'nominal' essences. These are, indeed, the abstract ideas already covered, but the crucial thought is that we categorize things into sorts on the basis of certain *observed* properties which we choose to associate as constituting one sort. Negatively, then, the dominant concern of the chapter is another piece of rubbish-removal, in this case the 'real essences' or 'forms' of the schools;¹² positively it is an account of classification according to which 'the sorting of Things, is the Workmanship of the Understanding' (sect. 12). More generally, and as we shall see, the account prepares the way for what Locke will say about the science of nature in Book IV.

There is of course much more in Book III, including treatments of the names of simple ideas in chapter iv, of the names of mixed modes and relations ('adultery' and 'gratitude' are among the examples) in chapter v, of the names of substances again in chapter vi, and of particles (words such as 'but' and the 'is' of predication) in chapter vii, but this book concludes with the three chapters on remedying 'abuses' and 'imperfections'. Recalling the concern Locke expressed in his Epistle to the Reader about 'the learned but frivolous use of uncouth, affected, or intelligible Terms', we can understand that these chapters are not peripheral to Locke's purposes, and his reference here to 'gibberish' such as the Epicurean notion of '*endeavour towards Motion* in their Atoms, when at rest' (III.x.14) can serve as just one example of the sort of thing he has in mind. In fact he casts his net wide. His observation that, in common use, 'body' and 'extension' stand for distinct ideas, but that 'there are those who find it necessary to confound their signification' (sect. 6) is an obvious reference to the Cartesians.¹³

VIII

Given that one of the main aims of the *Essay* is to determine the scope of human knowledge, it perhaps comes as something of an anticlimax that, in the event, Locke allows very little that he will count as knowledge. That this will be so is strongly suggested by the very first chapter in Book IV where he defines 'knowledge' as *the*

perception of the connexion and agreement, or disagreement and repugnancy of any of our Ideas', giving as the first two examples '*White is not Black*' and '*the three Angles of a Triangle are equal to two right ones*'. Locke in fact holds that the first of these involves one of four sorts of agreement or disagreement on which knowledge can be based—'*Identity, or Diversity*'—while the second is based on what he calls '*relation*'. The other sorts of perceived agreement are '*Co-existence, or necessary connexion*' (one example given is that '*Iron is susceptible of magnetical Impressions*', which, in so far as we know it, will turn out to be construed as what we would now term an analytic proposition), and '*Real Existence*', the one example given in IV.i being '*GOD is*'. When we find that in chapter ii he tells us that the primary ways of knowing are 'intuition' (anyone who has the two ideas will simply see that white is not black) and 'demonstration', of which mathematical proofs are the favoured model, the strong rationalist streak in Locke becomes apparent. Indeed, for him, 'intuition', or self-evidence, lies at the root of nearly all he recognizes as 'knowledge', for demonstration turns out to be based on nothing more than a series of intuitions. A good illustration of how this is supposed to work would be the series of supposed intuitions which he offers in IV.x as constituting a demonstration that God exists.

Locke, then, offers a very restrictive account of 'knowledge', and as the chapters proceed we find as much attention being given to things we cannot hope to know with certainty as to what we can. Examples of things lying beyond the scope of our knowledge thus turn out to include that man cannot be nourished by stones (IV.vi.15)—the explanation here being that our idea of man is that of 'a Body of the ordinary shape, with Sense, voluntary Motion, and Reason join'd to it' and we can neither intuit nor demonstrate by our reason any 'necessary connexion' between that and what will nourish him—and that opium will make a man sleep (IV.iii.25), but these could be multiplied. The proposition that gold is malleable for example *is* indeed certainly known to be true, but only if, as Locke puts it, '*Malleableness* be a part of the complex *Idea* the word *Gold* stands for'. If we happen not to include malleability in the definition of gold, or in the abstract idea, this again is something that cannot certainly be known (IV.vi.9). As he puts it in IV.viii.9,

the general *Propositions* that are made *about Substances, if they are certain, are for the most part but trifling*, and if they are instructive, are uncertain, and such as we can have no knowledge of their real Truth, how much soever constant Observation and Analogy may assist our Judgments in guessing.

There are indeed *some* areas where Locke's insistence that we lack 'knowledge' is, if not uncontroversial, at least such as to reflect a not unreasonable caution, as for example his denial that we know that matter cannot think, but equally there are many that seem surprising. If I am not now perceiving any men, for example, Locke will deny that I 'know' there are other men in the world (IV.xi.9).

One question that arises here, then, is precisely why Locke tolerates an account of knowledge that is as restrictive as this. And here no doubt at least part of the answer must be that he simply accepts a tradition whereby 'knowledge' does require a very high degree of certainty, and is indeed tied to the notion of necessity. However, this judgement

must be tempered by three further observations. One is that, for all his parsimony when it comes to recognizing ‘knowledge’, he does allow some items that, to us, may seem less certain than they did to him. The second is that in some cases where he is bound to say we do and perhaps always will lack ‘knowledge’, he is still guided by a view of what acquiring knowledge in these cases would be like. And the third is that, though he sees that, with the requirements for ‘knowledge’ set this high, our ‘knowledge’ will be very limited, he also insists that what we are then bound to call ‘probability’ may be of a very high order indeed. These three points are essential to an understanding of Locke’s overall position, so I shall elaborate on them briefly in turn.

First, then, it is indeed true that Locke denies that we ‘know’ certain things we would normally suppose we knew, but what we also find is that there are two areas of fundamental importance in which he believes demonstrability is attainable. The obvious example here is his supposed proof of the existence of God which, though flawed, he took to be a sound demonstration, but we should note too his repeated claim that ‘*Morality is capable of Demonstration*, as well as *Mathematicks*’ (III.xi.16, cf. IV.iii.18, IV.iv.7 and IV.xii.8). To be sure, Locke never claimed to have developed the system he envisaged, but the mere fact that he thought it possible in principle is significant. For if, starting from God’s existence, and the supposed self-evidence of a creature’s obligations to his creator, man could come by certainty in this area at least, ‘knowledge’ would certainly transcend the trivial. As he put it as early as I.i.5,

How short soever [men’s] Knowledge may come of an universal, or perfect Comprehension of whatever is, it yet secures their great Concernments, that they have Light enough to lead them to the Knowledge of their Maker, and the sight of their own Duties.

Indeed, the second point connects with this, for if Euclidean geometry is seen as providing the model for a demonstrative morality, it is also the model of what it would be like to have certainty in natural philosophy. For here, Locke’s insistence that we don’t for example ‘know’ that hemlock will always kill is combined with thoughts about what would be knowable to one who *could* penetrate into the real essences of substances. Hence his observation in IV.iii.25 that could we but penetrate into the internal structure of things ‘we should know without Trial several of their Operations one upon another, as we do now the Properties of a Square, or a Triangle’ (IV.iii.25). His assertion that ‘Could any one discover a necessary connexion between *Malleableness*, and the *Colour* or *Weight* of *Gold*...he might make a *certain* universal Proposition concerning *Gold* in this respect’ thus goes along with pessimism about the possibility of *our* discovering any such a connection, but also with a view about what such a discovery would be like. As he has it, ‘That *all Gold is malleable*, would be as *certain* as of this, *The three Angles of all right-lined Triangles, are equal to two right ones*’ (IV.vi.10).

The strong rationalist streak in Locke is thus evident here, in his pessimism about *our* acquiring much by way of ‘knowledge’ in this area, quite as much as it is in his optimism about the possibility of a demonstrative morality, but it also connects with his lack of any deep concern that our ‘knowledge’ is, on his view, limited. And this brings us to the third point, which concerns the stress he put on the notion that ‘probability’ is not to be

despised. For, on Locke’s account, to deny that I ‘know’ that man cannot be nourished by stones turns out to be no more than to assert that this truth is not self-evident or demonstrable, not that ‘constant Observation and Analogy’ don’t justify the high degree of assurance we in fact have, let alone that there are reasonable grounds for doubt. The tone here was in fact set back in I.i.5 with his observation that we should ‘not peremptorily, or intemperately require Demonstration, and demand Certainty, where Probability only is to be had, and which is sufficient to govern all our Concernments’, and the same note is struck later, in IV.xi.10. A truth may be ‘plain and clear’, though not strictly ‘known’.

IX

It would thus be a mistake to describe Locke as a sceptic, at least solely on the basis that he denies us ‘knowledge’ in certain areas where we would normally suppose we had it.¹⁴ Admittedly there are areas in which he thinks our lack of understanding goes deep—‘We have the *Ideas* of *Matter* and *Thinking*, but possibly shall never be able to know, whether any mere material Being thinks, or no’ (IV.iii.6), and we simply don’t understand for example ‘how any *size, figure, or motion* of any Particles, can possibly produce in us the *Idea* of any *Colour, Taste, or Sound* whatsoever’ (IV.iii.13)—but in matters that affect our practice, such as that stones will not nourish us, all we lack is demonstrative *proofs*. The most that can be said is that there may be one particular area where Locke should have been more sceptical than he was. This brings us back to the area of ‘real existence’, and in particular to sensitive knowledge.

The truth here is that, though when he introduces his account of knowledge in IV.i the only example Locke gives of our knowledge of real existence is our demonstrative knowledge that God exists, he in fact recognizes not only our supposedly intuitive knowledge of our own existence (IV.ix.3), but knowledge of the existence of external objects. Admittedly, the scope of this knowledge turns out to be very limited—broadly I ‘know’ that an object exists only when I actually sense it—but all the same it has often been questioned whether Locke is entitled to claim even this. There are two difficulties here. One is that Locke defines ‘knowledge’ as the perception of the agreements and disagreements of *ideas*, and it seems doubtful that this can allow for ‘knowledge’ of the existence of *anything* which is not itself an idea, whether God, oneself, or any external thing; and the second is whether he is entitled to claim even an assurance of the existence of bodies, given his apparent belief that we never perceive any. This second difficulty is at best tangentially connected with the definition of ‘knowledge’, and would arise even without it. His notorious comment in IV.iv.3 that ‘the Mind...perceives nothing but its own *Ideas*’ raises it very forcibly, while bringing us back to the topic of Locke’s idea of ‘idea’.

On the first of these supposed difficulties, all that can be said here is that it seems that Locke himself did not think that his definition ruled out any knowledge of ‘real existence’, in that he supposed the existence of God at least could be demonstrated by attending solely to our ideas. What is supposedly established here is, apparently, still a relationship between two ideas, those of God and of real existence. He makes a similar

point to Stillingfleet in defending his position on sensitive knowledge,¹⁵ though in the *Essay* itself there are indications that he does have some misgivings about whether, strictly, this should count as ‘knowledge’ at all.¹⁶ Even there, however, he certainly claims that in this area ‘we are provided with an Evidence, that puts us past doubting’, so the real issue is whether he was entitled to claim even that. At this stage it is the second difficulty that becomes acute. Very often, traditionally even, Locke has been seen as adopting a Representative Theory of Perception which positively invites scepticism in this area. If ‘the Mind...perceives nothing but its own *Ideas*’ it seems we do *not* perceive tables and chairs, and this appears to make their existence genuinely questionable. That Locke himself shows little sign of anxiety about this hardly lessens the difficulty.

Unfortunately we can do little more than note this apparent problem, apart from observing that it is of some historical importance (Berkeley’s idealism will have it as its starting-point) and that there has been much controversy on just what view of perception Locke is committed to. Whether those commentators are right who claim that Locke’s ideas of sense are ‘objects’ or ‘entities’, and indeed the only objects of which we are ever aware, rather than ‘perceptions’, or states of awareness *of the things themselves*, lies beyond the scope of an introductory essay. What must at least be conceded, however, is that there is undeniably a strong streak of what might be called ‘perceptual realism’ in Locke; that in many passages he does talk of perceiving the external things, and that even the claim that ‘the Mind...perceives nothing but its own *Ideas*’ can be interpreted in the light of his talk of ideas as being ‘found’ in the things themselves.¹⁷ Perhaps, but only perhaps, Locke is simply inconsistent, but claims such as that ‘we immediately by our Senses perceive in *Fire* its Heat and Colour’ (II.xxiii.7) and suggestions that what we do *not* perceive is the corpuscular structuring on which these qualities depend are significant. A strong case can be made for the view that the key to Locke’s thinking lies there.

X

It goes without saying that there is much in Locke’s *Essay* that has not been discussed here. That however is inevitable. His interest is perennial and his importance clear, but just what most interests a particular reader will depend on a number of factors. To his contemporaries his attacks on what he saw as ‘rubbish’ lying in the way to knowledge were of genuine significance, while the perceived implications of his epistemology for theology could and did cause deep concern. The importance he himself attached to, for example, his attack on ‘enthusiasm’ in religion in IV.xix is, though it was only introduced in the fourth edition, evident from its vigour, but the chapter is omitted from a recent abridgement. We now know that Berkeley was soon to attack the very notion of ‘matter’, or of bodies existing without the mind, and though he certainly wasn’t just addressing Locke, Locke has often been seen as his prime target. Locke’s doctrines concerning ideas have thus come to be seen as a stepping-stone to Berkeley’s idealism and indeed to Hume’s scepticism. His accounts of abstract ideas, primary and secondary qualities, substance and so on have been examined over and over again in the light of Berkeley’s criticisms, while others see them as significant in their own right. Again, Locke’s account

of personal identity has been no more than touched on here, but he was the first to raise the issue in the form in which it continues to be discussed today, and his contribution is admired and, still, widely discussed. Other features of his position have been warmly praised—one commentator claims that he handles the notion of real essence ‘almost flawlessly’¹⁸—yet often he has been used for target practice, and Gilbert Ryle once suggested, though perhaps not wholly seriously, that ‘nearly every youthful student of philosophy both can and does in about his second essay refute Locke’s entire Theory of Knowledge’.¹⁹ I imagine that few, certainly few who have delved at all deeply into his thinking, would now second that sort of judgement, but for all that the correct interpretation of his position remains a matter of controversy at almost every point. This is perhaps hardly surprising, for Locke stands at a crucial point in the development of the history of philosophy, epitomizing the shift from ways of thinking that have become largely foreign to us, to ways that seem familiar. University courses entitled ‘History of Modern Philosophy’ thus customarily have Locke’s *Essay* as their first text originally written in English. His problems have become, in a sense, our problems. Yet we find them emerging from a background that has become less familiar. Getting the most out of Locke’s philosophy will therefore involve using hindsight, for we know its fruits, but also understanding the world from which it emerged. It is only if we do both that Locke’s true genius can be seen.

NOTES

- 1 References to the *Essay* are to the Clarendon Edition, [3.3], and cite book, chapter and section number. Except in the case of the Epistle to the Reader the italics have been left unchanged.
- 2 In his *John Locke* ([3.22], 31–5), first published in 1937, R.I. Aaron noted Leibniz’s comment that Locke ‘writes obviously in the spirit of Gassendi’, and argued that the influence of Gassendi’s thought on him was considerable. Further discussions include Kroll, [3.52], and Michael, [3.56].
- 3 Aaron, [3.22], 27. However, both he and Gibson, [3.25], 236–41, also draw attention to important differences of view. For one thing, most of the Cambridge Platonists held that there were innate ideas, and as Gibson notes ‘nothing, Cudworth declared, could more directly promote atheism than the Aristotelian maxim, “Nihil est in intellectu quod non fit prius in sensu”’.
- 4 As will emerge, for Locke we have ideas in sense experience, and also in thinking and reasoning. The question of whether ideas are images can therefore emerge at two levels. Some have held that he takes the immediate object of perception when we see or otherwise perceive an object to be itself an image, or an entity which somehow stands proxy for the object, while others seem more concerned with whether the ideas that we might now call concepts are images. No doubt the relationship between these two issues is important, but it seems fair to say that most often it has been his view of sense perception that has exercised his readers, though it is ideas as concepts that feature most prominently in the *Essay*. When, however, Ayers claims ([3.21], 1:44) that, ‘the grounds for holding him an imagist are conclusive’, it is clear from the context both that he regards this judgement as controversial, and that his eye is fixed on ideas as they function in thought. Certainly, the nature of Locke’s idea of ‘idea’ continues to be much discussed.

- 5 For an examination of Descartes's doctrine of innate ideas, which includes the relevant passages, see Anthony Kenny, *Descartes: A Study of His Philosophy*, New York, Random House, 1968, ch. 5.
- 6 Mabbott, [4.26], 80. Even when this was published, however, a debate was in progress over Noam Chomsky's claim that his work in linguistics vindicated the rationalists on this issue. This claim was controversial, and it was widely criticized. See, for example, D.E.Cooper, 'Innateness: Old and New', *Philosophical Review* 81 (1972): 465–83.
- 7 Which is not to say that nothing is lost. Aaron, [3.22], 110–14, and Gibson, [3.25], ch. 3, are among commentators who have played down its importance, but for a survey which takes it seriously, see Stewart, [3.58]. Locke's compositionism and its historical background also looms large in, for example Schouls, [3.38], and Ayers, [3.44].
- 8 This notion did not rest only on what he wrote in the *Essay*, nor simply on the issue I shall concentrate on here. His publication of a work entitled *The Reasonableness of Christianity* in 1695 fuelled doubts as to his orthodoxy, particularly on doctrines such as those of original sin and the Trinity, while his correspondence with Stillingfleet focused attention on the supposed theological implications of the *Essay*.
- 9 This is well documented by Yolton, [3.15], 148–66, cf. [3.40], ch. 1 and *passim*, and [3.41]. If, from our standpoint it might seem absurd that Locke's contemporaries made so much of a suggestion that is far from prominent in the *Essay*, we should be clear that things looked very different then, as they did to Leibniz for example. His reaction is examined by Jolley, [3.37], who argues that 'For all its apparent randomness and lack of direction, the *New Essays on Human Understanding* is a book dedicated to defending the idea of a simple, immaterial and naturally immortal soul' (p. 7).
- 10 This is among a number of phenomena instanced in II.viii. 16–21, which have, since Berkeley at least, often been read as revealing Locke's acceptance of what is called 'the argument from the relativity of perception' to *prove* or *demonstrate* the subjectivity of certain supposed qualities. For a quite different, and more plausible account, see Alexander, [3.35], 124–9.
- 11 See for example Ayers, [3.43], including the references given on p. 78, n. 2.
- 12 This is just one of a number of references in the *Essay* to the substantial forms of the schools. For example, in IV.iv.13 Locke again protests the view that 'there were a certain number of these Essences, wherein all Things, as in Molds, were cast and formed'. It is strongly arguable that commentators who fail to attach due importance to Locke's dissatisfaction with this scholastic notion can only misunderstand many of Locke's better known pronouncements, including not only a problem he raises earlier in IV.iv—that of how we can know that our ideas 'agree with Things themselves'—and his answer to it as it relates to our ideas of substances, but also his insistence that words signify ideas, the account of knowledge given in Book IV, and even the content of II.xxiii. There too, in section 3, we find a significant reference to the suspect 'substantial forms' of the schools. (For a brief account of the doctrine, as understood by Locke and his contemporaries, see Woolhouse, [3.33], sect. 12.)
- 13 These examples are of 'abuses', but Locke's treatment of the 'imperfections' of words is also important. His initially puzzling insistence that 'Words...can properly and immediately signify nothing but the *Ideas*, that are in the Mind of the Speaker' underlies his analysis of the difficulties we get into with the names of mixed modes (such as 'murder') and substances, and the remedies for these. An illustration is a dispute between physicians he reports on in III.ix.16 over 'whether any Liquor passed through the Filaments of the Nerves'. This was largely resolved when they saw that 'each of them made [the term 'liquor'] a sign

of a different complex *Idea*'.

- 14 References to Locke as a sceptical philosopher that are found in the literature are, however, not wholly unjustified if they are linked to his observations about the limits of human understanding and, in particular, to his claims about our inability to penetrate into the real essences of things. The one point I want to insist on is that, for Locke, the claim that I don't 'know' for example that stones won't nourish me does not entail suspension of judgement, nor any suggestion that there are reasonable grounds for doubt.
- 15 Locke, [3.2], 4:360.
- 16 Thus Locke's account of the 'degrees' of our knowledge in IV.ii dwells on intuition and demonstration, and he observes at the beginning of section 14 that 'These two...are the degrees of our Knowledge; whatever comes short of one of these, with what assurance soever embraced, is but Faith, or Opinion, but not Knowledge'. On the face of it, this *should* rule out knowledge of the existence of things 'without us', for in the same section he admits that this falls short of 'either of the foregoing degrees of certainty'. All the same, it 'passes under the name of Knowledge', and this is something Locke immediately endorses. Similarly, his observation in IV.xi.3 that in this area we have 'an assurance that *deserves the name of Knowledge*' is not unnaturally read as conceding that he is making it 'knowledge' by special dispensation.
- 17 Locke's only sustained treatment of our knowledge of the existence of things 'without us' is in IV.xi, so it should be noted that here as in other key passages (e.g. II.viii.12) there is no suggestion that we do not perceive such objects. Indeed, it is said at the outset that it is 'when by actual operating upon him, it makes it self perceived by him' that a man knows that an external object exists. This is the sort of thing one has in mind when one talks of a strong streak of perceptual realism in Locke, but it has of course been recognized by those who hold that it cannot be taken at face value. The issue then becomes, I think, whether other things Locke says suggest that, really, all we are aware of is mind-dependent items, or whether the dominant thought is simply that, though we are aware of the things, the way they appear to us will depend in large part on facts about our sensory apparatus. For an analysis of the issues that divide commentators here, see Tipton, [3.59].
- 18 Bennet, [3.36], 120.
- 19 Ryle [3.57], 147. The remark, made in conversation with Bertrand Russell, was set in the context of a recognition that 'Locke made a bigger difference to the whole intellectual climate of mankind than anyone had done since Aristotle'. The paper in which he reports it is thus not dismissive, but rather Ryle's attempt to explain what Locke's great contribution was.

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CHAPTER 11

Leibniz: truth, knowledge and metaphysics

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Leibniz is in important respects the exception among the great philosophers of the seventeenth century. The major thinkers of the period characteristically proclaim the need to reject the philosophical tradition; in their different ways Descartes, Hobbes and Spinoza all insist that new foundations must be laid if philosophy is to achieve any sure and lasting results. Even Malebranche, who seeks to revive the teaching of Augustine, joins in the general chorus of condemnation of Aristotle and his legacy. Leibniz, by contrast, does not share in this revolutionary fervour. Although he is capable of criticizing the Aristotelian tradition, he is also careful to remark that much gold is buried in the dross.¹ Leibniz of course is as enthusiastic as any of his contemporaries about the new mechanistic science; indeed, he is one of its most distinguished advocates and exponents. But by temperament Leibniz is not a revolutionary but a synthesizer; in philosophy, as in politics and religion, he deliberately sets out to mediate between opposing camps. As he himself said, 'the majority of the sects are right in a large part of what they assert but not so much in what they deny'.²

The distinctive character of Leibniz's reconciling project needs to be made a little clearer. Other philosophers in the period had of course also tried to show that the new science was compatible with natural theology. Descartes, for example, sought to find a place in his philosophy for such orthodox doctrines as the existence of a personal God and the immortality of the soul. But in contrast with Descartes, Leibniz sought to retain as much as possible of the Aristotelian framework and to combine it with the emerging scientific and philosophical ideas; we shall see, for example, that Leibniz seeks to fuse Aristotelian and Cartesian conceptions of the soul. The synthesizing spirit of Leibniz's philosophy is one of its fascinations, but it is also a source of weakness; Leibniz sometimes seems to be trying to reconcile the irreconcilable.

The structure of the present chapter is as follows. The first three sections are devoted to the analysis of Leibniz's general metaphysics. In the first two sections we shall see how Leibniz formulates an Aristotelian theory of corporeal substance in his first mature work, the *Discourse on Metaphysics* (1686), and how he seemingly attempts to derive a number of metaphysical doctrines from purely logical considerations concerning truth. In the third section we shall see

how in his later writings Leibniz abandons his theory of corporeal substance for a form of idealism; this is the famous doctrine of monads. In the fourth section we shall look at the anti-Newtonian theories of space and time which Leibniz formulated at the very end of his career. In the following section we shall study Leibniz's somewhat ill-conceived attempt to apply his general theory of causality to the problem of the relationship between mind and body which Descartes bequeathed to his successors. Finally, in the last two sections we shall analyse Leibniz's psychology and his theory of knowledge; here we shall see how Leibniz seeks to reinterpret some ideas deriving from Descartes and Spinoza.

THE ARISTOTELIAN BACKGROUND: SUBSTANCE AND AGGREGATE

The synthesizing spirit of Leibniz's philosophy is clearly visible in Leibniz's first mature work, the *Discourse on Metaphysics*, and in the correspondence with Arnauld which it precipitated. One way of looking at these works is to see that Leibniz is trying to revive Aristotelian doctrines about substance and to show that they are in conformity with the new science; indeed, they are largely free of the conceptual difficulties which plague the more recent Cartesian ideas. It is true that Leibniz thinks that Aristotle did not say the last word about substance. But it is still possible to see Leibniz as engaged in extending, rather than replacing, the Aristotelian project.

We must begin by reminding ourselves of two very influential claims that Aristotle made about substance. First, for Aristotle, a substance is what may be termed an 'ultimate subject of predication'. Thus, by this criterion Alexander is a substance because while we can predicate properties of Alexander—we can say, for instance, that he was a Macedonian—he himself is not predicable of anything else; there is nothing of which we can say that it is an Alexander. To put the point another way, the noun 'Alexander' can appear only in the subject position in a sentence and never in the predicate position. By contrast, honesty is a subject of predication but not an ultimate one; for though we can predicate properties of honesty, honesty itself is predicable of other things—for instance, a person who possesses the virtue.³ Second, in response to the characteristically Greek preoccupation with flux, Aristotle claims that substances are substrata of change: 'The most distinctive mark of substance appears to be that while remaining numerically one and the same, it is capable of admitting contradictory qualities.'⁴ Thus, although he never instantiates both properties simultaneously, Alexander as an infant is two feet tall and as an adult, say, six feet tall. To say that Alexander is a substance is a way of drawing our attention to the fact that one and the same individual persists through the change in qualities. The relation between these two claims about substance is not entirely clear, but on the face of it, they do not seem to be equivalent; it seems that there could be items which are ultimate subjects of predication, even though they do not persist through time. A

lightning flash, for example, is instantaneous, but it is a subject of predication which is not itself obviously predicable of anything else.

Although Leibnizian substances characteristically satisfy the condition, in the *Discourse on Metaphysics* Leibniz is silent, at least officially, about the idea that substances are substrata of change. But early on in this work Leibniz approvingly cites Aristotle's claim that substances are ultimate subjects of predication: 'It is of course true that when several predicates are attributed to a single subject, and this subject is not attributed to any other, it is called an individual substance.'⁵ It is true that in the next breath Leibniz indicates that this definition is not fully satisfactory: 'But this is not enough, and such an explanation is merely nominal.'⁶ Presumably Leibniz's point is, not that the definition fails to capture necessary and sufficient conditions, but that it is somehow shallow compared with the one which, as we shall see, he goes on to propose. But in any case, whatever the grounds for his partial dissatisfaction, Leibniz seems to make fruitful use of the Aristotelian idea that substances are ultimate subjects of predication. In the Arnauld correspondence, in particular, Leibniz deploys this idea in order to reach anti-Cartesian conclusions about the status of bodies and at least to prepare the ground for the very Aristotelian thesis that the paradigm substances are organisms.

In the correspondence with Arnauld Leibniz argues for a remarkable negative thesis; he seeks to show that most of the things which both the man in the street and the Cartesians take to be substances are not really substances at all. In general, Leibniz's thesis is that no non-organic body is a substance. The argument in outline is as follows:

- 1 No aggregate is an ultimate subject of predication.
- 2 All non-organic bodies are aggregates.
- 3 Therefore, no non-organic body is an ultimate subject of predication (and hence not a substance).

The basic idea behind the argument is that if the notion of an ultimate subject of predication is thought through, we shall see that it disqualifies tables, chairs and the like from counting as substances.

Why does Leibniz think that an aggregate, such as an army, is not an ultimate subject of predication? An army of course is at least a subject of predication in the sense that we can ascribe various properties to it; we can say, for example, of a given army that it fought bravely. But it is not an ultimate subject of predication because in Leibniz's words, 'it seems...that what constitutes the essence of an entity through aggregation is only a state of being of its constituent entities; for example, what constitutes the essence of an army is only a state of being of the constituent men'.⁷ In the words of one recent commentator,

an aggregate is a state of being of those entities that compose it in the sense that any truths about the aggregate can be expressed in propositions that

ascribe modes and states to the composing entities without any need to refer to the aggregate itself.⁸

Thus, a proposition such as 'The army fought bravely' is reducible to propositions which ascribe various properties to the members of the aggregate, namely, the individual soldiers.

Perhaps more controversial is the second premise of the argument. A non-organic body such as a block of marble does not seem to be on a par with clear-cut examples of aggregates such as an army or a flock of sheep. Leibniz must admit that a block of marble is more tightly bonded than these aggregates, but he would claim that this fact is not metaphysically significant; a block of marble is no less an entity by aggregation than a flock of sheep.⁹ But in that case what is a block of marble an aggregate of? At first sight it seems that Leibniz would say that a block of marble is an aggregate of physical parts which are themselves aggregates and so on *ad infinitum*. But though he shows some hesitancy on this issue, in the correspondence with Arnauld Leibniz suggests that a marble slab is an aggregate of organisms no less than a flock of sheep: 'perhaps this marble block is merely a heap of an infinite number of living bodies, or is like a lake full of fish, although these animals are ordinarily visible only in half-rotten bodies.'¹⁰ This thesis draws support from the empirical discoveries made possible by the recent invention of the microscope.

Thus Leibniz reaches an important negative conclusion which is in obvious conflict with Cartesian theses; no non-organic bodies are substances.¹¹ But this conclusion still leaves open the question of Leibniz's positive views on the issue of what items qualify as substances. Recent work has shown that around the time of the *Discourse on Metaphysics* Leibniz was remarkably hesitant on this issue; indeed, he flirted with a number of possible positions.¹² He was perhaps particularly uncertain as to whether anything physical counted as a substance, but as we shall see, he also had doubts about the ontological status of souls. Despite his hesitations, the view to which he seems to have been most attracted is that organisms, and perhaps souls, are the only substances; organisms are what Leibniz calls 'corporeal substances'. With regard to physical objects, then, Leibniz's teaching is that every body is either itself a corporeal substance or an aggregate of corporeal substances.

Leibniz's somewhat tentative positive thesis raises an obvious question: why are organisms better candidates for substantiality than non-organic bodies? Leibniz's short answer to this question is clear: organisms are not just aggregates but true unities, and every entity which is endowed with a true unity is a substance. For Leibniz, an organism is truly one by virtue of possessing a soul or principle of life which confers unity on it; in scholastic terminology the soul is said to inform the body. Indeed, Leibniz even goes so far as to revive the scholastic doctrine that the soul is the substantial form of the body; here he is drawing on the fact that in medieval philosophy it is the presence of a substantial form that makes a body a natural unity.¹³

The thesis that only the presence of a soul can confer unity on a body, and thus make it a genuine substance rather than an aggregate, obviously needs to be justified. Leibniz is not totally forthcoming on this subject, but he does throw out some suggestive hints which make it possible for us to see what he has in mind. In correspondence with Arnauld he explains that the unity of an aggregate is a matter of convention only.¹⁴ The unity of a university department, for example, is conventional in the sense that it depends on certain human interests; for teaching purposes, let us say, it is convenient to group a Leibniz specialist with a philosopher of language rather than with a seventeenth-century historian. But there is no metaphysical fact of the matter which determines this classification. The unity of a human body, however, is not at all like that. The fact that my hand and foot belong together, but not my hand and the table in front of me, is determined not by convention but by nature, or rather by the metaphysical truth that my soul animates my body. I can, for example, feel pain in my hand and foot, but I cannot feel pain in the table in front of me. Thus the presence of a soul provides a wholly non-conventional basis for classifying some physical parts together.

Leibniz's doctrine that organisms are true substances was the target of two shrewd objections from Arnauld. In the first place, Arnauld objected that Leibniz seemed to be smuggling in a merely stipulative definition of substance. As Arnauld sees it, Leibniz redefines substance as that which has a true unity, and on this basis he reaches the anti-Cartesian conclusion that no bodies except organisms are substances. But in that case he has covertly abandoned the traditional definition of substance as that which is neither a mode nor state; using more Aristotelian language, we could restate Arnauld's point by saying that Leibniz has abandoned the definition of substance as an ultimate subject of predication.¹⁵ Leibniz is of course entitled to offer a stipulative definition of substance if he chooses, but he is not entitled to switch back and forth between such a definition and a more traditional one. Leibniz's reply to this objection is important: he answers Arnauld by saying that far from abandoning Aristotle's definition of substance he is simply drawing out a consequence of it: being a true unity is implied by being an ultimate subject of predication. Indeed, the concepts of a true unity and of an ultimate subject of predication are logically equivalent. 'To be brief, I hold as axiomatic the identical proposition, which varies only in emphasis: that what is not truly *one* entity is not truly *one entity* either. It has always been thought that 'one' and 'entity' are interchangeable.'¹⁶

Arnauld also objected to Leibniz's reintroduction of animal souls or substantial forms. As a good Cartesian, Arnauld made the familiar points against this doctrine; it is superfluous for the purposes of explaining animal behaviour, and it raises embarrassing difficulties concerning the status of animal souls after the destruction of their bodies. Arnauld cited the case of a worm both parts of which, when cut in two, continue to move as before, and challenged Leibniz as to what he would say about it.¹⁷ The serious philosophical point behind Arnauld's raillery is that an animal is no more a genuine unity than a non-organic body such as a table. Thus the chopping up of a worm is in principle no different from

the chopping up of a table; in both cases we are simply left with parts of the original body. In reply Leibniz seeks to reconcile the facts about the case of the worm with his thesis that animals are genuine substances which possess true unity by virtue of the souls which animate them. From the fact that both parts of the worm continue to move, it does not follow that we must postulate either two souls or none. The soul may continue to animate one of the parts, and it is this part which is strictly to be identified with the worm. In this sense the worm survives the division of its body.¹⁸

LOGIC AND METAPHYSICS

The originally Aristotelian idea of substance as an ultimate subject of predication thus plays a major role in the *Discourse on Metaphysics* and the correspondence with Arnauld; it provides the basis for Leibniz's persistent claim that substances are genuine unities. But as we have seen, Leibniz thinks that the Aristotelian doctrine does not go far enough. In the *Discourse on Metaphysics* Leibniz seeks a deeper understanding of what is involved in being a substance, and he finds it in what we may call the 'complete concept theory': this is the famous claim that 'the nature of an individual substance or a complete being is to have a notion so complete that it is sufficient to contain and to allow us to deduce from it all the predicates of the subject to which the notion is attributed'.¹⁹ In the following sections of the *Discourse* Leibniz develops a train of thought which led Bertrand Russell and the French scholar, Couturat, to claim that Leibniz derived his metaphysics from his logic.²⁰

As a general theory about the roots of Leibniz's metaphysics, the Russell-Couturat thesis has come in for a good deal of criticism. For one thing, the thesis does not seem to apply to the writings of Leibniz's later period; there purely logical theories seem to play little or no role in generating metaphysical doctrines. Even at the time of the *Discourse*, Leibniz appeals to non-logical considerations in support of his metaphysics. Leibniz invokes his physical theory that in collisions 'bodies really recede from other bodies through the force of their own elasticity, and not through any alien force'.²¹ In this way Leibniz seeks to confirm his metaphysical doctrine that there is no causal interaction between substances. Moreover, at least as formulated by Russell, the so-called 'logicist' thesis suffers from a different kind of difficulty. According to Russell, Leibniz *validly* derived his metaphysics from his logic; against this, it has been remarked that there are in fact serious problems with the purported deduction. Considerations like these have led some writers to argue that Leibniz did not so much derive his metaphysics from his logic as tailor his logic to a metaphysics to which he is attracted for independent reasons.²² Nonetheless, there does seem to be some truth in the Russell-Couturat thesis. At least in the *Discourse* and other writings of the same period, Leibniz certainly seems to rely on logical premises in arguing for metaphysical conclusions. This is not to say that as it stands the

deduction is watertight; at points Leibniz seems to be smuggling in certain unstated non-logical premises.

The claim that Leibniz derived his metaphysics from his logic is more mysterious than it need be. When Russell and Couturat put forward this thesis, they had something quite specific in mind when they spoke of Leibniz's 'logic': they were referring to his theory of truth. The theory of truth in question is explicitly stated, not in the *Discourse on Metaphysics*, but in the correspondence with Arnauld where it appears almost as an afterthought. However, the theory makes itself felt in the *Discourse*, for it seems to ground the deep analysis of the nature of substance which Leibniz offers as a supplement to Aristotle.

Leibniz's distinctive theory of truth can best be explained by way of contrast. Perhaps the most intuitive doctrine of truth is some version of the correspondence theory; in other words, truth consists in a relation of correspondence between propositions and states of affairs in the world. It is some version of the correspondence theory that Aristotle seems to have had in mind when he defined truth as saying of that which is that it is and of that which is not that it is not.²³ Although he sometimes seems to suggest that he is simply following in Aristotle's footsteps, Leibniz in fact advances a radically different theory. For Leibniz, truth consists not in a correspondence between propositions and states of affairs but in a relation between concepts. Leibniz provides a succinct summary of his theory in a letter to Arnauld: 'In every true affirmative proposition, necessary or contingent, universal or particular, the concept of the predicate is in a sense included in that of the subject: *praedicatum inest subjecto*; or else I do not know what truth is.'²⁴ Let us call this 'the concept-containment theory of truth'.

Leibniz's theory of truth can be seen as a generalization of a more familiar and more limited claim. Consider the proposition: 'Gold is a metal'. It is plausible to say that the proposition is true because the concept expressed by the predicate term is contained in the concept expressed by the subject term; in other words, an analysis of the concept of gold would reveal that the concept of metal is one of its constituent concepts. (Analysis is conceived of here as a matter of replacing a given term by its definitional equivalent.) As his comment to Arnauld shows, Leibniz wishes to extend this insight to all affirmative propositions, including singular ones such as 'Julius Caesar crossed the Rubicon'. Thus Leibniz holds that the proper name 'Julius Caesar' is not simply an arbitrary label; it expresses a concept no less than the term 'gold' does. The proposition 'Julius Caesar crossed the Rubicon' is true because the concept of crossing the Rubicon is contained in the concept of Julius Caesar. From this general, concept-containment theory of truth Leibniz's distinctive claim about the nature of individual substances follows as a special case; by virtue of the general theory, all the predicates which are true of an individual substance are contained in the concept of that substance.²⁵

'From these considerations there follow a number of important paradoxes.'²⁶ This remark in the *Discourse* is key evidence for the claim that Leibniz derived his

metaphysics from his logic, and it is certainly true that Leibniz goes on to present a number of remarkable doctrines about the basic structure of the world. Commentators tend to come up with slightly different lists of the doctrines that are so derived, but there are five major doctrines which are generally included.

- 1 The identity of indiscernibles: there cannot be two substances which are exactly alike.
- 2 The expression thesis: every substance expresses or mirrors the whole universe.
- 3 The denial of causal interaction between (created) substances.
- 4 Every substance is the causal source of all its states.
- 5 The hypothesis of concomitance (or what is later termed by Leibniz ‘The pre-established harmony’): the states of substances are harmonized by God so that they give the appearance of causal interaction. (The phrase ‘pre-established harmony’ is also sometimes used by Leibniz and by commentators to refer to the conjunction of theses 3–5.)

The relation of these doctrines to Leibniz’s logic is more problematic in some cases than in others. In the case of (at least one version of) the identity of indiscernibles, the derivation is relatively straightforward. The complete concept of an individual substance is presumably a concept under which no more than one individual can fall. Thus if there were two substances exactly alike there would be two substances with the same complete concept, which is impossible. It should be noted, however, that the complete concept theory seems to provide the basis for only a weak version of the identity of indiscernibles; for all the argument so far shows, this principle would be satisfied by two substances which differed solely in terms of their spatial relationships. However, for reasons which will become clearer, Leibniz in fact subscribes to a stronger version of the identity of indiscernibles to the effect that two substances cannot be exactly alike in terms of their intrinsic (i.e. non-relational) properties.

Leibniz’s more popular statements about the identity of indiscernibles can be unhelpful. For example, Leibniz sometimes tries to provide *a posteriori* support for the principle by means of an anecdote; he tells how a courtier was challenged to find two leaves exactly alike, and how after a while he abandoned the search as fruitless.²⁷ Picturesque as it is, this story is doubly misleading. First, in so far as it follows from the complete concept theory, the identity of indiscernibles is a thesis about substances. Strictly speaking, for Leibniz, dead leaves are not substances but aggregates of substances. Second, and more importantly, the identity of indiscernibles is not an empirical generalization but a necessary truth. The thesis is not that as a matter of contingent fact there are no two substances exactly alike, but that there could not be two such substances.

More serious problems of derivation are presented by the other main metaphysical theses 2–5. Different commentators locate the main difficulties in different places, but they agree in the general diagnosis: Leibniz tends to slide

from what is true at the level of concepts to claims about what is true at the level of substances in the world. Leibniz may have been unwittingly encouraged in this tendency by the imprecision of his terminology; as used by Leibniz, terms such as ‘subject’ and ‘predicate’ are dangerously ambiguous. The word ‘subject’ for example is ambiguous as between subject-concept and the substance in the world which instantiates the concept: *mutatis mutandis*, the term ‘predicate’ is similarly ambiguous.²⁸ Bearing this ambiguity in mind, in the remainder of this section we shall, then, examine the problems presented by 2–4.

Despite the unusual terminology, on one level at least the expression thesis is straightforward. Leibniz was pressed by Arnauld as to what he meant by ‘expression’, and in reply he made clear that it was a technical term which he explained as follows: ‘one thing *expresses* another (in my terminology) when there exists a constant and fixed relation between what can be said of one and of the other.’²⁹ When Leibniz says that every substance expresses the whole universe, at least part of what he wants to say is that, given a complete knowledge of the concept of any individual substance, say Alexander, it is possible in principle to read off the predicates (i.e. predicate-concepts) of every other substance. We can see that Leibniz must hold this by virtue of the fact that there are relational truths linking Alexander to everything else in the universe. It is a fact about Alexander, for example, that he was born so many years before Ronald Reagan became President of the United States. It follows, then, that all such relational predicates must be contained in the complete concept of Alexander, and so on for every other substance. Thus if one really knew the complete concept of Alexander, one would *ipso facto* also know everything there was to be known about the universe.

When Leibniz says that every substance expresses the universe, he also wants to assert a more controversial and more metaphysical thesis. In the *Discourse on Metaphysics* Leibniz claims that ‘there are at all times in the soul of Alexander traces of everything that has happened to him and marks of everything that will happen to him, and even traces of everything that happens in the universe, even though God alone could recognize them all’.³⁰ But of course it is not easy to see how from the fact that the concept of Alexander timelessly includes the predicate of dying in 323 BC, it follows that there must be marks of this event in Alexander’s soul even before it happens. It has been suggested that Leibniz is thinking along the following lines.³¹ Since it is a timeless fact about Alexander that he dies in 323 BC, throughout his history there must be something about Alexander himself by virtue of which this proposition is true; there must be some persistent structural modification of Alexander corresponding to the fact of his dying. This modification remains quiescent until the event when it bursts into activity; subsequently, it reverts to a state of quiescence.

Commentators have similarly stressed the difficulty of seeing how theses 3 and 4 follow from Leibniz’s logic. From the fact that every individual substance has a complete concept Leibniz infers that all the states of a substance are a consequence of that concept; from this he concludes, apparently, that there is no

causal interaction between created substances. But this argument seems fallacious.³² Consider the proposition: 'Julius Caesar was killed by Brutus and Cassius.' Here a causal relational predicate 'killed by Brutus and Cassius' is truly ascribed to Julius Caesar. This causal predicate must, then, be contained in the concept of Julius Caesar. But then it clearly does not follow from the complete concept theory that there is no causal interaction between created substances. Nor does it help matters to point out that, though in the *Discourse* Leibniz derives 4 from 3, he sometimes reverses the order of the derivation. For if it is difficult to see how 3 follows from the complete concept theory, it is no less difficult to see how 4 follows from that theory.³³

One way of dealing with these problems is to suppose that the derivation of 3 from Leibniz's logic is mediated by a doctrine that we have not so far discussed; this is the doctrine that 'there are no purely extrinsic denominations', which is itself a consequence of the 'marks and traces' version of the expression thesis.³⁴ The claim that there are no purely extrinsic denominations is one of Leibniz's more obscure doctrines, but is generally taken to assert the reducibility of relations; in other words, all relational truths about individual substances can be deduced from non-relational truths about those substances. For example, the relational proposition 'Smith is taller than Jones' is reducible in the sense that it can be derived from the non-relational propositions 'Smith is six feet tall', and 'Jones is five feet ten inches tall'. Thus by virtue of his thesis that there are no purely extrinsic denominations, Leibniz would claim that the proposition 'Julius Caesar was killed by Brutus and Cassius' is reducible to propositions which ascribe only non-relational predicates to those individuals.³⁵ But this approach does not really solve the problem. The thesis that there are no purely extrinsic denominations asserts at most that relational propositions are theoretically dispensable; it does not assert that such propositions are actually false. But it seems that it is the stronger thesis which is required if the claim that there are no purely extrinsic denominations is to provide a basis for 3; for Leibniz is committed by 3 to saying that propositions which assert causal relations between created substances are all of them, strictly speaking, false.

An alternative way of dealing with these problems is to reinterpret Leibniz's notion of a complete concept. One writer, in particular, has been impressed by those passages in which Leibniz tells Arnauld that the complete concept of an individual contains the laws of its world.³⁶ On this basis it has been suggested that a Leibnizian complete concept is constituted by a combination of basic (i.e. non-relational) predicates and laws—the laws of its universe. These laws are taken to include a law of succession for the states of the substance; such a law would imply that a substance's states causally depend only on itself. On this interpretation, then, there is no danger that the complete concept of Julius Caesar, say, will contain causal predicates such as being killed by Brutus or Cassius; such a predicate must be excluded because it suggests of course that a state of Julius Caesar causally depends on other created substances. We may still wonder, however, whether this interpretation can do justice to the expression

thesis, given that relational predicates are excluded from complete concepts. But here again the crucial point is taken to be that laws are built into complete concepts. The idea is that the concept of an individual substance contains non-causal laws of coexistence with other substances; from this it follows, as the expression thesis requires, that the predicates of all other substances can be deduced from the concept of a given substance. It is in this sense, then, that 'every individual substance involves the whole universe in its perfect concept'.³⁷ This interpretation is attractive, for it frees Leibniz's argument from its otherwise obvious invalidity. But as its proponent acknowledges, it does so at a heavy price; a complete concept turns out not to be a purely logical notion, for Leibniz has packed some of his metaphysics into it. Thus the difficulty now is not that Leibniz's argument involves a *non sequitur* but that it is effectively question-begging.

Before we conclude this section, it is worth clarifying thesis 4—that every substance is the causal source of all its states. At a minimum Leibniz holds that every state of a substance is caused by an earlier state of that substance.³⁸ But Leibniz seems to be committed to more than this when he claims, as he often does, that a substance gets all its states 'out of its own depths';³⁹ this phrase suggests something crucial about the way in which the states of a substance are caused by its earlier states. In fact, Leibniz's view of intra-substantial causality seems to draw on the 'marks and traces' version of the expression thesis. Remember that, according to that thesis, a substance bears within itself the marks of all its future states. Thus Leibniz holds that when an earlier state causes a later state, this later state was in a sense latent or dormant in the substance all along; when the state is caused, it emerges from quiescence and bursts into activity; subsequently, it reverts to a condition of quiescence. The causing of a state thus seems to be the activation of a 'mark' that was pre-existent in the substance throughout its previous history.

THE DOCTRINE OF MONADS

The metaphysical doctrines 1–5 which, in the *Discourse on Metaphysics*, Leibniz deduces from his logic all concern substances, and throughout his subsequent career Leibniz continues to assert these doctrines; they are some of the great constants of his philosophy. None the less, Leibniz's metaphysics underwent a major development between the *Discourse* (1686) and the *Monadology* (1714). Although Leibniz never recants any of the five doctrines, he changes his mind about what sort of items really fall under the concept of substance. In the *Discourse* Leibniz holds, despite some hesitation, that all substances are either organisms or souls; in his later philosophy he comes to hold that, strictly speaking, there are no corporeal substances; rather, all substances are either souls or at least soul-like. The later philosophy is thus a form of idealism inasmuch as it maintains that the basic furniture of the universe is mental or spiritual in nature. This is the famous doctrine of monads.⁴⁰ It may of course be questioned just how

sharp this transition was, and it is true that there are times in his later writings when Leibniz speaks as if there really are corporeal substances. But the dominant character of Leibniz's later metaphysics is well represented by his remark to De Volder: 'Considering the matter carefully, it must be said that there is nothing in the world except simple substances and in them, perception and appetite.'⁴¹ Taken strictly, this claim implies that there are no corporeal substances.

The term 'monad' derives from a Greek word for unity. The fact that Leibniz chose this term to denote the fundamental entities in his later metaphysics shows that there is continuity in his thought; as before in the *Discourse* and the correspondence with Arnauld, a substance is a genuine unity. But a monad, unlike a corporeal substance, is a unity in a quite straightforward sense; it has no parts, or, in other words, it is simple. Now the simplicity of monads is a clue to further aspects of their nature. Since they are simple, monads are immaterial—which, for Leibniz, means that they are spiritual, for everything material has parts. The simplicity of monads also entails, for Leibniz, that they are indestructible. Here the underlying idea is that destruction consists in decomposition, and that where there are no parts, there can be no decomposition. Hence, in the case of monads, 'there is no dissolution to fear'.⁴²

The fact that monads are immaterial and spiritual imposes a radical restriction on the properties of which they are capable; it rules out all such physical properties as size, shape and even position. As the quotation from the letter to De Volder bears out, the basic properties of monads are perception and appetite, or appetition. The notion of perception, which Leibniz defines as 'the expression of the many in the one',⁴³ is central not just to Leibniz's metaphysics but also to his psychology, and it will accordingly be discussed in the penultimate section of this chapter. But something may be said here about appetition. Appetition is the dynamic principle in the monad; it is that by virtue of which a monad changes its state. Yet, as one writer has suggested, it is possible that, for Leibniz, appetitions and perceptions are not two kinds of modifications but rather the same modification viewed differently.

From one point of view every passing state is an expression of the many in the one and as such it is a perception. From the other point of view every passing state is a tendency to a succeeding state and as such it is an appetition.⁴⁴

A possible parallel would be Spinoza's doctrine that every finite mode of substance can be viewed under the attributes of both thought and extension.

The doctrine of monads is not merely idealistic; it is also in a sense monistic. But the term 'monism' is a little misleading and needs clarification. Monadology is certainly not monistic in the sense in which Spinoza's metaphysics is monistic; Leibniz is not asserting, as Spinoza does, that there is only one substance (*Deus seu Natura*). Rather, monadology is monistic in the sense that,

according to Leibniz, there is only one *kind* of basic entities, namely souls. In this respect the contrast with Spinoza's monism is at a maximum. Far from asserting that there is just one substance, Leibniz holds that there are infinitely many simple substances and that, by virtue of the identity of indiscernibles, no two are exactly alike.

Monads are in fact hierarchically arranged. At the top of the hierarchy is God who seems to be the supreme monad;⁴⁵ at the bottom of the hierarchy are what Leibniz calls 'bare monads' which provide the metaphysical foundation for inanimate matter. The basis for this hierarchical classification is quality of perception; borrowing Cartesian terminology, Leibniz says that monads differ in terms of the clarity and distinctness of their perceptions. For example, the minds of human beings are near the top of the hierarchy by virtue of their capacity for a very high grade of perception, namely reason. A striking feature of monadology, however, is that although monads differ enormously in terms of the quality of perception, in a sense they do not differ in terms of the objects they perceive; for giving a new twist to his expression thesis Leibniz holds that every monad perceives the whole universe according to its point of view. The qualification tacked on to this thesis is to be understood in terms of the doctrine that there are qualitative differences among perceptions. To say that two monads differ in their point of view is to say that they do not enjoy exactly the same distribution of clarity and distinctness over their perceptual states. In this way Leibniz can also explain how the identity of indiscernibles applies to monads in spite of the fact that they all perceive the whole universe.

These are remarkable doctrines, and we may well wonder how Leibniz came to arrive at them. In fact, however, the basic argument for the fundamental principles of monadology is quite straightforward; it turns on two main assumptions: the infinite divisibility of matter and the thesis that there must be basic or ultimate entities. For Leibniz, it would be shocking to reason, or at least to divine wisdom, if everything in the universe were composed of compounds whose components were themselves compounds, and so on *ad infinitum*. The infinite divisibility of matter implies that these basic entities cannot be physical, for everything physical is a compound of the sort just described. Thus although physical atoms are a fiction, there can and must be 'spiritual atoms' or monads.

A natural initial reaction to monadology is to wonder at Leibniz's willingness to prefer it to the more down-to-earth metaphysics of the *Discourse*. But in response to the argument outlined above we may wonder why Leibniz was not in a position to advance it earlier. Certainly throughout his career Leibniz holds that the universe must consist of basic or ultimate entities. Moreover, in his earlier philosophy Leibniz also held a version of the thesis of the infinite divisibility of matter; matter, considered in abstraction from souls or substantial forms, is infinitely divisible 'in innumerable possible ways but not actually divided in any'.⁴⁶ So at the time of writing the *Discourse* Leibniz believed, as he continued to believe, that nothing purely material could be a basic entity. But the difference between Leibniz's earlier and later views seems to be this. In the *Discourse*

Leibniz held that, though in the abstract, matter is infinitely divisible, taken concretely it is composed of organisms which are material beings endowed with souls, and that these organisms are genuinely basic entities. In his later philosophy Leibniz may have continued to hold that matter is in some sense composed of organisms, but he gave up the thesis that organisms are genuinely basic entities or intrinsic natural unities.

Why, then, did Leibniz give up the view that organisms are basic entities? A plausible answer is that he came to feel that some of the claims about substance which he had deduced from his logic did not clearly apply to organisms. According to the *Discourse* substances are indivisible but, as we saw earlier, in the correspondence with Arnauld Leibniz had difficulty defending the thesis that organisms are indivisible. Possibly Leibniz became dissatisfied with his answer to Arnauld's puzzle about the worm that is cut in two. By contrast, monadology is largely free from these difficulties: as a simple, immaterial being a monad satisfies the indivisibility criterion much more clearly than an organism. Moreover, the earlier, Aristotelian metaphysics fares less well than monadology in accommodating the thesis that there is no causal interaction between substances. In the earlier metaphysics this thesis implies that no two organisms interact, but it has no such implications for other bodies; for instance, it does not entail that no two billiard balls interact. And this may well have come to seem arbitrary to Leibniz. By contrast, monadology suffers from no such problem. For one thing, it is perhaps fairly intuitive to say that souls cannot causally interact. But in any case, by restricting the thesis to souls or soul-like entities, Leibniz is at least able to escape the charge that he is simply drawing an arbitrary line through the physical world.

An obvious problem for an idealist philosopher who holds that reality is ultimately spiritual is to determine the status of bodies. Leibniz's idealism certainly implies that bodies cannot be substances, but beyond that it leaves their status unspecified. For one thing, idealism does not discriminate between eliminativist and reductionist approaches to this issue; in other words, it does not discriminate between the thesis that bodies do not exist and the thesis that, although bodies exist, they are to be reduced to something which is ontologically more basic. Fortunately, on this issue Leibniz leaves us in no doubt about his position: in a letter to De Volder he remarks:

I do not really eliminate body, but I reduce it to what it is. For I show that corporeal mass, which is thought to have something over and above simple substance, is not a substance, but a phenomenon resulting from simple substances, which alone have unity and absolute reality.⁴⁷

Leibniz is thus in some sense a reductionist about bodies; what is less clear is the nature of the reduction. Some writers have claimed that Leibniz anticipated Berkeley's phenomenalism; they have thought that he came to espouse the thesis

that bodies are sets of harmonized perceptions.⁴⁸ Leibniz seems to have flirted with this thesis on occasion; in a very Berkeleyian passage he tells Des Bosses:

It is true that things which happen in the soul must agree with those which happen outside of it. But for this it is enough for the things taking place in one soul to correspond with each other as well as with those happening in any other soul, and it is not necessary to assume anything outside of all souls or monads. According to this hypothesis, we mean nothing else when we say that Socrates is sitting down than that what we understand by 'Socrates' and by 'sitting down' is appearing to us and to others who are concerned.⁴⁹

Leibniz was certainly well placed to defend a version of phenomenalism. Other phenomenalists, such as Berkeley, who hold that the supply of souls or minds is finite are forced to analyse statements about the existence of physical objects in terms of statements about possible perceptions; they are forced to appeal to the perceptions which a mind would have in such and such circumstances. Leibniz, by contrast, does not have to take this line since he holds that the number of souls is infinite and that every possible point of view on the phenomena is actually occupied. Thus Leibniz can analyse all statements about the existence of physical objects in terms of other statements which are exclusively about the actual perceptions of monads.⁵⁰

Phenomenalism, however, does not seem to be Leibniz's considered view. Most characteristically Leibniz states that a physical object is, not a set of perceptions, but an aggregate of monads or simple substances. In saying this Leibniz is careful to point out that he does not mean that monads are parts of bodies; rather, any part of a body is itself physical, and since matter is infinitely divisible, there will be no part of matter which does not have parts which are themselves smaller bodies. Leibniz sometimes explains the relationship between bodies and monads by saying that bodies are 'beings by aggregation' which result from monads or simple substances.⁵¹ Bodies are also said to be 'well-founded phenomena';⁵² they are well-founded in the sense that they are appearances which are grounded in monads.

Despite some differences in formulation, Leibniz's main view seems to be that bodies are aggregates of monads. We may well wonder how this can be so; how can an aggregate of simple, unextended substances be identified with a physical object? It would seem that a physical object must have properties which no aggregate of monads could have. Certainly a physical object must have properties which no *individual* monad can have. Perhaps Leibniz would insist on the logical point that, from the fact that individual monads are unextended, it does not follow that an aggregate of monads is unextended; to suppose otherwise is to commit the fallacy of composition. This fits in well with Leibniz's claim that 'aggregates themselves are nothing but phenomena, since things other than the monads making them up are added by perception alone by virtue of the very fact

that they are perceived at the same time'.⁵³ In other words, to talk of aggregates is to go beyond the reality of the monads themselves and to make essential reference to the contribution of the perceiving mind. Alternatively Leibniz may hold, as he is traditionally interpreted as holding, that a body is not, strictly speaking, identical with an aggregate of monads; rather, an aggregate of monads is misperceived by us as a physical object having the properties of size, shape and position.⁵⁴

According to Leibniz's monadology, there is really nothing in the world but simple substances; strictly speaking, there are no corporeal substances. Leibniz makes only one concession to the privileged status which he had accorded organisms in his earlier philosophy: where organisms are concerned, in the corresponding aggregate of monads there is one monad which is dominant with respect to other members of the aggregate. The dominance relation is to be spelt out in terms of superior clarity and distinctness of perceptions. For example, in the case of human beings the mind is the dominant monad with respect to the aggregate of monads that constitute the body. But towards the end of his life Leibniz seems to have become dissatisfied with this theory; he appears to have felt that the 'hypothesis of mere monads' did not do justice to the unity possessed by organic bodies. In other words, the presence of a dominant monad was not enough to fill this role. Leibniz seems to suggest that, in addition, we must postulate something substantial which unifies the monads; this is what he came to call a 'substantial bond' (*vinculum substantiale*).

Some scholars have expressed scepticism as to whether Leibniz ever committed himself to the theory of the *vinculum substantiale*.⁵⁵ The basis for such scepticism is that Leibniz first proposed the theory in correspondence with the Jesuit Des Bosses who invited him to explain how monadology could accommodate the Catholic dogma of transubstantiation: this is the dogma that in the Eucharist the whole substance of the consecrated bread and wine is changed into the substance of the body and blood of Christ. It has thus been suggested that the doctrine of substantial bonds is merely the concession of a diplomat intent on accommodating Catholic dogma. But there are grounds for doubting this interpretation. In the first place, Des Bosses was not entirely happy with the theory of substantial bonds; he raised theological scruples against it. Second, and more importantly, the philosophical fit between the theory and the dogma of transubstantiation is not a very close one.⁵⁶ The theory of substantial bonds is intended to account for the unity of organisms. The consecrated bread and wine, however, are not themselves organisms, but rather aggregates of them.⁵⁷ Indeed the indications are that Leibniz was engaged in pursuing an independent train of thought about the unity of organisms which led him to the idea of substantial bonds, and that he then adapted this idea to meet the demands of the dogma of transubstantiation.

SPACE AND TIME

As we have seen, Leibniz speaks of monads as having points of view, but this expression is metaphorical; it must not be taken literally as implying that monads occupy positions in space. This is clearly not Leibniz's view. Unfortunately, Leibniz never offers a detailed account of the relations between his doctrine of monads and his theory of space, but he seems to hold that spatial relations are logical constructions out of the perceptual states of monads. In other words, the claim that a certain body is in such and such a spatial position is to be ultimately analysed in terms of propositions about monads and their properties. Thus from his knowledge of the perceptual states of monads, God could read off all the facts about the spatial relations of bodies in the universe. Leibniz is committed, it seems, to the same view of time *mutatis mutandis*. Strictly speaking, monads are no more in time than they are in space, but the temporal relations of events can in principle be read off from the properties of monads. How consistently or rigorously Leibniz adhered to this view of time is unclear.

At the very end of his life the nature of space and time was the subject of a fierce controversy between Leibniz and Newton's disciple, Samuel Clarke; the exchange thus took place at a point in Leibniz's career when the doctrine of monads was securely in position. Despite this, in the controversy with Clarke Leibniz does not seek to reveal the idealist groundfloor of his metaphysics. Throughout this exchange Leibniz argues at an intermediate level of philosophical rigour;⁵⁸ for the sake of argument he assumes that the phenomenal world of bodies in space is ontologically basic. We should also note that while the nature of space and time is the dominant topic in the correspondence with Clarke, it is by no means the only issue that divides Leibniz and Newton; Newton's theory of universal gravitation is also one of Leibniz's chief targets. Indeed, in his later years, Leibniz was engaged in a full-scale assault on the foundations of Newtonian science. According to Leibniz, Newtonian science was not only philosophically inept; it was a direct threat to natural religion.⁵⁹

In the correspondence with Clarke Leibniz puts forward two positive theories about the nature of space and time. In the first place, Leibniz argues that space and time are not substances or attributes but relations. 'Space is the order of co-existences; time is the order of successive existences.'⁶⁰ Thus Leibniz directly opposes the Newtonian absolute theory according to which space and time are entities which exist independently of bodies and events. For Leibniz, by contrast, bodies are logically prior to space and events are logically prior to time; in other words, there would be no space if there were no bodies and there would be no time if there were no events.⁶¹ Second, Leibniz argues that space and time are ideal. This thesis follows from the relational theory in conjunction with Leibniz's oft-repeated claim that substances alone are fully real, everything else being a mere *ens rationis* or mental construct. The claim that space and time are ideal might lead one to suppose that it is intimately tied in with the doctrines of the monadology, but in fact it is not; although it is fully consistent with those doctrines,

it does not depend on them. We can see that this is so by reflecting that Leibniz would still subscribe to the ideality thesis if he held, as he earlier did, that there are genuinely corporeal substances. For the ideality thesis, the crucial point is that space and time are relations and are therefore merely mental constructs.

In his letters to Clarke Leibniz offers two main arguments against the Newtonian theory. The first argument is from the principle of sufficient reason. Notoriously, this principle takes many different forms in Leibniz's philosophy, but here it can be understood to mean simply that there must be a reason for God's choice. The argument can be put in the form of a *reductio ad absurdum*. Suppose that the Newtonian theory of absolute space is true. Now the parts of this space are indiscernible, and so if God created a world he could have no reason for creating it at one point in space rather than some other. But we know both that God has created a world and that he never acts without a reason. The argument thus leads to a contradiction: God both does, and does not, act without a reason. It follows, then, that the theory of absolute space is false. *Mutatis mutandis* the argument can also be directed against the theory of absolute time.⁶²

Leibniz's second argument has proved to be of greater philosophical interest in our own time. This argument depends on a version of the identity of indiscernibles which, as various writers have noted, is really tantamount to the modern verificationist principle.⁶³ According to Leibniz, the Newtonians are committed to saying that it makes sense to suppose that God could, for example, move the universe a few miles to the west while keeping its internal structure unchanged. Leibniz has no patience with such suppositions. If God were to do such things, no change would be observable even in principle. In a remarkable passage Leibniz then states the verificationist objection:

Motion does not indeed depend on being observed; but it does depend on its being possible to be observed. There is no motion when there is no change that can be observed. And when there is change that can be observed, there is no change at all.⁶⁴

The supposition in question can thus be dismissed as meaningless or, as Leibniz sometimes says, an impossible fiction.

Ever since Clarke Leibniz's readers have been bothered by a seeming inconsistency in his position. The first argument seems to assume that, though absolute space and time are contrary to the divine wisdom, they are at least logically possible; the second argument, by contrast, seeks to establish a stronger claim: the theory of absolute space and time is an impossible fiction. Relatedly, there seems to be an inconsistency in Leibniz's claims about the identity of indiscernibles. Sometimes he says that to suppose two indiscernible entities or states of affairs is to suppose two things under the same name;⁶⁵ at other times he says that, though logically possible, the existence of two indiscernible entities would be contrary to the divine wisdom.⁶⁶ The problem of interpretation, however, is not really a serious one; it can be solved by assuming that Leibniz is

mounting a two-pronged attack on the Newtonian position. Leibniz's main argument turns on the claim that the identity of indiscernibles is a necessary truth: on this argument the supposition of two indiscernible entities is indeed an impossible fiction. But Leibniz is also prepared to argue in a more concessive vein: even if it is granted that two indiscernible entities are logically possible, it can still be shown that they would never obtain because they are contrary to the divine wisdom.

CAUSALITY, PRE-ESTABLISHED HARMONY, AND THE MIND-BODY PROBLEM

The seventeenth and eighteenth centuries were a period of intense interest in the nature of causality. Indeed, in this period the whole concept of causality was going through a process of transformation which was to culminate with Hume. But though early modern philosophers, such as Malebranche and Leibniz, anticipated some of Hume's insights, at least officially they tended to cling to traditional, Aristotelian ideas about the nature of causality which Hume himself was to discard; as a result they often seem to occupy half-way positions on the road to Hume. In general we can say that seventeenth-century philosophers tended to operate with a stronger concept of causality than is current today. This fact is something which needs to be borne in mind when interpreting their metaphysical doctrines about causal relations. Rationalist philosophers, in particular, often seem to be announcing surprising news about the world, but to some extent they can be read as doing something rather different; they are insisting that a certain strong concept of causality is not satisfied by certain events and processes which we might take to be causal.

Malebranche and Leibniz illustrate these points very clearly. In the case of Malebranche his occasionalism arises from his insistence that there must be a logically necessary connection between cause and effect; on this basis he concludes that no creature is a genuine cause.⁶⁷ Anticipating Hume he insists that it is not logically necessary, for instance, that the kettle should boil soon after I light a fire under it or that my arm should go up when I will to raise it.⁶⁸ Unlike Malebranche, Leibniz is not so wedded to the idea that necessary connection is a requirement for true causality; rather, he accepts the scholastic assumption that genuine causality involves a kind of contagion whereby properties are literally passed on from the cause to the effect. It is true that Leibniz's position is not free from tensions. For instance, he criticizes the scholastic Suarez's definition of 'cause' as 'what flows being into something else' on the grounds that it is barbarous and obscure.⁶⁹ Yet Leibniz famously denies that monads causally interact on the ground that they have no windows through which anything could enter or depart.⁷⁰ In other words, no properties can be literally transmitted from one simple substance to another. Yet if this is his ground for denying that substances causally interact, then Leibniz must be assuming something like the 'contagion' view of causality. And it is surely this

concept of causality which Suarez was trying to capture, however clumsily, in his definition in terms of influx. Thus, rather than abandon traditional assumptions about causality, both Leibniz and Malebranche choose the heroic course of denying the existence of genuine causal relations between finite substances. In other words, they stop short of Hume's revolutionary rethinking of the nature of causality.

Leibniz's doctrine of pre-established harmony, like Malebranche's occasionalism, has been seriously misunderstood. It has been assumed that both doctrines are merely more or less *ad hoc* solutions to the mind-body problem which Descartes is supposed to have bequeathed to his successors. But this assumption is mistaken. Recall that on pp. 393–5 we saw how Leibniz tried to deduce his doctrine of the preestablished harmony (understood as the package of metaphysical theses 3–5) from purely logical considerations; in particular, he tried to deduce it from his complete concept theory. The doctrine of the pre-established harmony is thus not simply an *ad hoc* solution to the mind-body problem; it is a general theory about the relations between finite, created substances. In this respect it resembles Malebranche's occasionalism. But in another respect there is an important relevant difference between the two theories. Because of his Cartesian assumptions, Malebranche is able to offer an occasionalist solution of the mind-body problem as a special case of a more general theory; it is not clear, however, whether Leibniz is really in a position to do the same. Indeed, at points in his philosophical career it is not even clear whether the mind-body problem really arises in his philosophy. We see, then, that Leibniz pays a price for his attempt to retain Aristotelian ideas while addressing characteristically Cartesian concerns.

To understand the force of these observations it is useful to compare the positions of Descartes and Leibniz. In Descartes's philosophy the mind-body problem is traditionally taken to arise from the fact that he holds that mind and body are both substances and that they are completely heterogeneous; the nature of mind consists wholly in thinking and the nature of body consists wholly in being extended. It has thus seemed difficult to Descartes's readers to see how there could be any union or interaction between two such different substances. By contrast, at no point in his philosophical career did Leibniz accept all the assumptions which generate the mind-body problem in its pure Cartesian form. In the first place, although in his later philosophy Leibniz insists that the soul is a substance, he is much less certain about its status around the time of writing the *Discourse on Metaphysics*. Using scholastic terminology Leibniz notes: 'the soul, properly and accurately speaking, is not a substance, but a substantial form, or the primitive form existing in substance, the first act, the first active faculty.'⁷¹ But if the soul is only an element of substance, then it is not clear that it makes sense to speak of a mind-body problem. Second, throughout his career Leibniz holds that the human body is not a substance but an aggregate of substances. It is true that the nature of the aggregate changes as his metaphysics develops: in the *Discourse* the body is an aggregate of organisms; in the *Monadology* it is an

aggregate of monads. But at no time does Leibniz regard the human body as a substance in its own right. Finally, at least in his later philosophy, mind and body, for Leibniz, are not fundamentally heterogeneous, for the body is an aggregate of entities that are themselves soul-like. Now there may well be a case for saying that monads cannot causally interact, but it clearly has nothing to do with considerations of heterogeneity. As we have seen, it has rather to do with the fact that monads have no windows. In other words, causal interaction requires the literal transmission of properties, and in the case of monads this requirement cannot be met.

In its classical form, then, the mind-body problem is a puzzle about the relations between two heterogeneous substances, and in this form the problem cannot arise in Leibniz's philosophy. At most Leibniz faces a problem concerning the relation between a substance (mind) and an aggregate of substances (body). But in that case a solution to this problem cannot be straightforwardly derived from the general doctrine of pre-established harmony. For from the fact that no two substances can interact it does not follow that a substance cannot interact with an aggregate of substances.

Despite these anomalies, Leibniz often writes as if he were in a position to solve the mind-body problem which Descartes bequeathed to his successors; he boasts, for instance, that his doctrine of preestablished harmony solves 'the great mystery of the union of the soul and the body'.⁷² In passages like these Leibniz tends to downplay the extent of his Aristotelian-scholastic commitments; he suggests that he shares the dualist assumptions that generate the mind-body problem, and refuses to follow Descartes only in his commitment to interactionism. Leibniz then exploits his doctrine of the pre-established harmony in the following way. Although mind and body appear to interact, the metaphysical truth of the matter is that each is simply following its own laws: the body is acting in accordance with the laws of mechanism, the mind is acting in accordance with the laws of psychology. In the former case the causality involved is efficient, in the latter it is teleological.⁷³ Thus, for example, my mind and my body have been so programmed by God that, when I form the volition to raise my hat, my arm is ready to execute the appropriate movement.

PSYCHOLOGY: EXPRESSION, PERCEPTION, AND *PETITES PERCEPTIONS*

Leibniz's solution to the mind-body problem struck many of his contemporaries as remarkably similar to Malebranche's occasionalism—a comparison which Leibniz resisted.⁷⁴ In fact, however, Leibniz's position is in some ways more reminiscent of Spinoza's. Like Spinoza, Leibniz insists on the autonomy of the physical and mental realms; every physical event has a physical cause, and every mental event has a mental cause. There are of course also important differences between their views. Unlike Spinoza, Leibniz subscribes to the traditional Christian conception of a personal God and he holds, at least in his later

philosophy, that the mind is a naturally immortal, immaterial substance. But these very differences suggest a way of viewing Leibniz's project, at least with regard to the mind-body problem; he is seeking to do justice to some of Spinoza's key ideas within the framework of traditional Christian theology.

There is indeed much that is Spinozistic in Leibniz's psychology. Consider, for instance, how Leibniz applies his concept of expression to the relationship between mind and body. According to Leibniz, the mind does not interact with the body, but it expresses it in the technical sense of the term which he explained for Arnauld's benefit. Indeed, Leibniz tells Arnauld that the mind expresses its own body better than it expresses anything else in the universe.⁷⁵ In response to Arnauld's query Leibniz explains that he does not mean by this that our mind has clearer thoughts of, say, the activity of its lymphatic glands than of the satellites of Jupiter; he means rather that given a complete knowledge of my mental states a supermind would find it easier to read off truths about my physical states than about the celestial bodies.⁷⁶ As Spinoza wrote, 'the ideas that we have of external bodies indicate the constitution of our own body more than the nature of external bodies'.⁷⁷ Leibniz might have stopped at this point, but in fact he goes further; he claims that the mind expresses its body by perceiving it, perception being a species of expression; indeed the mind perceives everything that happens in its body.⁷⁸ Here again Leibniz seems to be following in Spinoza's footsteps, for Spinoza had similarly written that 'whatever happens in the object [i.e. the body] of the idea constituting the human mind is bound to be perceived by the human mind'.⁷⁹ But whereas Spinoza does little to dispel the mystery surrounding this claim, Leibniz offers a body of theory which plugs the gaps in Spinoza's account. This is the famous doctrine of unconscious perceptions.

Here it is helpful to recall Leibniz's hierarchical arrangement of monads. All monads perceive, but they differ vastly in terms of the quality of their perceptions. Human minds or spirits are distinguished not only by reason but also by 'apperception' which means consciousness or perhaps even self-consciousness. But though Leibniz holds that human minds are set apart from lower monads by their capacity for (self)-conscious awareness, he further believes that they also have unconscious or little perceptions (*petites perceptions*); such perceptions are little because they are low in intensity. Not merely do large stretches of our mental life consist wholly in little perceptions, but even conscious mental states are composed of such perceptions. The doctrine of unconscious perceptions is perhaps Leibniz's principal innovation in psychology, and it is of course profoundly anti-Cartesian in its implications. For Descartes subscribes to the view that the mind is transparent to itself; he is explicit that there is nothing in the mind of which we are not conscious.⁸⁰

In the *New Essays on Human Understanding*, his reply to Locke, Leibniz remarks that there are 'thousands of indications' in favour of unconscious perceptions.⁸¹ Obviously there is an element of hyperbole in this claim, but even so, Leibniz certainly has a battery of arguments for his doctrine. Some of these arguments are based on *a priori* principles such as the identity of indiscernibles

which requires that any two minds must be qualitatively, not just numerically, different. Although Leibniz is not quite explicit about this, another assumption of the argument seems to be that minds at or before birth have no conscious experiences; thus the individuating characteristics required by the identity of indiscernibles must occur below the threshold of consciousness.⁸² Other arguments are less tied to the distinctive principles of Leibniz's metaphysics, but not all of them are more cogent. Leibniz is fond of arguing that, in order to hear the waves breaking on the shore, we must hear the noise of each individual wave.⁸³ This argument has been criticized as being as dubious as arguing, from the fact that we feel the weight of a stone, that we must have an unconscious perception of each of the molecules that make it up.⁸⁴

Perhaps more interesting is what we may call Leibniz's 'attention argument' which may be illustrated by the following scenario.⁸⁵ Suppose that two people, Smith and Jones, are having a conversation and that, throughout, a drill has been operating in the background; Smith has not been conscious of the noise, but he now suddenly has his attention drawn to it by Jones. Leibniz argues that in the act of attention Smith is really remembering a past perception of the noise. But *ex hypothesi* this earlier perception was not a conscious one and must therefore have been 'little' or unconscious. This argument clearly depends on the premise that attention involves memory, and one might wonder why one should accept this. If it is supposed to be true by definition, then the definition seems merely stipulative. Nonetheless, there is something attractive about the suggestion that cases like this force us to recognize the existence of unconscious perceptions, and Leibniz can support his conclusion in other ways. For example, it was implicitly assumed in our description of the case that Smith's sense organs are equally stimulated by the drilling both before and during the act of attention. Now Leibniz cannot of course strictly ascribe any psychological effects to a physical stimulus, but by virtue of his theory of expression he can and does insist that some state of the soul must correspond to any such stimulation;⁸⁶ and by hypothesis, as we have seen, the mental state which precedes the act of attention is not a conscious awareness of the noise. Leibniz can also fall back on an appeal to the law of continuity;⁸⁷ there would be a flagrant breach of this law if the stimulus which 'produced' a conscious perception of the noise during the act of attention 'produced' no perception at all in the mind before the act.

The doctrine of unconscious perceptions is a key element in Leibniz's attack on the Cartesian view that mentality is all or nothing. For Leibniz, by contrast, mentality is a continuum which extends below the threshold of consciousness. Sometimes, as we should expect, Leibniz's rejection of Descartes's view of the mental life provides the basis for the rejection of other Cartesian doctrines. Leibniz sides with common sense against the notorious Cartesian thesis that animals are mere automata. He argues that the Cartesians were led astray by their failure to distinguish between thought and perception; in other words, the Cartesians have made the mistake of confusing a species with its corresponding genus.⁸⁸ Thus even if animals have no thought (*cogitatio*), it does not follow that

they have no perceptions. Leibniz is clear, then, that animals have a mental life, but he is less clear about its precise nature. He seems to have believed that, unlike humans, animals have no capacity for self-consciousness, but whether he believed that they could consciously feel pain is less certain. Unfortunately, the issue is complicated by an obscurity in Leibniz's concept of apperception which, as we have suggested, is ambiguous between consciousness and self-consciousness.⁸⁹

Somewhat curiously, however, at other times Leibniz uses his theory of perception to defend Cartesian theses, although often in a seriously modified form. Here too the doctrine of unconscious perceptions plays a key role. As against Locke, for example, Leibniz exploits the doctrine in order to defend, or rather re-work, the Cartesian thesis that the mind always thinks. For Leibniz, the mind always thinks, not in the sense of being always conscious, but rather in the sense of never being without some perceptions; for example, even in dreamless sleep or a coma the mind has its *petites perceptions*. It is thoroughly characteristic of Leibniz's concerns that his defence of this Cartesian thesis is in the service of a larger goal—the vindication of an immaterialist theory of mind against what he sees as Locke's subversive attack on this doctrine. For Leibniz, the immateriality of the mind entails that it is naturally immortal, and this in turn entails that it always perceives.⁹⁰

KNOWLEDGE AND IDEAS

In contrast with Locke and the other British empiricists, Leibniz has traditionally been classified as a rationalist, and this classification is fundamentally an epistemological one: a rationalist philosopher is one who believes that it is possible to know substantive truths about the world *a priori*, by reason alone. We might expect, then, that in his full-length reply to Locke, the *New Essays*, Leibniz would seize the opportunity to provide a systematic defence of the rationalist position in epistemology. Yet on the whole this expectation is disappointed. On the contrary, as I have already indicated, Leibniz's main purpose in this work is not epistemological at all: it is metaphysical. Leibniz told a correspondent that in writing this work he was above all concerned to defend the immateriality of the soul.⁹¹

This fact about the work is remarkably suggestive of Leibniz's overall philosophical orientation. Unlike Descartes and the British empiricists, Leibniz was not greatly interested in what have since come to be regarded as the central issues in epistemology; the problem of our knowledge of the external world, for instance, was never at the forefront of his philosophical concerns. As we have seen, Leibniz sometimes toys with phenomenalism, and in the hands of Berkeley phenomenalism serves as an answer to the challenge of scepticism. Leibniz, however, does not seem to have been primarily attracted to phenomenalism for this reason. On occasion, of course, Leibniz can make some shrewd criticisms of the attempts of other philosophers to solve epistemological questions. Leibniz is

rightly suspicious of Descartes's appeal to clear and distinct ideas, and he ruthlessly exposes the weaknesses of Descartes's proof of the existence of the external world; he remarks with some justice that Descartes's proof is so feeble that it would have been better not to try.⁹² But some of Leibniz's criticisms of Descartes indicate a lack of deep engagement with the issues. Leibniz states that *Varia a me cogitantur* ('Various things are thought by me') has as strong a claim as the *Cogito, ergo sum* to be regarded as a first principle of knowledge.⁹³ But this comment suggests a blindness to the peculiarly self-verifying character of the *cogito*.

Perhaps Leibniz's chief interest in the theory of knowledge lies in defending a version of the Cartesian, and ultimately Platonic, doctrine of innate ideas. Not surprisingly, Leibniz's main defence of this doctrine is to be found in the *New Essays*; indeed, it constitutes the single most substantive treatment of epistemological issues in that work. But Leibniz's case for innate ideas does not stand on its own; it is an application of a theory of ideas in general, and it is best to begin by taking a brief look at this theory.

Leibniz's theory of ideas can be understood against the background of a famous controversy between Malebranche and Arnauld.⁹⁴ There are a number of issues in this controversy, but for our purposes the central problem is the ontological status of ideas. As an orthodox Cartesian Arnauld argued that ideas or concepts—e.g. the concept of a triangle—are mind-dependent entities; indeed, they are modifications of the mind.⁹⁵ Malebranche, by contrast, argued that ideas are not in human minds at all; rather, they are in God.⁹⁶ By thus locating ideas in God, Malebranche is self-consciously reviving the Augustinian doctrine of divine illumination; in order to achieve genuine knowledge of the world, our minds must be illuminated by the light of God's ideas. But Malebranche's philosophical point can perhaps be explained by removing the theological trappings; in contrast with Arnauld and orthodox Cartesians, he argues that ideas (concepts) are not psychological but abstract entities.

Leibniz approves of Malebranche's revival of the doctrine of divine illumination, and like Malebranche he speaks of God as the region of ideas.⁹⁷ But despite his tendency to echo Malebranche's language, Leibniz does not really follow him in regarding ideas as irreducibly abstract entities. Unlike Malebranche, Leibniz is a nominalist who cannot countenance such entities as basic items of ontology.⁹⁸ Certainly Leibniz's official definition of the term 'idea' is uncompromisingly psychological; ideas are 'in the mind' and they are 'faculties'—that is, dispositions to think in certain ways.⁹⁹ For Leibniz, then, since it is a psychological disposition, an idea is a persistent property of the mind. Thus, unlike Arnauld, Leibniz does not simply identify ideas with particular mental episodes. This definition of 'idea' does justice to something which Descartes recognized, if less explicitly and only intermittently: a person can have an idea of x even if at that moment he is not actually thinking of x.

On such a theory of ideas it is not hard to see what is involved in a commitment to innate ideas. For if ideas are themselves mental dispositions, then

innate ideas are innate mental dispositions; they are dispositions which we have had at least since birth. This is the form of the doctrine which Leibniz has primarily in mind when he defends the innateness of mathematical and metaphysical concepts against Locke. In his polemic Locke had adopted a two-pronged strategy of attack on innate ideas. According to Locke, the thesis of innate ideas is either empirically false—it ascribes highly abstract concepts to infants—or it is condemned to triviality.¹⁰⁰ In reply Leibniz seeks to show that his own dispositional theory of innate ideas constitutes a third option which is not caught in the mesh of Locke's polemic. To claim that the mind has an innate idea of *x* is not just to say, as Locke supposes, that it is capable of thinking of *x*; a distinction must be drawn between dispositions and 'bare faculties'.¹⁰¹ That Leibniz is right to draw such a distinction can be shown by reference to the case of a physical disposition such as fragility. When we call an object fragile, we are not just saying that it is capable of breaking; otherwise any object which breaks is fragile. Leibniz's theory of innate ideas thus implies at least that the mind is differentially predisposed to form certain thoughts rather than others. Here Leibniz seems to be reviving Descartes's thesis that ideas are innate

in the same sense as that in which we say that generosity is 'innate' in certain families, or that certain diseases such as gout or stones are innate in others; it is not so much that the babies of such families suffer from these diseases in their mother's womb, but simply that they are born with a certain 'faculty' or tendency to contract them.¹⁰²

In one way, however, Leibniz's dispositional theory of innate ideas seems to differ from Descartes's. Unlike Descartes, Leibniz seems to hold that mental dispositions cannot be basic properties; they need to be grounded in fully actual, non-dispositional properties of the mind. Here Leibniz may be responding to Malebranche's criticism that the Cartesians inconsistently countenanced basic powers in psychology, while rightly banishing them from physics.¹⁰³ But while it is obvious how, say, fragility can be grounded in structural properties of the glass, it is less clear what could serve to ground mental dispositions. In order to meet this requirement, it seems that Leibniz once again appeals to his doctrine of unconscious perceptions. My innate disposition to think of a triangle, for example, would be grounded in an unconscious perception which has triangle content. It is this doctrine which Leibniz appears to have in mind when he writes in the *New Essays* that 'ideas and truths are innate in us—as inclinations, dispositions, tendencies, or natural virtualities, and not as actions; although these virtualities are always accompanied by certain actions, often insensible ones, which correspond to them.'¹⁰⁴

The dispositional theory is Leibniz's main theory of innate ideas, but it is not the only one. Leibniz also advances what we may call the 'reflection account'. According to this account, the idea of substance, for example, is innate in the sense that we can acquire it by turning our mental gaze inward and reflecting on the

fact that our minds are substances. Leibniz seems to have been pleased with this theory, and it inspires some of his best-known remarks about innate ideas; it underlies such claims as 'We are innate to ourselves' and 'There is nothing in the intellect which was not previously in the senses, except the intellect itself'.¹⁰⁵ None the less, for all Leibniz's evident pride in the doctrine, it does not seem very satisfactory. For one thing, on this account ideas turn out to be innate only in the minimal sense that they are not acquired through the senses. Moreover, the theory faces obvious difficulties in explaining our acquisition of mathematical concepts, and these are generally numbered among the *explananda* for any theory of innate ideas. We may perhaps acquire the idea of substance by reflecting on the fact that our minds are substances, but we can hardly acquire the concept of a triangle by reflecting on the fact that our minds are triangular.

So far we have been chiefly concerned with Leibniz's defence of a theory of innate ideas against the Lockean objection that it must reduce to triviality. But what positive arguments does Leibniz offer in favour of the innatist doctrine? In the *New Essays* Leibniz is much more forthcoming on this score in connection with innate propositions than with innate concepts. In part this fact reflects the emphasis of Locke's own discussion, but it also testifies to Leibniz's concern with a problem which has exercised philosophers at least since Plato: this is the problem of explaining how we can have *a priori* knowledge of necessary truths, as we do in the case of mathematics. Leibniz follows the Platonic tradition by arguing that it is impossible to explain such knowledge except on the assumption that it is innate in our minds.¹⁰⁶ Through the senses, for example, we may perhaps come to believe that the Pythagorean theorem is true of all observed right-angled triangles, but we would never come to believe that this theorem expresses a necessary truth about such triangles.

Leibniz's case for innate knowledge has a distinguished ancestry, but it seems to be in danger of running together two separate issues.¹⁰⁷ In the first place, there is a causal question: how do we acquire beliefs to the effect that necessarily *p*? Second, there is a question of justification: how do we justify our claim to know that necessarily *p*? Leibniz sometimes seems to say that both questions can be answered in terms of an appeal to innateness, but this claim is distinctly dubious. The hypothesis of innateness may be a plausible answer to the first question, but it is more difficult to see how it helps with the second, normative issue; on the face of it, it seems entirely possible that our innate beliefs should all be false. It is true that the innatist hypothesis would help to answer the second question on the further assumption of divine benevolence; a good God can be trusted not to inscribe a pack of lies on our minds. Unlike Descartes, however, Leibniz is reluctant to appeal to divine benevolence in order to solve epistemological questions.

Leibniz's philosophy, and his metaphysics in particular, is an extraordinarily ambitious work of synthesis. His system seeks, for example, to combine Aristotelian and Cartesian insights within a framework of Christian theology. Sometimes Leibniz's attempts at synthesis seem overambitious and even

misguided; on occasion Leibniz seeks to address issues—such as the mind-body problem—without indicating how far he has departed from the assumptions which initially gave rise to them. Leibniz may well have been aware of such stresses in his system, and it may have been because of this awareness that he never ceased to develop as a philosopher; he continued to seek new ways of assembling the materials of his philosophy into a coherent whole. Indeed, in some ways, despite its strangeness, his later idealism is more coherent than the earlier, Aristotelian metaphysics. But though Leibniz had to struggle to achieve overall coherence, in the process he made major contributions to philosophical thought about the issues he discussed; his theories of substance, identity, causality, space and time, and innate ideas are illuminating and historically influential. For all its internal tensions and unresolved problems, his system in its various forms remains one of the most impressive examples of speculative metaphysics.

ABBREVIATIONS

A	German Academy of Sciences (ed.) <i>G.W.Leibniz: Sämtliche Schriften und Briefe</i> (Darmstadt, 1923–). References are to series and volume.
AG	R.Ariew and D.Garber (ed. and trans.), <i>Leibniz: Philosophical Essays</i> (Indianapolis, Ind., and Cambridge, Mass., 1989)
AT	C.Adam and P.Tannery (eds) <i>Oeuvres de Descartes</i> , 12 vols (Paris, 1897–1913; reprinted Paris, 1964–76)
CSM	J.Cottingham, R.Stoothoff and D.Murdoch (trans.), <i>The Philosophical Writings of Descartes</i> , 2 vols (Cambridge, 1985)
F de C	A.Foucher de Careil (ed.) <i>Nouvelles Lettres et Opuscules Inédits de Leibniz</i> (Paris, 1857)
G	C.I.Gerhardt (ed.) <i>Die Philosophischen Schriften von G.W.Leibniz</i> (Berlin, 1875–90)
Grua	G.Grua (ed.) <i>G.W.Leibniz: Textes Inédits</i> , 2 vols (Paris, 1948)
L	L.E.Loemker (ed.) <i>G.W.Leibniz: Philosophical Papers and Letters</i> (Dordrecht, 2nd edn, 1969)
MP	H.T.Mason (ed. and trans.) and G.H.R.Parkinson (intro.) <i>The Leibniz-Arnauld Correspondence</i> (Manchester, 1967)
NE	<i>New Essays on Human Understanding (Nouveaux Essais sur l'Entendement Humain)</i> . References are to series VI, volume 6, of the Academy edition and to the Remnant and Bennett translation. The pagination of Remnant and Bennett is identical with that of the Academy text; one page number thus serves for both

RB P.Remnant and J.Bennett (trans. and eds) *G.W.Leibniz: New Essays on Human Understanding* (Cambridge, 1981)

I have generally followed the cited translations; any significant modifications are indicated in the notes.

NOTES

- 1 See, for example, NE IV.viii, A VI.vi, RB 431.
- 2 Leibniz to Remond, 10 January 1714, G III 607.
- 3 See J.Bennett, *A Study of Spinoza's Ethics* (Cambridge, Cambridge University Press, 1984), pp. 55–6.
- 4 Aristotle, *Categories*, ch. 5, 43.
- 5 *Discourse on Metaphysics* 8, G IV 432, L 307.
- 6 *ibid.*, G IV 433, L 307.
- 7 Leibniz to Arnauld, 30 April 1687, G II 96–7, MP 121.
- 8 Sleigh [11.27], 123.
- 9 cf. Bennett, *op. cit.*, p. 58.
- 10 Leibniz to Arnauld, 30 April 1687, G II 100–1, MP 126.
- 11 Strictly speaking, for Descartes, there is only one body or extended substance: the entire physical universe.
- 12 See Sleigh [11.27], 98–101.
- 13 See Broad [11.29], 49–51.
- 14 Leibniz to Arnauld, 30 April 1687, G II 101, MP 126.
- 15 Arnauld to Leibniz, 4 March 1687, G II 86, MP 107.
- 16 Leibniz to Arnauld, 30 April 1687, G II 97, MP 121.
- 17 Arnauld to Leibniz, 4 March 1687, G II 87–8, MP 109.
- 18 Leibniz to Arnauld, 30 April 1687, G II 100, MP 125–6.
- 19 *Discourse on Metaphysics* 8, G IV 433, L 307.
- 20 Russell [11.38]; Couturat [11.43]; Couturat [11.44].
- 21 'First Truths', C 521, L 269. (Translation modified.)
- 22 See, for example, M.Ayers, 'Analytical Philosophy and the History of Philosophy', in J.Rée, M.Ayers and A.Westoby, *Philosophy and its Past* (Brighton, Harvester, 1978), p. 45. See also B.Brody, 'Leibniz's Metaphysical Logic', in Kulstad [11.34], 43–55.
- 23 Aristotle, *Metaphysics* 1011 b 27.
- 24 Leibniz to Arnauld, 14 July 1686, G II 56, MP 63.
- 25 As Arnauld noted (Arnauld to Leibniz, 13 March 1686, G II 15, MP 9), these remarkable doctrines of Leibniz's logic raise a number of puzzles concerning freedom and contingency. On these see, for example, Sleigh [11.27].
- 26 *Discourse on Metaphysics* 9, G IV 433, L 308.
- 27 Leibniz's Fourth Paper to Clarke, G VII 372, L 687.
- 28 See Parkinson [11.58], 6–8.
- 29 Leibniz to Arnauld, 9 October 1687, G II 112, MP 144.
- 30 *Discourse on Metaphysics* 8, G IV 433, L 308. (Translation modified.)
- 31 See Broad [11.29], 24–5.

- 32 See Loeb [11.55], 279.
- 33 It is worth noting here that, strictly speaking, there is a logical gap between 3 and 4 themselves. If 4 is derived from 3, then it is tacitly assumed that every state of a substance must have a cause. If, on the other hand, 3 is derived from 4, then it is tacitly assumed that there is no causal overdetermination. Both these assumptions would be congenial to Leibniz.
- 34 Parkinson [11.58], 147.
- 35 *ibid.*, p. 151.
- 36 Loeb [11.55], 286.
- 37 'First Truths', C 521, L 269. See Loeb [11.55], 286.
- 38 See Sleigh [11.27], 11.
- 39 See, for example, *New System*, G IV 484, L 457.
- 40 On the development of Leibniz's philosophy, see Broad [11.29], 87; D.Garber, 'Leibniz and the Foundations of Physics: The Middle Years', in K.Okruhlik and J.R.Brown (eds) *The Natural Philosophy of Leibniz* (Dordrecht, Reidel, 1985), pp. 27–130.
- 41 Leibniz to De Volder, 30 June 1704, G II 270, L 537.
- 42 *Monadology* 4, G VII 607, L 643.
- 43 Revision note of 1697–1700 to 'A New Method for Learning and Teaching Jurisprudence', A VI.i p. 286, L 91n.
- 44 R.McRae [11.69], 60.
- 45 Whether God is a monad is not entirely clear. However, there are places where Leibniz seems to say that God is a monad—for example, Grua II 558.
- 46 See Broad [11.29], 75, for a helpful discussion of these issues.
- 47 Leibniz to De Volder, undated, G II 275, AG 181.
- 48 M.Furth, 'Monadology', in Frankfurt [11.32], 99–135, esp. p. 122; Loeb [11.55], 304–5.
- 49 Leibniz to Des Bosses, 16 June 1712, G II 451–2, L 605.
- 50 Furth, in [11.32], 118–19.
- 51 See, for example, Leibniz to Des Bosses, 31 July 1709, G II 379; Leibniz to Des Bosses, January 1710, G II 399.
- 52 See, for example, Leibniz to Arnauld, 9 October 1687, G II 118–19, MP 152.
- 53 Leibniz to Des Bosses, 29 May 1716, GP II 517, AG 203.
- 54 See, for example, Broad [11.29], 91. For criticisms of the 'misperception' interpretation, see Rutherford [11.59], 11–28.
- 55 'Nowhere does Leibniz himself assert that he believes it... Thus the *vinculum substantiale* is rather the concession of a diplomatist than the creed of a philosopher' (Russell [11.38], 152; cf. Broad [11.29], 124–5).
- 56 cf. Broad [11.29], 127.
- 57 Leibniz to Des Bosses, 20 September 1712, G II 459, L 607.
- 58 C.D.Broad, 'Leibniz's Last Controversy with the Newtonians', in Woolhouse [11.62], 171.
- 59 Leibniz's First Paper to Clarke, G VII 352, L 675.
- 60 Leibniz's Third Paper to Clarke, G VII 363, L 682.
- 61 cf. Broad, in [11.62], 158–9.
- 62 Leibniz's Third Paper to Clarke, G VII 364, L 682–3.
- 63 Alexander [11.12], xxiii; Broad, in [11.62], 166.
- 64 Leibniz's Fifth Paper to Clarke, G VII 403–4, L 705.
- 65 Leibniz's Fourth Paper to Clarke, G VII 372, L 687.
- 66 Leibniz's Fifth Paper to Clarke, G VII 395, L 700.
- 67 N.Malebranche, *The Search After Truth*, 6.2.3.
- 68 *ibid.*
- 69 See the Preface to an edition of Nizolius, G IV 148. For an illuminating discussion of these issues, see H.Ishiguro, 'Pre-established Harmony versus Constant Conjunction', in A.Kenny (ed.) *Rationalism, Empiricism, and Idealism* (Oxford, Oxford University Press, 1986), pp. 61–85.
- 70 *Monadology* 7, G VII 607; L 643.
- 71 'Notes on Some Comments by Michel Angelo Fardella', AG 105; F de C 323.
- 72 *Discourse on Metaphysics* 33, G IV 458, L 324.
- 73 *Monadology* 33, G VI 620, L 651; *Principles of Nature and of Grace* 3, G VI 599, L 637.
- 74 See [Chapter 10](#) for a discussion of Leibniz's attitude towards Malebranche's occasionalism. See also Sleigh [11.27], 150–70.
- 75 See Leibniz to Arnauld, 28 November/8 December 1686, G II 74, MP 92; cf. Leibniz to Arnauld, 30 April 1687, G II 90, MP 113.
- 76 See Leibniz to Arnauld, 9 October 1687, G II 112, MP 143–4.
- 77 *Ethics* Part 2, Proposition 16, Corollary 2.
- 78 Leibniz to Arnauld, 9 October 1687, G II 112, MP 144.
- 79 *Ethics* Part 2, Proposition 12.
- 80 First Set of Replies, AT VII 107, CSM II 77.
- 81 NE Preface, A VI.vi, RB 53. (Translation modified.)
- 82 *ibid.*, p. 58.
- 83 *ibid.*, p. 54.
- 84 J.Cottingham, *The Rationalists* (Oxford, Oxford University Press, 1988), p. 152.
- 85 NE Preface, A VI.vi, RB 54.
- 86 *ibid.*
- 87 See Leibniz's appeal to the law of continuity, *ibid.*, p. 56.
- 88 Leibniz to Treuer, 21 May 1708; see Jolley [11.22], 117; cf. *Principles of Nature and of Grace* 4, G VI 600, L 637.
- 89 McRae argues that Leibniz's position on the issue of whether animals have sensation is contradictory. 'On the one hand what distinguishes animals from lower forms of life is sensation or feeling, but on the other hand apperception is a necessary condition of sensation, and apperception distinguishes human beings from animals' (McRae [11.69], 30). Leibniz certainly holds that self-consciousness distinguishes man from other animals, but whether he consistently equates self-consciousness with apperception is less clear.
- 90 See Jolley [11.22], 104.
- 91 Leibniz to Jaquelot, 28 April 1704, G III 473.
- 92 'Critical Thoughts on the General Part of Descartes's *Principles*', G IV 360, L 391.
- 93 *ibid.*, G IV 357, L 385.
- 94 This controversy was initiated by Arnauld's *On True and False Ideas* (1683) which attacked Malebranche's theory of ideas. On this controversy see S. Nadler, *Arnauld and the Cartesian Philosophy of Ideas* (Princeton, N.J., Princeton University Press, 1989); Jolley [11.65].
- 95 *On True and False Ideas*, ch. 5, Definition 3.
- 96 *Search After Truth* 3.2.6.

- 97 'On the Radical Origination of Things', G VII 305, L 488.
 98 The case for Leibniz's nominalism is well argued in Mates [11.57], ch. 10.
 99 'What is an Idea?', G VII 263, L 207.
 100 J.Locke, *Essay Concerning Human Understanding* I.ii.
 101 NE I.i., A VI.vi, RB 79–80.
 102 *Comments on a Certain Broadsheet*, AT VIII-B 358, CSM I 304.
 103 Elucidation Ten, *Search After Truth*.
 104 NE Preface, A VI.vi, RB 52.
 105 NE Preface, A VI.vi, RB 51; *ibid.*, II.i, III. Strictly speaking, even the reflection account involves a dispositional component, since it is a theory of how we acquire ideas, and ideas are mental dispositions.
 106 *ibid.*, Preface, p. 49.
 107 For this line of criticism see S.Stich (ed.) *Innate Ideas* (Berkeley and Los Angeles, Calif., University of California Press, 1975), Introduction, pp. 17–18.

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Introduction

Richard Kearney

Continental philosophy, as it has emerged in the twentieth century, is less a seamless fabric than a patchwork of diverse strands. Phenomenology, hermeneutics, existentialism, structuralism, critical theory, deconstruction—these are some of the salient movements which have developed in continental Europe between 1900 and the 1990s, though their influence is by no means confined to their area of origin. Continental thought has proved highly exportable, circulating far beyond the frontiers of Europe to provoke strong responses in the intellectual world at large.

It is worth recalling at the outset that the term 'continental' philosophy was coined not by European thinkers themselves but by academic philosophy departments in the Anglo-American world eager to differentiate it from 'analytic' thought. It was initially more a label of convention than a category corresponding to a given essence of thought. But whatever the origin or accuracy of the distinction, what became known as 'continental philosophy' has managed to exert a decisive impact on contemporary thought over the decades—an impact which exceeds the specialized discipline of academic philosophy and embraces such diverse fields as sociology, political science, literary theory, theology, art history, feminism and a variety of cultural studies.

Some view this protean character of continental thought as a defect—a sign that it cannot be rigorous or reliable. If it can be applied to anything in general it must be saying nothing in particular! More an art (*Kunst*) than a science (*Wissenschaft*)! More an exercise in poetic intuition than ratiocinative inquiry! What these objections tend to ignore, however, is that most founding fathers of continental thought were committed to a view of philosophy as science and saw themselves as guided by a basic notion of critical reason. Edmund Husserl, for instance, spoke of phenomenology as a 'rigorous science', while his disciple Heidegger regarded it as a transcendental science of the categories of Being. Even Sartre, the combative pioneer of French existentialism, sought to apply phenomenology to an historical 'critique of dialectical reason'.

Similar scruples operate in other major currents of continental thought. Ferdinand de Saussure, founder of structuralism, spoke of semiology as a 'science of signs'; and the works of such disciples as Lévi-Strauss, Foucault, Althusser, Lacan or the early Barthes were each marked by a determination to apply the structural model of language to a variety of disciplines (anthropology, historiography, historical materialism, psychoanalysis, sociology). One even finds critical theory and hermeneutics combining philosophical inquiry with other human sciences—with Paul Ricoeur calling for a creative dialogue between a historical 'understanding' (*Verstehen*) alert to the contingencies of human circumstance, and scientific 'explanation' (*Erklären*) committed to goals of universal objectivity. Many continental thinkers have sought to redefine and reinterpret reason, but few would claim to jettison it altogether.

Perhaps the most persistent feature of continental philosophy, through all its multiple mutations, is a commitment to the *questioning of foundations*. From phenomenology to deconstruction, one encounters the persuasion that the old foundationalist arguments no longer suffice. Meaning is not some metaphysical essence or substance; it is a task of intersubjective and intertextual relations. Truth cannot be grounded on a given system of being (realism) or mind (idealism); it must be radically rethought as an interplay of differences (perspectives, *Abschattungen*, intentionalities, situations, structures, signifiers, etc.). Continental philosophy thus finds itself renouncing the metaphysical quest for absolute grounds, even if some of its proponents—Husserl in particular—found this renunciation vexed and regrettable. Kant's claim to 'lay the foundation of knowledge', Hegel's appeal to Absolute Spirit, Kierkegaard's recourse to a Transcendent Deity, Marx's call for a Total Science, are largely superseded (albeit often reinterpreted) by continental thinkers in the twentieth century.

But if metaphysical foundationalism is one adversary, positivism is another. Reductionist attempts to explain away *meaning* in terms of *facts* are invariably resisted by phenomenologists, existentialists, critical theorists and postmodernists. Philosophical questioning, they argue, requires the specific methodology of a human science (*Geisteswissenschaft*); and while remaining in critical dialogue with the empiricometric procedures of natural sciences (*Naturwissenschaft*), it must not be *reduced* to the latter. Both methods are valid. It is the effort to confound or conflate them that leads to misunderstanding.

This is not to suggest that the critique of positivism is an exclusively continental concern. Analytic thinkers inspired by the later Wittgenstein, Ryle, Davidson or Dummett, show equal resolve in disentangling such category mistakes. But the reasons for doing so are different in each case. Generally speaking, analytic thinkers seek to avoid such error in the interests of clarity, evidence, verification and coherence; continentals appear more impelled by ontological scruples to keep thought open to 'irreducibles' and 'undecidables'—that is, to questions which surpass the limits of 'pure reason'—questions of being and nothing, of transcendence and difference, of alterity and historicity.

The reference to Kant here is perhaps useful. Continental philosophers have often tended to privilege the moral and aesthetic questioning of the Second and Third *Critiques* over the strictly epistemological reading of the First. This is not to say that they ignore the First but that they read it in a particular way. For example, while both analytic and continental thinkers share a common commitment to Kant's *transcendental aesthetic*, (the origination of all experience in sensible time and space), the former tend to show preference for the *transcendental analytic* (dealing with objective categories of understanding), whereas the latter incline more towards the 'limit ideas' of World, Soul and Freedom contained in the *transcendental dialectic*. To put this more succinctly, continental thought is on balance more likely than analytic thought to bypass the confines of pure reason, venturing into the liminal areas of noumenal experience and dialectic. Indeed Husserl's repudiation of the Kantian distinction between phenomenal and noumenal in his *Logical Investigations* (1900–1) already signalled this direction. Continental philosophy, it could be said, favours dialectical and practical reason over 'pure' reason. It holds that *being* is ultimately irreducible to *verification*, *meaning* to *evidence*, *truth* to *coherence*, *time* to *measurement*, *paradox* to *problem*.

This raises the controversial subject of style. Continental philosophy is marked by distinctive signatures of thinking and writing. Its practitioners would claim, for instance, that extraordinary questions of experience cannot always be expressed in ordinary language. Ideas of 'dialectical' reason (as both Kant and Hegel realized in their different ways) cannot be translated into categories of 'pure' reason. And the attendant *surplus of meaning* requires that standard criteria of correspondence and coherence have to be occasionally transgressed. This is by no means unprecedented in philosophy. As Heidegger points out in his introduction to *Being and Time*, Aristotle's innovative use of language to express his discovery of being was far from transparent to his original Greek readers. This line of reasoning could be construed as an 'anything goes' argument; but there is more to it than that. A certain experimental *style de pensée* is the risk certain philosophers are prepared to take in order to say the unsayable (or, in Beckett's ludic phrase, to 'eff the ineffable'). Adorno, Heidegger, Merleau-Ponty, Lacan, Levinas, Derrida, Kristeva—each has his or her own inimitable voices.

Finally, it must be acknowledged that continental philosophy does not arise in a vacuum. True to its conviction that thought is always *situated*, the predominant mood of such philosophy, from existentialism to postmodernism, is one deeply committed to moral and political questions. Thinking is no longer regarded as some neutral exercise in cognition but an intervention in the 'lived world' of history and society. This responsiveness of ideas to the *Lebenswelt* was, in the case of modern continental thought, radically informed by the experience of two world wars on European soil—and the corresponding horrors of Auschwitz and the Gulag. Husserl was one of the first to register this sense of breakdown and disorientation when, fleeing from Nazi Germany, he called for a fundamental rethinking of the western intellectual tradition. And most continental philosophers after him have shared this persuasion, advancing forms of inquiry that are increasingly exploratory, tentative, iconoclastic, *engagé*. Critical theorists from Horkheimer to Habermas, existentialists from Merleau-Ponty to de Beauvoir, structuralists from Barthes to Foucault, not to mention postmodernist thinkers like Lyotard and Vattimo, all demonstrate a keen preoccupation with social and political issues. The common challenge is to start all over again, seeking alternative modes of questioning. Totalizing Archimedean principles are renounced. Meaning and value are to be reinterpreted from first to last. Recurrent crises call for perpetual revision. And it is perhaps this urgency to respond to the trauma of historical change that has compelled so many continentals to abandon the metaphysical obsession with foundations in favour of post-metaphysical experiments of thought.

The fourteen essays in this volume outline and assess some of these experiments. The first five span the twin movements of phenomenology and existentialism, running from Husserl and Heidegger to Sartre, Merleau-Ponty and Levinas. Subsequent essays deal with specific currents of continental thought in such areas as science, Marxism, linguistics, politics, aesthetics, feminism and hermeneutics, while a final essay on postmodernism highlights the manner in which so many concerns of continental thought culminate in a radical anti-foundationalism. Each study speaks for itself; but I wish to thank the contributors, drawn from six different countries, for their co-operation and collegiality in putting this volume together. It has been a gratifying reminder that for all the controversies surrounding continental philosophy, it remains a forum of debate where

critical intelligence, scholarly expertise and a passionate commitment to the burning issues of our time are still alive and well.

CHAPTER 2 Philosophy of existence I

Heidegger

Jacques Taminiaux

At the very outset and up to the end, the long philosophical journey of Martin Heidegger (1889–1976) remained oriented by a single question, the question of Being, the *Seinsfrage*. This does not mean, however, that the question preserved the same meaning or ruled an identical field of investigation throughout the whole journey. Indeed, Heidegger himself repeatedly claimed that at some point a turn (*Kehre*) occurred in his thought. Moreover, thanks to the current publication of his entire *corpus* (*Gesamtausgabe*), it is now possible to draw a fair picture of the vicissitudes of the journey. For the purpose of this chapter, I propose to divide Heidegger's work into two phases. The first covers publications and lecture courses devoted to setting out the project of what Heidegger, at that time, called 'fundamental ontology'. The later phase covers writings which are all characterized by a meditation on the history of Being. Whereas the project of fundamental ontology aimed at completing metaphysics as the science of Being, the later meditation consistently aimed at overcoming metaphysics.

FUNDAMENTAL ONTOLOGY

After a few years of study in theology the young Heidegger, who first wanted to become a Catholic priest, had decided for reasons both personal and theoretical to dedicate his life to philosophy.

At the turn of the century, the burning area for philosophical research in Germany was logic. Two major trends were in conflict as far as the approach to the basic problems of epistemology and the philosophy of science is concerned. On the one hand under the influence of British empiricism, John Stuart Mill predominantly, many German scholars in those fields were convinced that the foundations of knowledge in general were strictly empirical. Accordingly they were looking for the roots of all cognitive principles in observable facts such as those which are investigated by psychology taken as an empirical science. On the other hand, in a reaction against empiricism, several scholars were attempting to revive in the disciplines at stake the transcendental orientation of Kant's criticism. In the history of ideas this conflict is known as the quarrel about *psychologism* between empiricism and transcendentalism. Whereas the former claims that thinking and knowing are a matter of facts occurring in the mind, the latter claims that thought and knowledge, however much they may depend on facts, could not exist without the help of a transcendental *cogito*. In 1900–1 a book appeared which had a decisive

influence in the quarrel: Edmund Husserl's *Logical Investigations*. Like neo-Kantianism, the book was a refutation of all empiricist reductionism. But unlike neo-Kantianism it vindicated a new and original method which was altogether intuitive and a priori: phenomenology.

Heidegger's early writings were contributions to the new phenomenological trend. His doctoral dissertation (1914) was entitled *The Doctrine of Judgment in Psychologism*. His *Habilitationsschrift* (1916), *The Theory of Categories and Meaning in Duns Scotus* was inspired by Husserl's idea of a pure a priori grammar. Heidegger's genuine project emerged after these academic exercises, when he came to realize that he was less interested in logic for its own sake than in the link between logic and ontology or even in the ontological foundation of the logical. Indeed he repeatedly claimed that the influence on him of the *Logical Investigations* was at that time on a footing with the impact of a book by one of Husserl's masters, Brentano's dissertation *On the Manifold Meaning of Being in Aristotle* (1862). Brentano showed that in Aristotle the Being of beings is expressed in at least four basic ways: as substance (*ousia*), as potentiality (*dunamis*) and actuality (*energeia*), as truth (*alêtheia*), according to the categories such as quality, quantity, relation and so on. While meditating upon this manifoldness in the meanings of Being, Heidegger raised the following question: is there a unique focus of intelligibility which illuminates these various meanings, a common source for understanding them, and how and where is it to be found? Such is the *Seinsfrage*, the question of Being.

The reappropriation of Husserl and Aristotle

On the basis of his early dissertations, Heidegger was already convinced that the phenomenological method was to be his way to address the question. When he became Husserl's personal assistant at the University of Freiburg-im-Breisgau, thereby gaining the opportunity to become familiar with all aspects of phenomenological research, he came to realize that the work of his master provided him not only with a method but also with basic discoveries thanks to which he was able to transform his ontological question into a genuine field of investigation. On the basis of the posthumous publication of several drafts and lecture courses, it is now possible to draw a fair picture of Heidegger's early attempts to articulate his own field of ontological investigations thanks to a peculiar retrieval or reappropriation of both Aristotle and Husserl. It could even be demonstrated that Heidegger's project of fundamental ontology is the outcome of an overlapping of what he considered to be the basic discoveries of Husserl with what he took to be the basic discoveries of Aristotle. This means that, with the help of Husserl's teaching, Heidegger was able to find in Aristotle's teaching an authentic phenomenology while, with the help of Aristotle's teaching, he discovered the possibility of transforming phenomenology into a field of ontological investigation. This ontological overlapping of Aristotle and Husserl is already noticeable in the short manuscript *Phenomenological Interpretations of Aristotle* [2.27] that Heidegger wrote in the autumn of 1922 at the request of P.Natorp in order to support his application for a teaching position at the University of Marburg. The overlapping pervades the teaching of Heidegger from the time of his appointment at Marburg until the publication of *Being and Time*.

Heidegger credited Husserl with three basic discoveries useful for articulating his own

field of investigation. The first discovery is *intentionality*. According to Husserl, intentionality is the very structure of consciousness in all its modes (perception, imagination, conceptualization, judgment, reasoning and so on). In every form of consciousness there is a specific relatedness between a specific way of intending and a specific correlate which has its way of appearing *qua* intended. Already in the 1922 manuscript, Heidegger makes clear that for him this structural relatedness is much more than a basic feature of consciousness. It is the fundamental character of the very life of each human being. *De facto*, or factually, the life of an existing human being is essentially *related*. In Heidegger's language of that time, this means that such relatedness is an ontological character of 'factual life'. This is why he writes:

the complete intentionality (the relatedness to, that towards which there is a relation, the accomplishment of the self-relating, the temporalism of it, the preservation of temporalisation) is nothing but the intentionality of the object which has the ontological character of factual life. Intentionality, merely taken as relatedness to, is the first phenomenal character, proximally noticeable of the fundamental mobility of life, that is of care. ([2.27], 17)

Whereas Husserl's discovery of intentionality was confined within the limits of a theory of consciousness, i.e., within the framework of a theory of knowledge, Heidegger's peculiar retrieval of the discovery results very early in another philosophical project aiming at an ontology of factual life, or of facticity. Along with this alteration, the new philosophical project entails an alteration in the very notion of logic. In Husserl, logic was another name for the theory of knowledge, i.e., of the basic categories making cognition possible. As a result of the shift from consciousness to factual life, logic becomes a name for the investigation of the ways in which factual life expresses and understands itself as a result of specific categories.

This second shift is at the core of Heidegger's reinterpretation of what he viewed as the second major discovery of Husserl, i.e., the doctrine of *categorial intuition*. According to this doctrine, the meaning of human discourse (*Rede*) depends on a complex set of structures, forms and basic concepts which are all of an ideal nature. In spite of the fact that, precisely because they are ideal, these idealities are in a position of excess or surplus *vis-à-vis* any sensuous content given to sensible perception, they are none the less, claims Husserl in the sixth *Logical Investigation*, offered to an intuition or insight that is no longer sensible, but ideal: the so-called *categorial intuition*.

Among the categorial intuitions mentioned by Husserl, one stood out as having a decisive relevance for the project to which Heidegger had subscribed from the outset: the problem of the *meaning of Being*. Indeed in the context of the sixth *Logical Investigation* Husserl was developing a twofold thesis about Being. First, he stated, in agreement with Kant, that 'Being is not a real predicate'. Second, he maintained, in contradistinction to Kant, that 'Being' is given to categorial intuition. Heidegger took advantage of this double thesis and transformed it for his own ontological purpose. 'Being is not a real predicate' meant for both Kant and Husserl that it is not to be found among the predicates which define the quiddity or *realitas* of beings: what they are. This thesis turned out to mean for Heidegger that Being is not in any sense a being. In other words the thesis

amounted to stating a difference between beings and Being, an onto-ontological difference. Likewise, the thesis according to which 'Being' is given to a categorial intuition, which in Husserl was an element of his transcendental logic, turned out to mean for Heidegger that in its factual life the human being has an understanding of Being. In other words, factual life interprets itself in terms of Being. This is to say that the ontology of those factual beings who understand Being is an hermeneutics, or a theory of interpretation.

But, by the same token, Husserl's twofold thesis about Being, thus reappropriated in an ontological framework, induced Heidegger to search in the *de facto* life of the human being for the unique ground for an intelligibility of the various meanings of Being. It induced him to search for the focus of intelligibility within what he was to call, a little later, the human *Dasein*.

In this search, Heidegger availed himself of a third discovery made by Husserl: the discovery of the *a priori*, a word with an obvious temporal connotation. Husserl often claimed that time consciousness was the most fundamental consideration of his phenomenology. In order for consciousness to be intentional at all, it has to be temporal. This means for Husserl that in order to be able to intend any intentional correlate, consciousness has to be a 'living present', a present which constantly articulates the 'retention' of what is just past with the anticipation (or 'protention') of what is going to happen. Heidegger, who was to edit in 1928 Husserl's *The Phenomenology of Internal Time-consciousness*, took advantage of this third discovery. His ontology of human *Dasein* aims at demonstrating that temporality is the only horizon within which we understand the meanings of Being. This is condensed in the very title of his masterwork of 1927, *Being and Time* [2.2, 2.45], a book in which the three Husserlian discoveries operate in a peculiar way along with an Aristotelian inspiration. The link between this inspiration and Husserl's legacy is already noticeable in the fact that Heidegger, in his Introduction, characterizes the phenomenological method at work in the book by using the very language of Aristotle.

What Heidegger discovered very early, as he puts it in a later survey of his 'way to phenomenology' is that 'what occurs for the phenomenology of the acts of consciousness is thought more originally by Aristotle and in all Greek thinking and existence as *alētheia*' (*On Time and Being* [2.70], 78). In its traditional definition, truth is an adequation between the mind and the real, and it occurs in a specific place: the predicative judgment. In one way, Husserl's phenomenology contributed to overcoming the classical notion of truth. For Husserl indeed, prior to the so-called *adequatio intellectus ad rem* (of the mind to the thing), the touchstone of truth is *evidence*, i.e., the self-manifestation of the object *qua* phenomenon to intentionality. Moreover, Husserl claimed that the locus of truth is in no way restricted to the predicative judgment: it is intentionality itself, or consciousness in all its forms. Heidegger took advantage of this breakthrough in his phenomenological interpretation of Aristotle. As far as truth is concerned, the Greek philosopher, he claims, is more original than Husserl on two accounts: first because he understands truth as the unconcealment of beings for an unconcealing being, the human being; second because this unconcealing, instead of being restricted to consciousness, is attributed by him to the human comportment as such, more precisely to the human way of being. In other words, for Aristotle, claims Heidegger,

alētheia, or truth, is a matter of *bios*, of life or of existence. It is in the context of this phenomenological reading of Aristotle that Heidegger was led to replace the words 'factual life' by the key word *Dasein* in order to characterize the human way of being. In German the word is both a verb meaning 'to be present', or to exist, and a noun meaning 'presence', or existence. Moreover, *da* the prefix of the word, means both *there* and *then*; it points to a place and time for something to happen. Heidegger's use of the word to characterize the human way of being is an attempt to suggest that the concrete existence of a human being is a phenomenon which is *there*, thrown into a place and a time in which an unconcealment happens.

But in addition to a concept of truth in terms of existence, Heidegger also discovered in Aristotle a concrete analysis of human existence as an unconcealing way of being. The ontological reappropriation of Husserl's discovery of intentionality taught him that human existence as such is a *relatedness to*. The reappropriation of Husserl's discovery of categorial intuition taught him that human existence, in its relatedness to, understands Being. Likewise, the appropriation of Husserl's discovery of the *a priori* taught him that time is at the core of the understanding of Being. Since those three ontological reappropriations were oriented by a single question—where is the source for the understanding of Being to be found?—they all required an analysis of *Dasein* as the being who understands Being. In other words they required an analysis of *Dasein*'s way of being, i.e., for an ontology of *Dasein*. And here Heidegger discovered very early that Aristotle's description of human comportment paved the way to the ontology of *Dasein* that he was attempting to articulate. His lecture courses of the Marburg period demonstrate that, in his view, the *Nicomachean Ethics* was such an ontology. It is in such terms that Heidegger deals with Aristotle's *Ethics* in the introduction to his celebrated lecture course of 1924–5 on Plato's *Sophist* [2.29], which had a deep influence on those who originally heard it, including Hannah Arendt, Hans-Georg Gadamer and Hans Jonas.

The *Nicomachean Ethics* scrutinizes the dianoetic excellences or intellectual virtues and establishes them in a hierarchy. According to Aristotle these virtues have two levels: the lower are the deliberative excellences, the higher are the epistemic excellences. At the lower level two deliberative virtues take place: *technē* and *phronēsis*. In Greek *technē* means art, in the sense of knowhow. Heidegger insists that in Aristotle *technē* is an intellectual excellence because it is a matter of truth, of *alētheia* as unconcealment. It is a peculiar way of disclosing, or discovering, what is required for a specific comportment: the productive comportment called *poiēsis*. In other words, it is a way of knowing truth, or even of being in truth, linked with a peculiar way of being: the production of such and such a work or result. However, claims Heidegger, the reason why Aristotle puts *technē* on the lowest rank among the deliberative excellences is to be understood in terms of an ontology of *Dasein*. Indeed, in the productive way of being which is ruled by *technē*, *Dasein* is busy with, and concerned by, products or results out there. To that extent the pair *technē-poiēsis* suffers an ontological deficiency. To be sure, the principle for the productive activity informed by an unconcealing knowhow is *within* the agent, hence within the *Dasein* and of the same nature as *Dasein* itself: it is the model conceived by the agent and held in view by him. But the telos or end of productive activity is in no way within *Dasein* or of its nature: it occurs *outside* of *Dasein*.

This ontological deficiency, claims Heidegger, is no longer the case in the second

deliberative excellence, namely *phronēsis*, also conceived by Aristotle as a peculiar way of disclosing, or of being in truth, adjusted to a specific comportment or active way of being. This active way of being is no longer *poiēsis* but *praxis*, i.e., action in the sense of the conduct by an individual of his or her own life. *Phronēsis* discloses to *Dasein* the potentiality of its own existence. Here again, according to Heidegger, the reason why Aristotle puts *phronēsis* on the highest level among the deliberative excellences is to be understood in terms of an ontology of *Dasein*. Indeed neither the principle of *phronēsis* nor its goal falls outside the human being. The principle here is a prior option of the *Dasein* for well-doing, while the end is the very way of being of *Dasein*, its own *praxis*. *Phronēsis* is nothing but the resoluteness to exist in the highest possible manner.

Thus understood in ontological terms, Aristotle's distinction between the *technē-poiēsis* and the *phronēsis-praxis* distinctions allowed Heidegger to set up the framework of his own ontology of *Dasein*, as a being who understands Being. This ontology, which was to be developed in *Being and Time*, describes the existence of *Dasein* in terms of a tension between an everyday way of Being in which the *Dasein* is not authentically who it is, and an authentic way of Being in which *Dasein* is properly itself. The description shows that in everydayness *Dasein* cannot be its ownmost Being, because it lives in a condition of preoccupation or concern for ends to be attained by a variety of means or tools, a condition which is enlightened by a specific circumspection about surroundings. To that extent everydayness is ruled by *Das Man*, the 'They'. In it everybody is nobody, because such a condition never confronts *Dasein's* own existence. This description is the outcome of a peculiar reappropriation of Aristotle's doctrine concerning *technē* and *poiēsis*. On the other hand, the analytic of *Dasein* shows that *Dasein* authentically becomes a Self by confronting its ownmost potentiality for Being. It does so by accepting existence in its finitude, as a Being-unto-death. This description, with the exception of the emphasis put on anxiety, is again the result of a peculiar reappropriation of Aristotle's analysis of *phronēsis* and *praxis*. Aristotle indeed insists that *phronēsis*, as a dianoetic virtue, has its proper realm in the perishable. On the other hand, Heidegger occasionally suggested when he was teaching Aristotle that the latter's concept of *phronēsis* somehow anticipates the notion of conscience (*Gewissen*). And conscience in Heidegger's analytic of *Dasein* is the phenomenon in which *Dasein* listens to a call from its own depths summoning it to confront its finitude.

But the Aristotelian inspiration in Heidegger's ontology of *Dasein* is not restricted to *technē* and *phronēsis*. It also includes a peculiar reappropriation of Aristotle's doctrine of the epistemic virtues. In the *Nicomachean Ethics* these virtues are *epistēmē* (science) and *sophia* (wisdom). Both are adjusted to *theoria*, i.e., to a purely contemplative attitude, which bears upon a realm which is no longer perishable, a realm which is forever what it is and how it is. For Aristotle that realm is higher than the realm of human affairs precisely because it is not perishable as they are. And in his view it is at this level only, specifically at the level of *sophia*, that a true concern with Being can take place, as a contemplation of the ontological structure of the totality of beings and of the prime mover which is the principle for all movements of *physis* (nature). Heidegger insists, in his Marburg lectures, that, according to Aristotle, the contemplation of that immutable realm is the most authentic way of being that a mortal can attain, because as long as such contemplation lasts, the mortal spectator lives in the proximity of the divine.

According to Heidegger's teaching in the Marburg period, there is in the Aristotelian concept of *sophia* an equivocation between ontology as the science of the Being of beings and theology as the science of the divine. There is also an indeterminacy, because for Aristotle the only meaning of Being is limited to what he calls *ousia*, i.e., in Heidegger's interpretation, presence in the sense of presence-at-hand (*Vorhandenheit*). This meaning of Being, Heidegger says, is adjusted to nature, but it is not relevant as far as the Being of *Dasein* is concerned. Moreover, considering presence as the only meaning of Being amounts to understanding Being in the light of a temporality in which only the present is important. This temporality, considered as a succession of present moments, is in fact the concept of time that Aristotle develops in his *Physics*. Heidegger raised objections to the predominance of this concept. In the case of the Being of *Dasein*, putting the emphasis only on the present is one-sided and misleading. In order for *Dasein* to be authentically present, it has to retrieve who it was as thrown in its own Being as well as to anticipate its own end. Whereas the temporality of nature is ruled by the exclusive privilege of the present, the temporality of *Dasein* not only is determined by a triad, in which three *ecstasis*—past, present, and future—co-operate, but also is ruled by the privilege of the future.

Accordingly, Heidegger, who agrees with Aristotle in considering the contemplation (*theoria*) of Being as the authentic accomplishment of *Dasein*, reorients that contemplation exclusively towards the finite being of *Dasein* and its finite temporality. As a result, fundamental ontology claims to be able to overcome both the onto-theological equivocation and the ontological indeterminacy which characterized the ancient ontology and its legacy. The overcoming includes a deconstruction (*Destruktion*) of the ancient concepts along with a reversal of the old hierarchy between the perishable and the immutable. This deconstruction aims at demonstrating that for the most part the basic concepts of ancient philosophy and consequently of the entire western tradition of metaphysics—concepts such as matter (*hylē*) and form (*morphē*), potentiality (*dunamis*) and actuality (*energeia*), idea (*eidōs*), substance (*hupokeimenon*), and so on—find their phenomenal origin in the activity of production, an activity which in order to be possible at all presupposes the permanence of nature, and liberates its products from their link to the producer to bestow on them a permanence similar to the natural one. Consequently these ontological concepts, instead of being coined after the authentic ontological experience that *Dasein* has of its own Being, were coined in the inauthentic framework of everydayness. In such a framework *Dasein*, while coping with entities which are ready-to-hand, pays attention to a meaning of Being—presence-at-hand (*Vorhandenheit*)—which is not adjusted to finite existence as its own way of Being. In other words, the genealogy carried out by deconstruction aims at showing that Greek ontology, in its concern for the eternal features of nature, was mistaken in believing that the contemplation of those features allowed the philosopher to go beyond the finitude and reach the proximity of the divine. Quite the contrary; it remained trapped within everydayness. Here appears the *reversal*: the so-called overcoming of finitude was a falling away from it. The falling away from the authentic towards the inauthentic explains the predominance of the notion of presence-at-hand in traditional ontology.

As a result of this reversal, the notion of transcendence, which traditionally defined the position of the divine above the lower realm of immanence, was transformed by

Heidegger to designate the process through which the *Dasein* goes beyond beings towards Being: only the *Dasein* properly transcends, and it transcends beings towards Being.

The articulation of the project

Heidegger's project, inspired by a singular appropriation of Husserl and Aristotle, of fundamental ontology, designed as a reply to the question of the meaning of Being, included two tasks which provide the structure of *Being and Time* [2.2; 2.45].

The first part of the treatise was supposed to be devoted to 'the interpretation of *Dasein* in terms of temporality, and the explication of time as the transcendental horizon for the question of Being' (pp. 39; 63). The book, which came out in 1927, announced three divisions of Part One: (1) 'the preparatory fundamental analysis of *Dasein*'; (2) '*Dasein* and temporality' (*Zeitlichkeit*); (3) 'time and Being' (pp. 39; 64). The third division never appeared.

Part Two of the treatise was supposed to deal with the 'basic features of a phenomenological destruction of the history of ontology, with the problematic of Temporality [*Temporalität*] as our clue' (pp. 39; 63). This part, which also never appeared, was designed to have three divisions: the first one dealing with Kant's doctrine of schematism, the second with the ontological foundation of Descartes' *cogito sum*, the third with Aristotle's essay on time.

The published portion of Part One (which made Heidegger instantly famous) proceeded in two steps, corresponding to divisions one and two. If Part One starts with an analysis of *Dasein*, it is because the leading question of the meaning of Being rebounds as it were on the one who poses it. Indeed *Dasein* is the only being for whom Being is a question or an issue. If such analysis has to be fundamental, it is because, instead of restricting itself to the teachings of disciplines such as anthropology, psychology or biology, it must treat *Dasein* as a being for whom Being itself is the question, and not 'what is man?', 'what is mind?' or 'what is life?' If such analysis is preparatory, however, it is because it is carried out not for its own sake but in order to provide an answer to the question of the meaning of Being.

But even leaving aside the problem of what is prepared by it, the analysis of *Dasein* is not governed at all by the traditional question 'what?' Instead of addressing the question 'what is *Dasein*?' the analysis has to address the question 'who is *Dasein*?' Indeed the question 'what?' is not adjusted to *Dasein* for the reason that, in its *de facto* existence, *Dasein* is such that its very essence lies in its 'to be' (*Zusein*), or in its 'existence', a word which indicates an openness to a task, a possibility, and which is allotted by Heidegger solely to *Dasein* in order to avoid any confusion with the traditional use of *existentia* as equally valid for designating the Being of any entity whatsoever. In Heidegger's terminology the meaning of the word *existentia*, in its traditional use, is 'presence-at-hand', and is appropriate only to entities which are precisely *not* of *Dasein*'s character. *Dasein* is thus the only entity in which existence has a priority over essence. Moreover if the question 'what?' has to be replaced by the question 'who?', it is because there is no *Dasein* in general, because an individual *Dasein* is not a special instance of some genus. *Dasein* as an entity for which Being is an issue in its very Being, is 'in each case

mine' (pp. 42; 67–8). As an entity which is its own possibility or existence and which is in each case mine, *Dasein*, in its very Being, can win or lose itself. 'Mineness' grounds either *authenticity* or *inauthenticity*. The German words, *Eigentlichkeit* and *Uneigentlichkeit*, have no moral connotation. *Eigentlichkeit* designates a condition in which someone is its own Being; *Uneigentlichkeit* refers to a condition in which someone is not properly its own Being.

As a result of the priority of existence over essence, the fundamental analysis of *Dasein* has to treat it from the existentiality of its existence. The access to the basic characters of that existentiality is given in the condition in which *Dasein* is 'proximally and for the most part'—everydayness. These basic characters of existentiality are called *existentialia*.

Because mineness grounds either authenticity or inauthenticity, all existentialia have an authentic and inauthentic modality. They all have a transcendental status, which means that they are a priori conditions of possibility for *Dasein*'s existence. They are factors or items of a constitutive state of *Dasein* that Heidegger calls 'being-in-the-world'.

Being-in-the-world is the primordial phenomenon which has to be analysed in order to uncover the *existentialia*. Though the phenomenon is unitary, it is possible to look at it in three ways, by putting the emphasis on the 'world' as such, or on the 'being-in' as such, or on the one 'who' is in the world.

The world is neither the total amount of entities composing what is usually called the universe nor a framework for those entities. It is neither a global container nor an addition of contents. It is not nature. In order for nature to appear, a world is presupposed. The world must be understood a priori in terms of existentiality. Properly speaking, only *Dasein* is in the world, and there would be no world without *Dasein* intimately open to it. And since *Dasein* is not present-at-hand but existing, the world is not a global presence-at-hand that constantly encircles *Dasein*. Because *Dasein*'s existence is its own 'can be' or possibility, the world which is at issue in the phrase 'being-in-the-world' must be described in terms of possibility, but a possibility which is already given. It is an *existentialia*.

If we take as clue our everyday way of Being, we must admit that our comportment is characterized as a concern with an environment. Within that concern we do not merely observe things present-at-hand. Instead we are constantly busy dealing with entities of a pragmatic nature endowed with a pragmatic meaning that we understand. Each of these entities is essentially 'something in-order-to', it is an instrument adjusted to this or that purpose. None of those entities is isolated. They are all interrelated, and in order for them to appear as 'in-order-to', they all presuppose as backdrop a context of involvement, with which we are familiar. Such involvement is that 'wherein' we understand our ways and that 'for which' we let entities be encountered and used. But the involvement presupposed by our everyday concern itself refers to a deeper a priori which is the very relatedness of *Dasein* to its own potentiality for Being. This ultimate 'for the sake of which' is not a possibility within the world, it is the world itself as *Dasein*'s own potentiality. World is another name for Being as that for the sake of which *Dasein* is transcending.

Similarly 'Being-in' has to be understood in terms of existentiality. And since existence as such is a disclosing process, the 'Being-in' is better captured as a lighting or

as an openness than as an insertion. Three existentialia constitute the 'Being-in': disposition, comprehension and discourse.

Disposition (*Befindlichkeit*) is the state in which *Dasein* finds itself. That *Dasein* essentially finds itself in some state is revealed by the moods or humours making manifest how one is. In terms of existentiality, moods reveal that *Dasein* has been delivered over to the Being is has to be. Heidegger calls 'thrownness' the facticity of being delivered over to Being. Hence disposition discloses *Dasein* in its thrownness.

Comprehension (*Verstehen*) is also to be conceived in terms of existentiality. In order to comprehend or understand the significance of the utensils it deals with in everydayness, *Dasein* has to project itself upon this or that possibility. In any act of understanding, there is some projection. But the *de facto* projections pervading *Dasein's* ordinary comportment have their ontological foundation in *Dasein's* projection upon its own 'can be'. As an *existentialia*, comprehension discloses *Dasein* itself in its own potentiality-for-Being.

'Discourse is existentially equiprimordial with disposition and comprehension' (161). The German word for discourse is *Rede*, which is Heidegger's translation of the Greek *logos*. In terms of existentiality, discourse is the disclosing articulation of the intelligibility of Being-in-the-world.

The reply to the question "'who' is in the world?" shows that *Dasein* in its everyday mode of Being is not properly a Self. Most of the time it loses itself in what it is busy with. In other words it understands itself in terms of what is ready-to-hand within the world. On the other hand it essentially belongs to *Dasein* to be with other *Daseins*. But here again the everyday mode of Being-with-one-another is such that *Dasein* is absorbed in the neutrality of the 'They' (*das Man*), instead of confronting its own *Dasein*. In both cases the inauthentic prevails over the authentic. Heidegger calls 'fallenness' the tendency *Dasein* has to forget its own Self or to move away from it. Fallenness is an *existentialia*. As a result of such a tendency, all the *existentialia* have two modalities: an authentic and an inauthentic one. For example, discourse in its inauthentic form is idle talk. Likewise comprehension in its inauthentic form is curiosity.

We can readily see that a temporal connotation is involved in the description of all these items. Already pre-given as a 'wherein', the world is a past. But as constantly anticipated as a 'for which', it is a future as well.

A temporal dimension is also involved in the three interconnected modes of disclosure which constitute 'Being-in'. Since disposition discloses the facticity of *Dasein's* thrownness, it reveals that it belongs to existence to have already been. It is also obvious in the case of comprehension as a project: if *Dasein* itself is a project, this means that structurally it throws itself forwards in the direction of a future. Discourse as an *existentialia* also shows a temporal dimension. By articulating 'Being-in-the-world' it expresses both the thrownness and the self-projection of *Dasein*.

Likewise, if the ontological answer to the question 'who?' has to be expressed in terms of a tension between authenticity and inauthenticity, the answer itself either emphasizes a future or, concerning the rule of the 'They' and of the everyday equipment, the predominance of what is currently the case.

Once Being-in-the-world is analysed in its constitutive items, there must be a synthetic return to the unitary character of the phenomenon. Heidegger characterizes the

ontological unity of *Dasein's* Being-in-the-world with a single word, *Sorge*, usually translated by the word 'care'. Care is the transcendental structure at the root of all the existential features mentioned so far. Care, as the ontological unifying structure of *Dasein*, is revealed in the fundamental disposition of anxiety, thanks to which *Dasein* realizes that it is already thrown in the world, that it has to be its own Being, and that it is thus thrown and projecting itself in a condition of proximity to inner-worldly beings whose Being is not its own Being. In the experience of anxiety the three intercon-nected dimensions of care are disclosed: facticity, possibility, fallenness among other beings.

This is a turning point in the existential analytic: it opens the way to the second division of Part One: *Dasein* and temporality.

The phenomenon of care is now manifest in its unity. However, the question remains: what about its totality? A phenomenon appears as a whole when its limits are made visible. Hence the problem is: what are the limits of care as the basic structure of existence? Clearly the limits of existence are birth and death. If we consider both limits as terms of a process which is not intrinsically determined by them, then we might say that, as soon as we exist, birth is over and that until we cease to exist, death is not there. But this view does not fit with *Dasein's* mode of Being: a project which is thrown. Precisely because *Dasein's* project is thrown, birth is not a mere moment which is over as soon as *Dasein* exists. *Dasein* cannot be who it is without having been thrown in the world with the limited possibilities which from the outset condition its Being. Likewise death is not the other external limit of existence. Existence as a project includes in itself, i.e., in its potentiality, its own end. This means that *Dasein's* death is not restricted to its Being-at-the-end. It is rather a manner of Being that *Dasein* takes over as soon as it is. It thoroughly permeates existence. It makes *Dasein's* project essentially finite and turns it into a Being-towards-the-end.

Because of such finitude, a negative feature, a negativity determines care in relation to both thrownness and project. What about the third dimension of care, i.e., the proximity with other beings? Is it also determined by negativity? The answer is ambiguous. It can be if and only if *Dasein* resolutely takes over its own mortality. But for the most part, because the proximity with other beings entails a predominance of pragmatic preoccupation over care, *Dasein* covers up its own finitude and thinks of death as a contingent event occurring to everybody and to nobody. They die, I don't.

This description allows us to understand how temporality is the ground of the ontological constitution of *Dasein*. According to ordinary views and a philosophical tradition going back to Aristotle, time is an unlimited sequence of moments, including the moments which once were but no longer are, those which are not yet and the one which is now. The sequence is considered to be irreversible and measurable. Heidegger claims that such a concept of time was shaped not on the basis of a phenomenal analysis of *Dasein* but on the basis of the experience of nature. Instead, the original concept of time has to be articulated in conformity with the ontological constitution of *Dasein*. A clue for the articulation is provided by the structure of care: Being-ahead-of-itself and already-being-in-a-world as well as falling and Being-alongside entities within-the-world. This structure points to the originary time. The 'Being-ahead-of-itself' indicates an anticipatory dimension. Since such anticipation is already there, it includes a retrieval of what and who the *Dasein* already is or has been. The anticipation is *Dasein's* future. It is the

existential future, whereas the retrieval is *Dasein's* existential past. Finally, the proximity with other beings points towards *Dasein's* present. Since that proximity is properly finite if and only if *Dasein* resolutely takes over its own Being-towards-the-end, the existential present can only be the instantaneous vision (*Augenblick*) by *Dasein* of the situation of its finite existence. Such vision includes a glimpse of the difference between the mode of Being called existence and modes of Being such as readiness-to-hand and presence-at-hand.

Heidegger claims that the foundation of care on the triadic structure of existential time is not at all a philosophical construct. It is ontically or pre-ontologically revealed to each one in the phenomenon of conscience (*Gewissen*), a phenomenon which is not itself moral in the first place, and demands a description in terms of existentiality. A specific call belongs to the phenomenon of conscience. The structure of such a call reveals a temporal foundation. The call is addressed to a fallen *Dasein* currently captivated by entities in-the-world. The call comes from *Dasein* itself in its facticity, a condition in which *Dasein* as thrown is in the mode of having been. And the message of the call is addressed to *Dasein* again in its ownmost potentiality-for-Being, i.e., in the mode of a future.

Heidegger insists that 'the primordial meaning of existentiality is the future' (324). However, neither the existential future (anticipation) nor the existential past (retrieval) nor the existential present (instant of vision) has the traditional character of a discrete entity. Because the existential future is a coming-to-oneself, it is a dimension and not at all a not-yet-present moment nor a sequence of not-yet-present moments. In Heidegger's language it is an *ecstasis*. Likewise the existential past and the existential present. The word *ecstasis*, which in Greek means 'standing outside', is used by Heidegger in order to emphasize a connotation of stretching towards, or openness to. With this Heidegger associates the notion of horizon. The horizon is that to which each *ecstasis* is open in a specific way. Existential temporality is ecstático-horizontal. Now, because the *ecstases* are interconnected under the primacy of the future, because they belong together intrinsically, temporality is an ecstatic unity of future, past and present. Such unity has itself a horizon which is the condition of possibility of the world as existential and of *Dasein's* transcendence.

Because of its existentiality, temporality is essentially finite, instead of being an infinite sequence wherein existence would take place. It is the very process through which an intrinsically finite mode of Being opens itself to its own potentiality for Being and to other modes of Being. For the same reason, it is not enough to say that *Dasein's* existence is temporal. Rather, *Dasein* temporalizes. Genuine time is temporalization and even self-temporalization. In its ownmost Being, *Dasein* exists in such a way that it runs ahead towards its own end (*Vorlaufen*), retrieves its own thrownness (*Wiederholung*), and renders present its own situation (*Gegenwärtigung*).

In the light of all this, it turns out that common time, as an infinite sequence, is derived from existential time. According to the common concept of it, time is a sequence of now-moments revealing itself in counting, a counting done in reference to a motion (the sun or the hands of a clock). In fact, Heidegger says, this reckoning of time is guided by and based upon a reckoning with time: time is already disclosed to us *before* we use a clock. The disclosure occurs in our daily comportment. Hence our daily reckoning with time is

what deserves analysis, if we want to define common time fully. As soon as we approach common time in these terms, we realize that the 'now' we check on the clock every day is never a naked and discrete entity given as an object at hand (*vorhanden*). Now is always 'now that' I am doing this or that. When I say now, in daily life, I am always expressing myself as attending to something, as *presentifying* it. Likewise, when I say 'at that time', I display myself as *retaining* something bygone, either in the mode of recollecting it or in the mode of forgetting it. Similarly, when I say 'then', I show that I am *expecting* something to happen, on its own or by reason of my own deeds. Hence counting time leads back to a reckoning-with-time articulated according to presentification, retention and expectation. But this triad presupposes the existential triad mentioned above. While presupposing the original temporality, however, it also covers it up because of the falling character of everydayness, in which inner-worldly entities tend to prevail upon the existential world. As a result of our fallenness, time becomes an infinite sequence, whereas the original temporality is essentially finite. For the same reason, time becomes irreversible whereas authentic temporality is an ever-renewed encroachment of the past upon the future and vice versa. For the same reason, time gets bound to the *motion* of things whereas authentic temporality is the ownmost mobility of *Dasein*.

The entire analysis involves an explicit criticism of Aristotle, whose concept of time is indeed a free-floating sequence of nows, and an implicit criticism of Husserl's notion of time-consciousness which, as an articulation of retentions, living impressions and protentions, does not go beyond the level of everyday preoccupation.

The deconstructive reappropriation of the history of ontology

As far as Greek philosophy is concerned, there are in fundamental ontology several traces of a 'deconstructive' retrieval of Plato. Heidegger agrees with Plato that human beings are naturally philosophers although most of the time people do not care about philosophy. He also agrees with Plato's characterization of philosophy as a way of Being, a form of existence: the *bios theoretikos*. The distinction between the 'They' (*Das Man*) and the authentic Self owes much to Plato's demarcation between the multitude (the *polloi*) and the philosopher. The description of everydayness in terms of a productive preoccupation owes much to Plato's condescending characterization of active life in terms of *poiēsis*. The description of everyday language as empty talk is obviously indebted to Plato's contempt for *doxa* (opinion) and sophistry. Above all the Heideggerian hierarchy between three levels of seeing—the immediate intuition (*Anschaung*) of entities merely present-at-hand; the awareness that the mere presence of those entities is an abstraction deriving from a loss and fall in relation to their readiness-to-hand (*Zuhandenheit*) open to a practical circumspection; and finally the awareness, reached in the silence of conscience, that the everyday surrounding world (*Umwelt*) is in a position of falling away from one's authentic world, a world transparent (*durchsichtig*) to conscience only—that hierarchy is obviously an echo to the levels of seeing mentioned by Plato in the parable of the cave.

As far as medieval thought, with which Heidegger became acquainted during his early theological studies, is concerned, it is possible to recognize in his analytic of *Dasein* a discreet reappropriation of the scholastic concept of *analogia entis* (analogy of being).

Just as the medieval theologians determined what they called the degrees of Being in terms of an analogy between the kinds of beings and the *summum ens* (highest being), a divine being whose actuality is devoid of any potentiality and whose essence is identical with its existence, Heidegger determines analogically an hierarchy of the ways of Being, in reference to the *Dasein*. Thus he characterizes the being of the stone as ‘worldless’ and the being of the animal as ‘poor in world’ on the basis of a unique analogy with *Dasein*, whose essence, once it is thrown in its Being, is to exist, or to be in the world.

Likewise the very distinction between an everyday world in which the *Dasein* feels at home, and an authentic world in which it is homeless is not without a secularized reminiscence of Augustine’s notion that the world is an exile, and that the Christians do not belong to it.

For modern philosophy, fundamental ontology includes a reappropriation and deconstruction of several major authors, such as Leibniz, Kant and Hegel.

In Leibniz the ‘principle of ground’ (*Satz vom Grund*), also formulated as the principle of Sufficient Reason which is supposed to provide an ultimate answer to the question ‘why?’, is based on the nature of truth. For Leibniz truth is to be found primarily in judgment, and judgment ultimately consists in an identity between subject and predicate, an identity such that it can be demonstrated that any *P* is analytically derived from *S*. But for Leibniz this analytical concept of truth is not simply a matter of logic. It has an ontological basis. Ultimately all the logical propositions ‘*S* is *P*’ have their ontological foundation in the monads that harmoniously compose reality, each of them having in itself the reason or ground for what happens to it. At the time of fundamental ontology, Heidegger discussed Leibniz in the published essay *The Essence of Reasons* (*Vom Wesen des Grundes* [2.4]), but also in posthumously edited lecture courses such as *The Metaphysical Foundations of Logic* [2.34, 2.48]. Though rejecting the traditional privilege of judgment shared by Leibniz, he agrees with him that the problem of ground has to be dealt with in terms of the problem of truth. He also agrees that any ontic truth presupposes an ontological foundation of a monadic nature. But whereas Leibniz inserts such a foundation into an onto-theological framework, Heidegger attributes it to the transcending process through which the *Dasein*, as a Self, overcomes beings towards Being. That process of transcendence which is the ontico-ontological difference itself is the foundational coming-to-pass of truth as unconcealment.

Kant’s philosophy was also the topic of a deconstructive appropriation. The major proof of this is offered by Heidegger’s book *Kant and the Problem of Metaphysics* [2.3, 2.47]. The book is an attempt to demonstrate that the *Critique of Pure Reason*, at least in its first edition, somehow anticipates the project of fundamental ontology in its reply to the question ‘How are synthetic judgments possible?’ Heidegger insists that according to Kant the question makes sense only if it stems from a knowing being which is essentially finite. Kant finds the sign of that finitude in the fundamental receptivity of sensibility. Sensible receptivity means that we, human beings, can know only beings that we do not create. However the ontic knowledge of those beings, which for Kant takes place in the experience of natural entities, requires an a priori synthesis which has, Heidegger claims, the nature of an ontological knowledge, i.e., of an a priori comprehension of the Being of those beings. In Kant, that a priori synthesis is the union of pure intuition (the a priori forms of space and time) with the pure categories of the understanding, a union carried

out by transcendental imagination through the protection of transcendental schemata characterized as transcendental determinations of time. By recognizing the decisive role of time—more precisely of a temporalizing process performed in the depths of the knowing subject, at the core of a synthetic or ontological knowledge enabling ontic access to beings as objects—Kant would have anticipated Heidegger’s own attempt to show that our openness to beings presupposes a comprehension of their Being, i.e., a transcendence happening in the horizon of temporality. However, in its deconstructive aspect, this reappropriation of Kant also emphasizes the limitations of his endeavour: (1) a framework which is the legacy of Christian metaphysics with its distinction between *metaphysica generalis* and *metaphysica specialis* (psychology, cosmology, theology); (2) a one-sided concept of Being as presence-at-hand, therefore a one-sided concept of time, as a sequence of present moments, although Kant’s notion of self-affection partially overcomes this one-sidedness; and (3) also the fact that Kant himself, as evinced by the second edition of the *Critique of Pure Reason*, seems to have withdrawn from his own discovery of finite transcendence in the operation of transcendental imagination.

Heidegger in *Being and Time* is entirely critical of Hegel, and at several places in the book he carefully discards any semblance of a proximity between the Hegelian conceptions and his own position. He claims, for example, that the Hegelian definition of time merely maintains traditional views leading back to Aristotle’s *Physics*, and is one-sidedly focused on presence-at-hand. Moreover, he insists on the abstraction and formalism of Hegel, compared to the concreteness of his own fundamental ontology. And against the Hegelian thesis according to which Spirit falls into time, he objects that the very meaning of a ‘fall’ is left in the dark by Hegel. Instead of claiming that Spirit falls into time, the meaningful thesis about the fall should be expressed in this way: ‘factual existence “falls” as falling from primordial, authentic temporality’ ([2.2] 486; [2.45], 435–6). In spite of this apparent discarding of Hegel, readers of *Being and Time* are allowed to suspect, in relation to the history of ideas, that Heidegger’s analysis of anxiety as a crucial experience which is not to be confused with ordinary fear, and the characterization of Being in terms of ‘no being’ or Nothingness, are not without some relation to Hegelian topics. One is inclined to suspect that there is indeed some reappropriation of Hegel in fundamental ontology.

Such a reappropriation comes to the fore in Heidegger’s essay of 1929, *What is Metaphysics?* [2.5, 2.50], the text of his inaugural lecture at the University of Freiburg on the occasion of his accession to the Chair of Philosophy left vacant by the retirement of Husserl. At the outset of this essay, Heidegger states that he is in accord with Hegel’s comment that ‘from the point of view of sound common sense, philosophy is the “inverted world”’ (p. 95). And further on, he reveals a second point of agreement. After a description of anxiety as a meta-physical experience in which nothingness manifests itself, he quotes Hegel’s *Science of Logic*: ‘Pure Being and pure Nothing are therefore the same’ (*Wissenschaft der logik*, vol. 1, 111, p. 74). This proposition, Heidegger says, is correct, ‘Being and nothing do belong together’ (*Basic Writings*, p. 110). To be sure, these two points of agreement are rather formal and Heidegger adds that his own emphasis on the finitude of Being revealing itself in the transcendence of *Dasein* marks a fundamental divergence in spite of a formal proximity. But a lecture course of 1930–1 devoted to an interpretation of Hegel’s *Phenomenology of Spirit* shows that there was

much more than a formal convergence, and that Heidegger's fundamental ontology really crossed the Hegelian path. Focusing on the transition from consciousness to self-consciousness, the lecture course claims that Hegel's notion of 'life' in the *Phenomenology of Spirit* unfolds a concept of Being which is no longer caught in the traditional notion of presence-at-hand. Moreover, Heidegger in the lecture course expresses admiration for the Hegelian description of the movement by which absolute knowledge absolves itself from natural knowledge. That description, he suggests, has to be considered as a transposition in an absolute framework of the very movement of finite transcendence.

Finally, fundamental ontology involves a reappropriation of Nietzsche on one point at least: historicity. In *Being and Time* ([2.45], section 76), Heidegger attempts to demonstrate that historiography (*Historie*) has its existential source in *Dasein's* historicity. *Dasein's* Being is essentially historical 'in so far as by reason of its ecstatic-horizontal temporality it is open in its character of "having been"' ([2.45], 445). In the context of the demonstration, Heidegger insists that 'Nietzsche recognized what was essential as to the "use and abuse of historiography for life" in the second of his studies "out of season" (1874), and said it unequivocally and penetratingly' ([2.45], 448). For both Heidegger and Nietzsche the so-called objectivity of historical sciences, instead of being primordial, is a falling away from an active movement of uncovering directed towards the future. For both, that active movement is essentially interpretative or hermeneutical. For both, it is also circular because it creates an overlapping of the future and the past.

In other words, Heidegger suggests that by saying that only master builders of the future who know the present will understand the past, Nietzsche anticipates the Heideggerian topic of the 'hermeneutic circle'.

THE HISTORY OF BEING

Paroxysm and interruption of fundamental ontology

The basic principle of the analytic of *Dasein*, worked out in *Being and Time*, was: *Dasein existiert umwillen seiner* ('*Dasein* exists for the sake of itself'). In the light of this principle, the project of fundamental ontology intended to demonstrate under the heading 'Time and Being' how the various meanings of Being—such as life, actuality, reality, permanence and so on—had to be understood as deriving from the self-projecting existence of *Dasein*. But the principle itself was restricted to the way of Being of individuals.

That restriction vanished in 1933 when Heidegger decided to support Hitler and became the first National Socialist rector of the University of Freiburg. The focus of his Rectoral Address is no longer the individual *Dasein* but the *Dasein* of the German people. As a result of that shift many concepts of *Dasein's* analytic undergo a significant metamorphosis.

The early version of fundamental ontology had reappropriated the Aristotelian *praxis* in the direction of *Dasein's* solitary insight (*theoria*) into the finiteness of its own Being,

therefore in the direction of *Dasein's bios theoretikos*. Heidegger in 1933 once again claims that the intention of the Greeks was to understand *theoria*, in its relation to Being, as the highest form of *praxis*. But he adds that *theoria*, thus understood as the science of the Being of beings, is 'the very medium that determines, in its ownmost Being, the *Dasein* of a people and of the State' (*The Self-assertion of the German University (Die Selbstbehauptung der deutschen Universität)* [2.7], 12). Accordingly, no longer the individual *Dasein* but the very existence of a people organized in a state seems to become the authentic location for the unconcealment of beings in their totality and in their Being. Now the organization of a people is obviously not a matter of pure *theoria*, but a matter of *technē*, of knowhow and of *poiēsis*. Consequently as a result of the shift from individual *Dasein* to the *Dasein* of a people-in-a-state, *technē* is no longer confined within the inauthentic realm of everydayness. To be sure, there is an ordinary *technē* which is still restricted to those limits, but, in addition to it, there is now place for an authentic *technē*, a knowhow which, instead of being fascinated by what is merely present-at-hand, is ontologically creative. In this context, Heidegger recalls an old Greek legend according to which Prometheus would have been the first philosopher, and he quotes the words of Prometheus in Aeschylus' tragedy: '*technē* however is much weaker than necessity.' Necessity is here interpreted by him as the 'overpower' of destiny. In such 'overpower' a concealment of being is involved which challenges knowledge and demands a metaphysical reply, in terms of a creative *technē*.

Along with the transposition of the notion of *Dasein* to a people, and the introduction of a creative *technē*, the Rectoral Address also introduces the idea that Being itself, and not only *Dasein*, is intrinsically polemical and historical; and that *Dasein*—either as an individual or as a people—is the 'there' of Being.

But in spite of all these modifications, the Rectoral Address maintains the project of a fundamental ontology, as a task including a metaphysics of *Dasein* articulated according to the opposition between a fallen everydayness, fascinated by presence-at-hand, and a resolute authenticity dedicated to unconcealing Being by transcending beings.

The two lecture courses offered by Heidegger after the rectorate period—a lecture course on Hölderlin [2.37] given in the winter term 1934–5, and a lecture course on the *Introduction to Metaphysics* [2.8, 2.53] given in the summer term 1935—introduce developments of topics treated in the Rectoral Address, but they also maintain the framework of fundamental ontology.

The lecture course on Hölderlin starts by discarding, in order to listen to the poet, all the forms of fallen everydayness already described in *Being and Time* as obstructing the question: Who is *Dasein*? The *Dasein* at stake here, however, is no longer the individual but 'the authentic gathering of individuals in a community' ([2.45], 8). Hölderlin's poetry, in the poems '*Germania*' and '*Am Rhein*', is supposed to raise the question: 'Who are we, the German people?' The question demands a withdrawal from everydayness and a resolute attitude of racial questioning opposed to the 'They'. In continuity with *Being and Time*, Heidegger characterizes everydayness in terms of *technē*, i.e., circumspection dedicated to the management of surroundings, to production, usefulness and the general progress of culture. That inauthentic compartment encompasses the everyday life of the Nazi regime: cultural activism, subordination of thought and the fine arts to immediate political needs, biologism, and the rule of bureaucrats. But on the level of authenticity

there is a place for a quite different *technē*, adjusted to the historical *Dasein* of the German people. Only a few individuals are aware of the innermost historicity of that people. These few are the creators: the poet, the thinker and the founder of the state. The co-operation of these three creative types is described by Heidegger in his interpretation of what he calls the *Grundstimmung*, the basic mood of the two poems, i.e., Hölderlin's holy mourning in the face of the flight of the gods. The poet institutes (*stiftet*) the truth of the *Dasein* of the people. The thinker elucidates and articulates the Being of beings thus disclosed by the poet. But the co-operation of the two requires the people to be led to itself as a people. This can only occur through the creation by the state-creator of a state adjusted to the essence of that people. That triad embodies the Promethean *technē* mentioned in the Rectoral Address. The three of them rise to the level of demigods preparing the conditions for a return of the divine.

The same Promethean trend is to be found in Heidegger's dialogue with pre-Socratic thought in the *Introduction to Metaphysics*. As a result of the elevation of a creative *technē* to the highest ontological level, Heidegger now detects between Parmenides, Heraclitus and Sophocles convergences pointing to an ontological assignment to setting-into-work what the creative *technē* sees or knows. The assignment is required by the polemical essence of what the early Greek thinkers called *physis*, an appellation which, like the word *alētheia*, is taken to be another name for Being. Being is polemical because, on the one hand, it is an unconcealment which retains itself in itself while disclosing itself in beings; and because, on the other hand, it is again and again threatened, in its very disclosure, by sheer semblance, deception, illusion. Therefore it is an 'overpowering' calling for a creative self-assertion defined as a decision (*Entscheidung*) to provide a 'separation in the togetherness of Being, unconcealment; appearance, and Non-Being' ([2.8], 84; [2.53], 92). And since there is a violence in the 'overpowering' of Being such decision has to be disrupting and violent. This violent response to the 'overpowering' of Being is what characterizes *technē* in its essential meaning. *Technē* provides the basic trait of the Greek *deinon* (uncanny) evoked in a famous chorus of Sophocles' *Antigone*. So understood, *technē* is both a knowledge and a creative power. As a knowledge, it is a sight looking beyond what is present-at-hand; as a creative power, it is the capacity to set-into-work within being the historical unconcealment of Being. In this context, Heidegger claims that unconcealment takes place only when it is achieved by work: 'the work of word in poetry, the work of stone in temple and statue, the work of the word in thought, the work of the *polis* as the historical place in which all this is grounded and preserved' (pp. 146; 160). In this context, Heidegger celebrates what he calls 'the inner truth and greatness' of the National-Socialist movement versus the ideology (racism) and everyday practice of the Nazi Party.

In these two lecture courses the introduction of a distinction between a petty *technē* trapped in everydayness or presence-at-hand and a lofty *technē* able to set-in-work Being itself in its unconcealment not only leaves untouched but even reinforces the articulation of fundamental ontology—i.e., the opposition between ordinary time and authentic temporality. The fact that the *Dasein* at stake is now understood as the *Dasein* of a people, either Greek or German, simply widens the basic principle of *Being and Time* according to which the *Dasein* exists for its own sake and by willing itself. It could even be said that the Promethean connotation of these texts brings fundamental ontology to a

sort of metaphysical climax. Heidegger suggests, indeed, that it is because of its foundational role towards his people that his own work deserved the heading of fundamental ontology (pp. 113; 146). And he quotes with admiration Hegel's words in the *Logic* of 1812: 'A people without a metaphysics is like a temple without a Holy of Holies.' Metaphysics is thus the privilege of Germany, whereas western democracies, particularly the United States, on the one hand, and the USSR on the other hand, are said to be absorbed in the frenetic development of the petty *technē*.

However, this paroxysm was soon going to bring fundamental ontology to an end, and to open the way to a 'turn' (*Kehre*) in Heidegger's thought. A comparison between the successive versions of his essay *The Origin of the Work of Art* bears witness to such a turn, or at least to a shift in Heidegger's treatment of the question of Being. Indeed the two early versions of the essay preserve the Promethean tendency which characterized the *Introduction to Metaphysics*; whereas the third and final version is no longer Promethean at all. All the topics tackled by the *Introduction to Metaphysics*—the people and its gods, the greatness of a creative *technē*, decision, the ontological *polemos* (conflict)—are still mentioned in the final version, but they lose their previous hardness thanks to an overall tonality which is more meditative and open to enigmas than voluntarist and proclamatory.

In the three versions, Heidegger insists that there is a circle in the investigation into the origin of the work of art. Indeed, if it is true that the artist is the origin of the work, it is also true that the work is the origin of the artist since neither is without the other. However, both are what they are by virtue of art itself. But if it is true that the essence of art should be inferred from the work, it is no less true that we could not recognize a work of art as such without referring to the essence of art. Hence the interrogation into the origin of the work of art moves in a circle. In the two early versions of the essay the topic of the circle operates as a device for signifying the circular character of *Dasein* as a being which projects its own Self by retrieving its thrownness, in such a way that project is a retrieval, and retrieval is a project. But in the final version that emphasis on *Dasein's* existence for its own sake is replaced by an emphasis on Being itself inasmuch as Being is neither limited to beings nor without them, and neither encapsulated in *Dasein* nor without it.

Moreover, whereas the early versions insisted on the contrast between everydayness and creative self-assertion, the final version is almost without sign of a contempt for everydayness and its pettiness. It is significant in this regard that the first section of the final version of the essay is entirely devoted to the question: what is a thing in its thingly character? In the framework of fundamental ontology, as well as in the early versions of the essay, that question was clearly not an important issue for the task of thinking, and there was nothing enigmatic in the question. Indeed, there was an easy answer to it, in terms of everydayness: the Being of things is either presence-at-hand (natural things) or readiness-to-hand (equipment). By contrast, the final version of the essay states the following: 'The unpretentious thing evades thought most stubbornly. Can it be that this self-refusal of the mere thing, this self-contained independence, belongs precisely to the nature of the thing? Must not this strange feature of the nature of the thing become what a thought that has to think the thing confides in? If so, then we should not force our way to its thingly character' ([2.55], 32). In other words, everydayness, instead of being the

familiar realm that resoluteness has to overcome in order to face the homelessness of existence, now becomes strange and deserves meditation in its familiar outlook. Dwelling among things no longer obstructs thought, quite the contrary. It is also significant that the reliability of equipment previously defined by its readiness-to-hand, hence in relation to *Dasein* only, now turns out to bear testimony to an enigmatic interplay of unconcealment and concealment in Being itself. This is what Heidegger tries to suggest in his meditation on one of Van Gogh's paintings of a pair of shoes.

The second section of the final version of the essay also marks a change regarding the notion of truth. Heidegger's point in the three versions is that in the work of art truth sets itself to work. Truth, here once again understood as *alētheia* or unconcealment, is of an essentially ambiguous and polemical nature, for it is a mixture of disclosedness and withdrawal. This polemical nature of truth is revealed by the conflictual nature of the work of art. While setting up a world, the artwork sets forth the earth, but whereas the world is an opening of paths, the earth is a self-seclusion. Hence there is in the work of art a strife between world and earth. Such strife characterizes truth itself as unconcealment. But whereas the early versions of the essay maintain the priority of *Dasein* regarding truth by making the *Dasein* of a people the locus of truth, the final version characterizes unconcealment as a clearing (*Lichtung*) to which human beings belong and are exposed. Consequently the meaning of resoluteness also changes: it is no longer the project to be a Self but an exposure to the secret withdrawal at the core of the clearing.

Finally, the last section of the final version is an attempt to define creation without reference to Promethean self-assertion. What is now considered to be fundamental in the work, inasmuch as it is created, is no longer its ability to anticipate in a leap what a people decides to be. What is decisive in it, as created, is this: 'that such work is at all rather than is not' ([2.55], 65). In other words, the enigma of a coming-to-presence now overcomes the previous privilege of future self-projection. The creator is no longer a violent struggler but someone receptive to the clearing.

The turn and the overcoming of metaphysics

Why did Heidegger give up his project of fundamental ontology? The question raises an extremely complex issue and there are at least three ways of approaching it. From a strictly systematic point of view, it is possible to notice a paradox at the core of the project. Indeed if fundamental ontology—the science of the meaning of Being—is identified with the ontological analysis or metaphysics of *Dasein* (as seemed to be the case up to the *Introduction to Metaphysics*), then, as Heidegger himself said at the time, 'ontology has an ontical foundation' (*Basic Problems*, p. 26). But how is it possible to avoid then the reduction of Being to characteristics of a being, more precisely to *Dasein*'s way of Being? If, on the other hand, the metaphysics of *Dasein* is only the provisional preparation of a systematic ontology, then a distinction has to be made between the temporality of *Dasein* and the temporality of Being itself; and, consequently, the provisional character of the analytic of *Dasein* contradicts its allegedly fundamental function. In both cases, the attempt made in *Being and Time* (and later extended to surpass the limits of individual *Dasein*) turns out paradoxically to be itself a manner of

oblivion of Being to the benefit of a being.

A second way of approaching the issue would be a close chronological investigation of the variations, appearing during the 1930s and early 1940s, in Heidegger's use of the notions coined in *Being and Time*. Such investigation remains to be done on a twofold basis: the lecture courses already published or in the process of being edited in the *Gesamtausgabe*, particularly those on Nietzsche (1936–41), and the long text written by Heidegger for his own use under the heading *Contributions to Philosophy (Beiträge zur Philosophie 1936–8)* [2.38].

A third approach is offered by Heidegger's own explanations of what he called the 'turn' which, at some point, occurred in his thought. The first among these self-interpretations is Heidegger's *Letter on Humanism*, written in 1946 in reply to questions raised by Jean Beaufret.

It is not certain, however, that the results of the three approaches could ever coincide, mainly because of Heidegger's tendency to justify retrospectively each step of his philosophical development. Despite these difficulties there is no doubt that several topics which had no place whatsoever in fundamental ontology came to the fore during the second half of the 1930s. The lecture courses on Nietzsche are extremely significant in this regard.

It has been noticed by several readers of the *Nietzschebuch* (Mehta; Arendt) that in the first lecture courses (1936–9) Heidegger interprets Nietzsche in terms of the analytic of *Dasein* and shows a basic agreement with Nietzsche, whereas the courses of 1939–41 are polemical. This is why Hannah Arendt claimed that initially the 'turn' was a biographical event, by which she meant that, underneath a polemical debate with Nietzsche, it was an explanation of Heidegger to himself, and an attempt to discard his own voluntarist inclinations during his activist period.

At any rate, what comes to the fore in the polemic against Nietzsche is a new way of considering the history of metaphysics. In fundamental ontology, the point was to deconstruct the biases and confusions inherent in past philosophies in order to liberate metaphysics and complete it as the science of the meaning of Being. Now, the point is to consider its development as a fatal destiny and to prepare its overcoming. That destiny is characterized as an increasing oblivion of Being culminating in Nietzsche's philosophy of the will-to-power and of the eternal return of the same, interpreted by Heidegger as nihilism.

At the dawn of western thought, the key words of the pre-Socratic thinkers, above all the word *alētheia*, all signalled the process through which beings are brought to the 'open' in tension between a reserve and an appearing. This means that Being was experienced as fully differentiated in the manner of an offering which withholds itself in what it gives. This differentiation indicates a finiteness of Being to which corresponds thinking as a receptivity to the secret of Being. The first erasing of this differentiated correspondence and mutual belonging starts with Plato. Plato's dialogues demonstrate a tendency to transform a mere consequence of the ambiguous process of *alētheia* into the essence of truth. In Plato beings reveal their beingness through ideas. The word initially meant the outlook offered by things as they emerge out of *physis*. Therefore it meant a consequence of the process of unconcealment. But Plato's ideas come to the forefront and get split off from the unconcealing process. Moreover, they acquire a normative status in

relation to *physis*. Unconcealment then becomes a result of the clarity of the ideas which themselves refract the clarity of a supreme idea, the Good. This is the birth of metaphysics as onto-theology. The task of metaphysics from now on is to develop a theory of the essence of beings, a logic of their beingness, i.e., an ontology, and simultaneously to develop a theology by relating their beingness to a primordial being. *Alētheia* is thus obliterated by an ontical hierarchy, and truth becomes a matter of correctly seeing the ideas. Accordingly, the mutual belonging of Being in its ambiguity and of thinking in its receptivity to the same is levelled down to a contemplative conformity of the mind to essences.

A second stage in the metaphysical oblivion of Being took place in the Middle Ages. In medieval thought the Platonic concept of truth as conformity of the intellect to the beingness of beings, coupled with the founding role of a supreme being, was retrieved within the Christian speculations about creation and the dependence of the created on the creator. Truth in the scholastic sense of *adaequatio intellectus ad rem* (adequacy of the mind to the thing) is now grounded upon the deeper *adaequatio rei Dei intellectus* (adequacy of the thing to the mind of God).

A third stage occurred at the beginning of the modern age with the invention of subjectivity. When Galileo Galilei introduces, in still approximate terms, the first formulation of what Newton, a few decades later, was to call the principle of inertia, he uses the words ‘mente concipio’ (conceive in my mind). What is significant here, for Heidegger, is not the replacement of the sensible outlook of natural phenomena (the cornerstone of Aristotelian physics) by a purely intellectual approach of nature, but the fact that inertia, in order to appear at all, requires the human mind to give itself a preconception of what motion is and thus projects in advance the condition for phenomenality. In the conformity of adequation between intellect and thing, the stress is now put on the intellect in such a way that the thing manifests its truth inasmuch as it fits with a project emanating from the *mens*. Deeper than the modern use of mathematics in physics, there is what Descartes called *mathēsis*—a project by which the *cogito* ascertains itself on its own and acquires a position of mastery. In Descartes’ philosophy, with the restriction of the dependence of the finite human mind on the divine infinity, the *cogito* posits itself as the unique basis upon which beings reveal their beingness. The word for basis in Greek was *hupokeimenon*, in Latin *subjectum*. The *cogito* becomes the only *subjectum*. The rule of subjectivity begins. The modern object-subject correlation means that beings are what they are to the extent that they submit themselves to the rule of the human *cogito*.

Such is the birth of the reckoning and evaluating reason which determines modernity. All its features appear at the outset. The *mathēsis* is *universalis*, which means that it is planning for the totality of beings. It is both a subjectivation of all beings referring them to the *cogito* and an objectivation making them all equally calculable and controllable. Earlier than the current reign of technology, right at the beginning of the modern era, nature as a whole was conceived as one huge mechanism in relation to a technological way of looking.

Between Descartes and Nietzsche, Heidegger does not notice a fundamental discontinuity. Nietzsche’s notion of the will-to-power was in several ways anticipated by Descartes and subsequent thinkers: Leibniz’s notion of the monad as a conjunction of

perception and appetite in addition to his principle of Sufficient Reason; Kant’s concept of reason as a condition of possibility; Fichte’s reinterpretation of Kant in terms of practical reason; Schelling’s conviction that there is no other Being than the Will; Hegel’s concept of the Absolute, willing its self-identity throughout differentiation. So while claiming to be liberated from metaphysics, Nietzsche was merely bringing it to its accomplishment and carrying modern subjectivity to an onto-theological climax. Heidegger indeed interprets the will-to-power in ontological terms as the beingness of all beings, and the eternal return of the same in theological terms as the ultimate ground of beingness and being. Defined as the beingness of all beings, the will-to-power pushes to an extreme limit the project of objectivation and subjectivation inherent in *mathēsis*. Objectivation is brought to an extreme because the will not only treats every being as an object (*Gegenstand*) but also compels any object to become a storage (*Bestand*) available to all kinds of assignment and manipulation. Subjectivation is brought to an extreme as well, for all things are reduced to the values that the will bestows on them in order to intensify its power. On the other hand, the eternal return of the same, defined as the ultimate form of being, signifies an endless, circular, repetitive machination which is the metaphysical essence of modern technology. The abyssal thought of the eternal return means that the will aiming to intensify itself is itself willed and challenged to will itself infinitely. On both counts, Being has definitely lost the enigmatic ambiguity which was experienced by the early Greeks. Being is like nothing. Nihilism rules.

It is significant of the ‘turn’ at work in this meditation on modernity that Heidegger’s description of what he calls ‘European nihilism’ in a 1940 lecture course on Nietzsche includes the following remarks about *Being and Time*: ‘The path followed in it is interrupted at a decisive place. The interruption is explainable by the fact that, all the same, the attempt made on that path was running the risk, against its own intention, to reinforce furthermore subjectivity’ (*Gesamtausgabe* vol. 48, p. 261).

The main result of the above description of the history of metaphysics is the claim that modern technology is the last accomplishment of a long process of oblivion of Being inherent in metaphysics since Plato. Heidegger uses the word *Gestell* to characterize the nature of modern technology. *Gestell* is a global ‘enframing’ wherein beings are entirely available to all sorts of arbitrary evaluations and manipulations, and in which Being counts for nothing. To that global enframing Heidegger opposes what he calls *Ereignis*, often translated as ‘event of appropriation’, a term already used in his *Beiträge* of 1936–8. Within the global enframing, thinking is replaced by calculation. It is only by meditating *Ereignis* that thinking can remain alive. Thinking the *Ereignis* is a counter-current to nihilism.

That opposition pervades the writings of Heidegger after the Second World War. In all of them the voluntarist tonality of *Being and Time* and of the *Introduction to Metaphysics* has vanished. Significantly the word *Dasein* is now spelled *Da-sein*: there-being. The mortals are the ‘there’ of Being. They are exposed to the secret granting of Being. Significantly, also, a topic such as the ‘call’, which was restricted in *Being and Time* to *Dasein*’s listening to its ownmost potentiality, now emanates from Being itself. Whereas in fundamental ontology the human *Dasein* was the lieutenant of nothingness, it is now the shepherd of Being. Whereas fundamental ontology somehow conflated thinking and willing, thinking is now a matter of not-willing, of letting-be (*Gelassenheit*), and even of

thanking. Whereas fundamental ontology conceived of dwelling in terms of a preoccupation of inauthentic everydayness, dwelling now deserves profound meditation. Likewise for the 'thing', a topic to which Heidegger devoted several essays in the late period. Likewise for speech, formerly taken as a capacity of *Dasein*, and now characterized in terms of a call emanating from Being, of a gathering of Being and of a corresponding to it. That shift from *Dasein* to Being explains why Heidegger criticized humanism as an aspect of metaphysics.

The shift of emphasis also generates a change in Heidegger's thought about time. While maintaining the notion of *ecstasis*, Heidegger no longer understands ecstatic temporalization in terms of an existential self-project, but in terms of a belonging of *Dasein* to the ambiguous unconcealing process of Being allegedly covered up by the entire tradition of metaphysics. This becomes apparent in a lecture given by Heidegger more than thirty years after *Being and Time*, under the significant title *Time and Being* (1962). This is the title which had been announced in 1927 as the heading of the third division of the book, a division which never appeared. The lecture of 1962, however, is not to be considered as the completion of the project of 1927.

It is a significant feature of the 'turn' that the topic is presented in neutral terms, in which *Dasein* no longer plays a central role. Heidegger indeed announces that his meditation is oriented by the sentence 'Es gibt Sein, Es gibt Zeit', which literally means: 'It gives Being, It gives time.' This neutral phrasing clearly suggests that the issue is no longer *Dasein*'s temporalization. In both sentences, the phrase 'Es gibt' invites the audience to hear an offering which is not itself reducible to what it is offering. Hence the sentence 'It gives time' points to an offering which keeps withdrawing itself within what is offered. Already in the word 'present' there is more than the now; what is also meant by the word is a gift bestowed upon man. Open to the presence of the present, mortals welcome the granting. The emphasis is no longer on the project of the self but on receptivity to the granting.

In this context, the prior concept of *ecstasis* is modified. Each *ecstasis*, as well as the unity of the three *ecstases*, is now understood as a granting extended to human beings. Instead of saying that the past is what we retrieve in the light of our finite project, Heidegger now says that it happens to us, extending itself to us and soliciting us. The past is an *ecstasis* in the sense of the coming towards ourselves of an absence which concerns us while it is granted to us. Absence is itself a mode of presence if we think of presence in the sense of a granting. But in each there is an interplay of granting and withholding. The same holds true for the unity of the *ecstases*. Heidegger now calls each *ecstasis* a dimension, and he calls the unity of the *ecstases* the fourth dimension of time.

About such unity, Heidegger no longer evokes a privilege of the future. The emphasis is now on the coming-to-presence. Moreover, instead of evoking *Dasein*'s temporalization, he suggests that time temporalizes from itself. The unifying fourth dimension of time is characterized as a disclosed interplay of the three *ecstases*, a clearing extension, an opening. However it is also characterized by a denial, a withholding. Time nears and holds back. It is radically ambiguous. The granting, effective in it, is also a denial.

This new apprehension of time is at the core of Heidegger's notion of *Ereignis* which he opposes to *Gestell*—the technological enframing for which there is no secret

whatsoever. In German *Ereignis* means 'event'. In Heidegger's terminology it designates the co-belonging of Being and man. He insists on both etymological roots of the word. They are *er-eignen*, 'appropriating', and *'er-äugen'*, bringing to visibility. There is no doubt that the use of the word in this twofold meaning signifies a contrast with the use of words such as *eigen* ('own'), and *Eigentlichkeit* ('authentic selfhood') in *Being and Time*. The *Ereignis* is not to be conceived of in terms of the Self at issue in the work of 1927. What is at stake in it is no longer a project but a *Schicken*, a sending or a destining. The event of co-belonging between Being and man is the manner in which Being destines itself to us, by opening the playspace (*Spielraum*) of time wherein beings appear. But destiny withholds itself in order for its granting to occur. The history of Being is that destiny. In it each epoch is an *epokhē*, a withholding of Being within its donation. In each case the *Ereignis* withholds (*enteignet*) itself. Consequently the task of thinking is no longer to be defined by the phrase 'Being and time' but by the phrase *Lichtung und Anwesenheit*, 'clearing and coming-to-presence', both understood in terms of a granting and a denial.

The trouble with this history of Being is that, in spite of the above signals of a significant shift in Heidegger's thought, it reproduces in a new way the previous contrast between the 'They' and the Self. Indeed only a few German poets (Hölderlin, Trakl, George) and Heidegger himself—but not the plurality of human beings interacting in a common world of appearances and events—seem able to properly respond to the ambiguity of the destiny of Being.

Moreover, the previous privilege of *Dasein's bios theoretikos* reappears in a new manner: thinking is the only activity able to prepare a new beginning in the history of Being.

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Introduction

S.G.Shanker



In this volume we survey the striking developments that have taken place in the philosophies of logic, mathematics and science in the twentieth century. The very use of a genitive case here bears eloquent testimony to the dramatic changes that have occurred. Prior to this century, few philosophers troubled to break ‘philosophy’ down into its constituent parts. Nor did they display any pronounced interest in the nature of philosophy *per se*, or the relation in which philosophy stands to science. Indeed, subjects that we now regard as totally distinct from philosophy—such as mathematics or psychology, and even physics or biology—were once all located within the auspices of philosophy.

It is interesting to note, for example, how Hilbert obtained his doctorate from the philosophy department. Now we are much more careful to distinguish between axiomatics, proof theory, categorization theory, the foundations of mathematics, mathematical logic, formal logic, and the philosophy of mathematics. That hardly means that philosophers are only active in the latter areas, however, while mathematicians get to rule over the former. Rather, philosophers and mathematicians move about freely in all these fields. To be sure, it is always possible to distinguish between the work of a mathematician and that of a philosopher: the approach, the techniques, and most especially the intentions and the conclusions drawn, invariably betray the author’s occupation. But the fact that philosophers and mathematicians are working side-by-side, that they are reading each other’s work and attending each other’s conferences, is an intellectual development whose significance has yet to be fully absorbed.

Significantly, the major figures in the philosophies of logic and mathematics this century—Frege, Russell, Wittgenstein, Brouwer, Poincaré, Hilbert, Gödel, Tarski, Carnap, Quine—all moved from logic or mathematics to philosophy. Perhaps more than any single factor, it was

this dynamic that determined the nature of analytical philosophy. For it resulted not only in the importation of formal tools but also in the preoccupation with ‘logical analysis’, in the search for ‘regimentation’ and the preoccupation with the construction of ‘formal models’ of language. Increasingly, an undergraduate education in philosophy began not with the writings of Plato and Aristotle but with the propositional and predicate calculus. Where students were once exposed to the subtle nuances in the concept of truth, they were now trained in the art of axiomatizing the concept of truth. Symposia and dialogues were supplanted by truth tables and the turgid prose of late nineteenth-century German scientific writing.

Perhaps the most noticeable effect of this overwhelming logical and mathematical presence is that philosophical arguments began to be conducted at a very high level of technical sophistication. Those who came to these issues straight from philosophy found themselves forced to master the intricacies of formal or mathematical logic if they wished to participate in the debates. But for all the changes taking place, the underlying philosophical problems remained remarkably constant. Questions such as ‘What is the nature of truth?’, ‘What is the nature of proof?’, ‘What is the nature of concepts?’, ‘What is the nature of inference?’, or even that much-vaunted issue of analytic philosophy, ‘What is the nature of meaning?’, have all long been the loci of philosophical interest. Thus, it is not surprising that over the past few years there has been a remarkable surge in historical studies, all motivated by the goal of establishing the relevance of some classical figure or argument for contemporary thought—as Professor Parkinson and I point out in our general introduction to this *History*.

Still, it would be imprudent to conclude from the perennial nature of its problems that philosophy has not in fact changed in some fundamental way this century. It is not so much the pervasive influence of formal and formalist thought (which may in fact already be starting to wane), however, as the relation in which philosophy now stands to science. This issue has been a pre-eminent concern throughout this century: indeed, in some ways, it has been a defining issue for the aspiring philosopher of logic, mathematics, or science.

The two main rival positions have been the Russellian and the Wittgensteinian: scientism, and what has been dubbed (by its critics at any rate) ordinary language philosophy. According to Russell, philosophy should ‘seek to base itself upon science’: it should ‘study the methods of science, and seek to apply these methods, with the necessary adaptations, to its own peculiar province’.¹ There are two basic aspects of scientism as conceived by Russell. First, there is no intrinsic difference between philosophy and science: each is engaged in the pursuit of knowledge (albeit at different levels of generality); each constructs theories and

generates hypotheses. Second, philosophy plays a heuristic role in the evolution of science. As Russell saw it,

To a great extent, the uncertainty of philosophy is more apparent than real: those questions which are already capable of definite answers are placed in the sciences, while those only to which, at present, no definite answer can be given, remain to form the residue which is called philosophy.²

On this picture, the realm of philosophy is constantly being eroded. The more effective philosophers are, the more imminent becomes their demise. For their success entails the active engagement of scientists, rigorously testing and revising the theories that originated in a priori reasoning.

The appeal of Russell's argument stemmed largely from the fact that he had history on his side. The pattern was set in the mechanist/ vitalist debates: in the removal of first the animal heat debate and then the reflex theory debate from the province of philosophy and their resolution in physiology. It was natural for scientific philosophers to assume that Turing's mechanical version of Church's thesis had set the stage for yet another major step in this process: i.e. the transference of the mind from philosophy's jurisdiction to that of cognitive science. The sentiment began to surface that one could no longer regard philosophy as the driving force behind logical, mathematic and scientific progress. Rather, the feeling was that the 'Queen of the Sciences' had been reduced to the role of handmaiden, initiating perhaps but in no way governing the great advances taking place in logic, mathematics and science. To borrow a term from contemporary concept theory, the fate of philosophy in the twentieth century began to be characterized as the descent from superordinate, to basic-level, to subordinate status.

On the face of it, this argument is rather curious. After all, it takes as its paradigm the displacement of natural philosophy by physics. But the philosophical debates that have been inspired by physics in the twentieth century are amongst the most profound and spirited that philosophy has ever enjoyed. Disputes over the nature of matter and time, the origin of the universe, the nature of experiment, evidence, explanation, laws and theory, the relation of physics to the other sciences: these are but a few of the issues which have been hotly debated this century, and which will continue to stimulate intense debate. And these pale in comparison to the controversies sparked off by Turing's thesis.

If anything, interest in philosophy has grown throughout this century, as is manifest by the rapid growth of philosophy faculties in every liberal arts programme. Like the relation of the Canadian economy to the American, the more science has advanced, the more philosophy has

grown. New scientific breakthroughs—indeed, new sciences—seem to create in their wake a host of new philosophical problems. But then the crucial question which this raises, which the scientific conception of philosophy obscures, is: what renders these problems *philosophical*? Is it just that they arise at a premature scientific stage, before there is an adequate theory to deal with them? But if that were the case, how could we speak of there being *perennial* philosophical problems?

Wittgenstein sought to come to terms with this latter question throughout his later writings. In 1931 he wrote:

You always hear people say that philosophy makes no progress and that the same philosophical problems which were already preoccupying the Greeks are still troubling us today. I read: '... philosophers are no nearer to the meaning of "Reality" than Plato got,...'. What a strange situation. How extraordinary that Plato could have even got as far as he did! Or that we could not get any further! Was it because Plato was so *extremely* clever?³

Wittgenstein's proposed explanation for this phenomenon—viz., 'The reason is that our language has remained the same and always introduces us to the same questions' (Ibid.)—drew from Russell the bitter complaint that this would render philosophy 'at best, a slight help to lexicographers, and at worst, an idle tea-table amusement.'⁴ But this criticism rests on a profound misreading of Wittgenstein's conception of the nature of philosophy. Indeed, the very assumption that the philosophers whom Russell cites in *My Philosophical Development* (viz., Wittgenstein, Ryle, Austin, Urmson and Strawson) can be identified as forming a philosophical 'school' is deeply suspect. Admittedly, they all shared certain fundamental attitudes towards the proper method of resolving philosophical problems, but in no way did they all share the same philosophical interests and objectives, let alone subscribe to a common set of philosophical doctrines or theses.

The basic premiss Wittgenstein was advancing is that questions about the nature of concepts belong to logic, and that we clarify the nature of a concept by surveying the manner in which the concept-word is used or learnt. Russell attributed to Wittgenstein the view that philosophical problems can be resolved by studying the ordinary grammar of concept-words. But nothing could be further from the truth. The fundamental principle underlying Wittgenstein's argument is that the source of a philosophical problem often lies in a crucial and often elusive difference between the *surface grammar* of a concept-word and its *depth* or *logical grammar*, or in the philosopher's tendency to treat what are disguised *grammatical propositions* as if they were empirical propositions.

Where Russell was certainly right, however, was in thinking that the later Wittgenstein was fundamentally opposed to the scientific conception of philosophy. In his 1930 lectures Wittgenstein announced:

What we find out in philosophy is trivial; it does not teach us new facts, only science does that. But the proper synopsis of these trivialities is enormously difficult, and has immense importance. Philosophy is in fact the synopsis of trivialities.⁵

This means that the task of philosophy is to clarify concepts and theories, not to draw inductive generalizations or to formulate theses. Indeed, Wittgenstein went so far as to insist, 'The philosopher is not a citizen of any community of ideas. That is what makes him into a philosopher.'⁶ Wittgenstein did not mean to suggest by this that philosophy does not have a crucial role to play *vis-à-vis* science. In the *Bowwsma Notes* he remarks that 'the consummation of philosophy' in the twentieth century might very well lie in the clarification of scientific theories: in 'work which does not cheat and where the confusions have been cleared up'.⁷ But this would seem to limit philosophy to the task of interpreting scientific prose: the 'history of evolving ideas', as it were. And as the following chapters demonstrate, the philosophies of logic, mathematics and science this century took *Principia Mathematica* not *The A.B.C of Relativity* as their standard-bearer.

What's more, there is a real danger in this thought that the principal role of philosophy is to describe and not explain. For it has a tendency to promote the view that philosophers are armchair critics, akin to theatre critics, both professionally and temperamentally set apart from the scientific writings whose shortcomings it is their chief job to expose. Not surprisingly, one frequently hears the complaint from scientists that philosophers have been seduced by the negative: that they criticize a theory without appreciating the subtle difficulties involved, or without making the necessary effort to master the literature underpinning a scientific issue. Yet philosophers, even scientific philosophers, are in no rush to lose their distinctive identity. There has thus been marked hostility and frustration on both sides of the 'philosophy versus science' divide.

These are important emotions. For if philosophy were irrelevant to the ongoing development of logic, mathematics and science, there would be neither anger nor impatience: only disinterest. But one constantly hears the demand from scientists for positive philosophical input. So the question which this naturally raises is, what is impeding this union? Is it perhaps the very terms in which twentieth-century philosophy has tried to assess its relation to science? Is it not significant that both scientism and ordinary language philosophy have strong nineteenth-century roots: the former in scientific materialism and the latter in hermeneutics? Indeed, is

not the battle between scientism and ordinary language philosophy reminiscent—and perhaps simply a continuation—of the battle between scientific materialism and hermeneutics? If there has not been a decisive victory by either side, is it, perhaps, because each is articulating an important truth: and, perhaps, omitting an important aspect of the development of the philosophy of logic, mathematics and science this century?

We can turn again to Wittgenstein to appreciate this point. At the close of the second book of *Philosophical Investigations* Wittgenstein remarks how, 'in psychology there are experimental methods and *conceptual confusion*... The existence of the experimental method makes us think we have the means of solving the problems which trouble us; though problem and method pass one another by'.⁸ Ironically, a few cognitivists actually greeted Wittgenstein's censure as confirming the importance of the post-computational revolution. For example, F.H. George insisted that:

[Wittgenstein's] criticism of experimental psychology, at the time it was made, [was] almost entirely justified. Experimental psychologists were, at that time, struggling to unscramble their concepts and clarify their language and models: at worst they believed that as long as a well-controlled experiment was carried out, the mere accumulation of facts would make a science. The relation, so vital to the development of psychology, between experimental results, by way of interpretation and explanatory frameworks, models, used largely to be neglected.⁹

On this reading, the mechanist paradigm that Wittgenstein was attacking was fundamentally displaced by Turing's version of Church's thesis. Hence, Wittgenstein's concerns are now hopelessly dated for:

Almost everyone now acknowledges that theory and experiment, model making, theory construction and linguistics all go together, and that the successful development of a science of behavior depends upon a 'total approach' in which, given that the computer 'is the only large-scale universal model' that we possess, 'we may expect to follow the prescription of Simon and construct our models—or most of them—in the form of computer programs'.¹⁰

Ignoring his enthusiasm here for the post-computational mechanist revolution, what is most intriguing about George's interpretation of Wittgenstein's argument is the manner in which he seeks to synthesize scientism with ordinary language philosophy. On this argument, philosophy enters a scientific enterprise at its very beginnings; it serves an

important role in clearing away the confusions inhibiting the construction of a comprehensive explanatory framework. But once the new model is in place, philosophy has no further constructive role to play. For, as George puts it, 'much of this conceptual confusion has now disappeared'.¹¹

Is this really the case? Has philosophy been even more successful than Russell envisaged? The philosophies of logic, mathematics and science have been driven by five leading problems this century:

- 1 What is the nature of logic, of logical truth?
- 2 What is the nature of mathematics: of mathematical propositions, mathematical conjectures, and mathematical proof?
- 3 What is the nature of formal systems, and what is their relation to what Hilbert called 'the activity of understanding'?
- 4 What is the nature of language: of meaning, reference, and truth?
- 5 What is the nature of mind: of consciousness, mental states, mental processes?

I have limited these to five problems to suggest a generational flux. A few philosophers have, of course, been active in all these areas throughout the century, but there is some basis for viewing the development of the philosophies of logic, mathematics and science in the twentieth century in terms of the succession of these five leading problems.

Now, very few philosophers would be willing to consign any, let alone all five, of these problems to the 'History of Ideas'. What the following chapters reveal is not the resolution of these issues, but the deepening understanding we have achieved of the nature of logic, mathematics, language and cognition. Moreover, as the century has progressed, it has become increasingly tenuous to suppose that philosophy is either conceptually prior to science, i.e., that philosophy clears away the confusions so that the proper business of theory-making can proceed—or that philosophy is conceptually posterior to science, i.e., that philosophy is restricted to correcting the errors that occur in scientific prose. For the advances that have been realized in the topics covered in this volume are not simply the result of philosophical reflection, or well-controlled experiments, but rather, are the outcome of a complex interplay of philosophic and scientific techniques as practised by both philosophers and scientists.

Thus, each of the chapters in this volume is as important to science students as the relevant science textbooks are to philosophy students. The point here is not that the categorial difference between philosophy and science—between philosophical and empirical problems, or philosophical and empirical methods—is disappearing, but that the formal, or institutional demarcation of these activities is fast becoming obsolete. All over the world interdisciplinary units are springing up which are

specifically designed to train their students in various cognitive sciences as well as in philosophy. This is a reflection of the fact that scientists themselves are constantly engaged in conceptual clarification, while philosophers have grasped the importance of entering fully into the community of science if their efforts are to serve the needs of scientists. What has been consigned to the 'History of Ideas' are the old terms of the 'philosophy versus science' debate. But the following chapters are not just history; more fundamentally, they are a harbinger of the great changes we can continue to expect in the ongoing evolution of philosophy.

🌿 NOTES 🌿

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- 2 Bertrand Russell, *The Problems of Philosophy*, Oxford, Oxford University Press, 1959.
- 3 Ludwig Wittgenstein, *Culture and Value*, P.Winch (trans.), Oxford, Basil Blackwell, 1980, p. 15.
- 4 Bertrand Russell, *My Philosophical Development*, London, George Allen and Unwin, 1959, p. 161.
- 5 Ludwig Wittgenstein, *Wittgenstein Lectures: Cambridge 1930–1932*, D.Lee (ed.) Oxford, Blackwell, 1980, p. 26.
- 6 Ludwig Wittgenstein, *Zettel*, G.E.M.Anscombe and G.H.von Wright (eds), G.E.M.Anscombe (trans.), Oxford, Blackwell, 1967, section 455.
- 7 O.K.Bouwsma, *Wittgenstein, L.Conversations 1949–1951*, J.L.Craft and R. E.Hustwit (eds) Indianapolis, Hackett Publishing Company, 1986, p. 28.
- 8 Ludwig Wittgenstein, *Philosophical Investigations*, Oxford, Blackwell, 1953, p. 232.
- 9 F.H.George, *Cognition*, London, Methuen, 1962, pp. 21–2.
- 10 Ibid.
- 11 Ibid.

CHAPTER 5

Logical Positivism

Oswald Hanfling



❧ I INTRODUCTION ❧

'Logical positivism', writes a leading historian of twentieth-century philosophy, 'is dead, or as dead as a philosophical movement ever becomes' (Passmore [5.42]). Most philosophers today, and indeed for some time past, would endorse this statement. In one sense it is absolutely dead, for it lost its cohesive membership with the break-up of the group of philosophers known as the 'Vienna Circle', due to political pressures in the 1930s. It was here that the philosophy known as logical positivism had been initiated, developed and energetically propounded to the philosophical community throughout the world.

The 'death' of the movement was due, however, not only to the dispersal of its members, but also to a widespread recognition of the defects of its ideas. Now in this sense, probably most of the philosophy studied in our universities is dead, for most of it is open to more-or-less fatal criticisms; and criticism is regarded as one of the main approaches to the great philosophers and movements of the past. However, what hastened the widespread rejection of logical positivism was not merely the (unsurprising) discovery that its doctrines were open to criticism, but the aggressive and even arrogant way in which those doctrines were propounded to the world. Chief among these was the 'elimination of metaphysics'. It was claimed by members of the movement that they had noticed something about existing and traditional philosophy, which would completely overturn it and render it largely otiose. There appeared articles with such titles as 'The Elimination of Metaphysics through the Logical Analysis of Language' (Carnap [5.5]) and 'The Turning Point in Philosophy' (Schlick [5.24]). Carnap posed the question: 'Can it be that so

many men, of various times and nations, outstanding minds among them, have devoted so much effort, and indeed fervour, to metaphysics, when this consists of nothing more than words strung together without sense?' International conferences were called with a view to disseminating the new 'insights', and a grandiose project, *The Encyclopedia of Unified Science*, was launched to give definitive expression to the new 'scientific' era in which philosophical and other discourse would become part of the discourse of science. In these circumstances it was not surprising that critics of the new ideas were more than usually prompt, forthright and thorough in their criticisms.

Nevertheless, logical positivism has an established place in the history and continuing development of philosophy. At least three reasons might be given for this. One is purely historical, regarding the considerable impact and influence of the movement in its heyday. A second lies in the intrinsic interest of its ideas, which I hope to bring out in what follows. A third lies in the fact that even if no one today would call himself a logical positivist, some of its main positions, such as verificationism, and emotivism in ethics, are still referred to as parameters within which discussions of particular topics, such as ethics or the philosophy of religion or of science, are to be conducted. Again, it can be argued that even if the parent plant is dead, many of its seeds are alive and active in one form or another. In an interview in 1979, A.J. Ayer, a leading philosopher of our time, who had been an advocate of logical positivism in the 1930s, was asked what he now saw as its main defects. He replied: 'I suppose the most important... was that nearly all of it was false'. Yet this did not prevent him from admitting, shortly afterwards that he still believed in 'the same general approach' ([5.70], 131–2).

In a number of ways 'the same general approach' is still widespread today, and indeed was so long before the advent of logical positivism. Empiricism, in one sense or another, is a major thread running through Western philosophy since the seventeenth century, including logical positivism and much of the philosophy of today. The same is true of 'reductionism', and especially the assumption that mental phenomena can be reduced, in some sense, to the vocabulary of the material or physical. Another idea, which was central to logical positivism and remains of central importance today, is that philosophical questions are largely questions of language, and that theories of meaning are therefore of central importance.

The movement originated in the 1920s among philosophers and scientists of the 'Vienna Circle', under the leadership of Moritz Schlick, professor at the University of Vienna. After some years of writing and discussion, the Circle organized its first international congress in 1929, attracting sympathizers from many countries. In 1930 it took over a journal, renamed *Erkenntnis*, for the publication of its ideas. The British

philosopher A.J. Ayer attended its meetings in 1933 and made its ideas widely known in the English-speaking world with the publication of *Language, Truth and Logic* in 1936 [5.1].

By that time the dispersal of the Circle was already under way, a number of members having emigrated, mainly to the United States and Britain. But there were also fundamental intellectual differences within the Circle. One of these, between Schlick and Carnap and Neurath, will be described below in section V.

An important influence was that of Wittgenstein, though he was not a member of the Circle. Having retired from philosophy after the publication of his *Tractatus Logico-Philosophicus* in 1922 [5.28], he was coaxed back into the subject by Schlick in 1927 and had regular meetings with Schlick and Waismann, another member of the Circle. (Their conversations are recorded in [5.27].) But from 1929 he declined to meet with other members of the Circle, whose views he found unsympathetic—a sentiment that was reciprocated by Otto Neurath, for one. Nevertheless, the *Tractatus* was regarded by the Circle as a classic statement of the new outlook in philosophy, and the work was read out and discussed sentence by sentence in the period 1924–6. It was, moreover, Wittgenstein who first formulated the ‘verification principle’ by which the new philosophy became known. Nevertheless it was he who made the most decisive break from these ideas when embarking on his ‘later’ philosophy in the early thirties.

The philosophy of the Circle became known as ‘logical positivism’ or ‘logical empiricism’. The former name is more usual, but the latter, preferred by Schlick, seems to me to be more appropriate. It has the advantage of indicating the affinity of the Circle’s ideas with those of the empiricist tradition begun by Locke in the seventeenth century, and later represented by such thinkers as Mill and Russell. It is also readily connected with the Circle interest in empirical science. Hence, although this article is entitled ‘logical positivism’, I shall prefer to use the term ‘logical empiricism’.

The term ‘logical’ indicates a primary interest in language and meaning, as opposed to knowledge. The main questions for such philosophers as Locke and Descartes had been about the sources and extent of knowledge, and the empiricist Locke claimed that sense experience was the only source. In the new empiricism, by contrast, the primary question was not ‘How do we know that *p*?’, but ‘What does “*p*” mean?’

The new approach may be illustrated by the problem of ‘other minds’. How can I know that other people really have thoughts and feelings, when I can only observe their bodily movements and the sounds they utter? In the new philosophy this problem of knowledge is transformed into one about meaning. What does it *mean* to say that another person has such and

such a feeling? According to the new philosophy, it can mean *no more* than what is observable. Any statement about feelings as distinct from what is observable will be meaningless. ‘It is not false, be it noted, but meaningless: we have no idea what it is supposed to signify’ ([5.24], 270).

The logical empiricists recognized two, and only two, kinds of meaningful statements. They are, first and mainly, empirical statements, verifiable by observation. Second, there are statements, such as those of logic and mathematics, whose truth can be known a priori; but these were regarded as not presenting ‘new’ knowledge, but merely an analysis of what was known already. Any other statements were to be dismissed as meaningless ‘pseudo-statements’.

II THE VERIFICATION PRINCIPLE

‘The meaning of a proposition is the method of its verification.’ So ran the principle as formulated by Wittgenstein and Schlick. (It was first formulated by Wittgenstein, but its most frequent use occurs in the writings of Schlick.)

In this sentence we have an answer to a long-standing question of philosophy, namely, What does meaning—the kind of meaning that language possesses—consist in? This question has sometimes been answered in terms of words and sometimes in terms of sentences or speech-acts. Locke answered it by reference to mental entities corresponding to words, claiming that ‘words...signify nothing but the Ideas that are in the mind of the speaker’ [5.78], 3.2.4). Wittgenstein, in the *Tractatus*, had postulated ‘names’ as the fundamental units of meaning, these ‘names’ being correlated with fundamental ‘objects’ in the world; with a further ‘picturing’ relation between propositions and corresponding ‘states of affairs’ in the world. The verificationist answer, as I have said, was in terms of the method of verification of a given proposition. Here was an apparently simple principle which could provide a focus for both adherents and critics of the new movement.

As well as providing an answer to the question ‘What is meaning?’, the principle was intended to provide a criterion to distinguish what is meaningful from what is not. Thus, if there is *no* method of verification—no way of verifying the proposition—then it must be meaningless.

It seems obvious that there is something right about the verification principle; that there is, at least, an important connection between meaning and verification. Thus, if we are unsure what someone means by his words, we can often find out by asking how one would verify what he said. And sometimes, at least, the admission that there is no conceivable method of verification will lead us to conclude that what was said is meaningless.

On the other hand, there are a number of difficulties with the principle, which may be divided into three, corresponding to the terms 'proposition', 'is' and 'method of verification'.

The original German word for 'proposition' is *Satz*, and the straightforward translation of this is 'sentence'. There is a difficulty, however, about treating sentences as objects of verification. Such a sentence as 'It is raining' cannot be regarded as true or false in itself. It is only when someone *uses* the sentence on a particular occasion that *what he says* is true or false. In answer to this and other difficulties philosophers have used the term 'proposition' to mean, roughly, what is asserted by means of a declarative sentence. It is, according to this usage, propositions that are true or false, and not the sentences by means of which they are asserted.

But now another difficulty may arise. 'Proposition' is sometimes defined as meaning an entity that is necessarily true or false. But if this is so, then the question of meaningfulness has already been decided in using the term 'proposition', for only what is meaningful can be described as true or false. In other words, it would be self-contradictory to speak of a meaningless proposition.

One way of overcoming this would be to put 'putative' before 'proposition'; another, which I shall adopt, is to use the word 'statement'. In ordinary English we can ask of a statement, made by someone, both whether it means anything and, if so, whether it is true. Some philosophers have also defined 'statement' to mean what is necessarily true or false (and hence meaningful), but there is no need for a verificationist to follow this usage. In this article I shall prefer the word 'statement', but will sometimes follow the writers under discussion in using 'sentence' or 'proposition', as the case may be. This seems the least confusing way of proceeding. (For further discussion of the difficulty about sentences and propositions, see [5.59] and [5.42].)

My next difficulty was about the word 'is', in the claim that meaning 'is' a method of verification. How are we to understand this identification? 'Meaning' and 'method' are concepts of different types. 'One can sensibly talk about *using* a method, but [not] "using a meaning"' ([5.52], 36). A method may be easy or difficult to carry out, it may take a long or a short time, etc.; but these things cannot be said about the meaning of a statement.

Nevertheless, it was thought essential to account for the meaning of verbal expressions by reference to something other than verbal expressions. Otherwise what would be the connection between language and reality? This need was expressed as follows by Schlick:

in order to arrive at the meaning of a sentence or proposition we must go beyond propositions. For we cannot hope to explain the

meaning of a proposition merely by presenting another proposition... I could always go on asking 'But what does this new proposition mean?'... The discovery of the meaning of any proposition must ultimately be achieved by some act, some immediate procedure.

([5.24], 219–20)

A similar thought was sometimes expressed with reference to words as distinct from propositions, and here the notion of 'ostensive definition' (as distinct from verification) was invoked, as when we point to an object to explain the meaning of a corresponding word, such as the word 'red'. Wittgenstein expressed this thought as follows: 'The verbal definition, as it takes us from one verbal expression to another, in a sense gets us no further. In the ostensive definition however we seem to take a much more real step towards learning the meaning' ([5.79], 1). This passage, however, was written after Wittgenstein's break from verificationism, and in the ensuing pages he argued that such appeals to 'reality' as distinct from language could never supply the desired detachment from language. He imagined someone trying to explain the word 'tove' by pointing to a pencil and pointed out that, in the absence of all verbal information, this act might be taken to mean all sorts of different things.

This brings us to the third difficulty; about 'method of verification'. What would be the relevant method in the case of, say, the statement 'It is raining'? I might verify this by putting my hand out of the window. But this act might serve to verify all sorts of statements; and, on the other hand, all sorts of methods might be used to verify the statement.

I began with a difficulty about identifying meaning with a method, as indicated by the word 'is' in the verification principle. Suppose now that we removed this word and spoke instead of a 'correspondence' between meaning and method. This would still leave us with the difficulty just mentioned. It is hard to see how Schlick's requirement of 'going beyond propositions'—breaking out of the circle of language—could ever be satisfied.

III THE CRITERION OF VERIFIABILITY

Not every verificationist was concerned, or mainly concerned, about the question of what meaning consists in. One of the main aims of the movement, as I said, was to distinguish what is meaningful from what is meaningless, with the special aim of showing statements of metaphysics to belong to the latter class. Now such a criterion can easily be deduced from the verification principle. If the meaning of a

statement is the method of its verification, then it will follow that if it lacks such a method—if it is not verifiable—then it will, likewise, lack meaning. It is possible, however, to advocate this criterion independently, without deduction from the verification principle. Thus, one might claim that unverifiable statements are meaningless, without putting forward an account of what meaning consists in; and this was the position of A.J. Ayer. He expressed the *criterion of verifiability*, as I shall call it, as follows:

We say that a sentence is factually significant to any person if, and only if, he knows how to verify the proposition that it purports to express—that is, if he knows what observations would lead him, under certain conditions, to accept the proposition as being true, or reject it as being false.

([5.1], 48)

(Sometimes the term ‘verification principle’ has been used for the criterion of verifiability, but the two tenets should not be confused.)

It should be noted that the word ‘verify’ is used here in the sense of ‘verify whether...’ and not ‘verify that...’ The latter would presuppose that the proposition in question is *true*. But a proposition that is known to be true is, by the same token, known to be meaningful; so that the criterion would be redundant. The relevant sense of ‘verify’ is that in which this is *not* known, so that, as Ayer implies, we do not yet know whether the proposition will turn out true or false. Moreover, either of these results would satisfy the criterion: what is at stake is not the truth of the proposition, but whether it has meaning. Unverifiable propositions, being meaningless according to the criterion, would be neither true nor false.

By means of such a criterion it was hoped to proceed immediately to the ‘elimination of metaphysics’, without getting involved in questions about what meaning consists in. The discovery that the propositions in question are meaningless would explain why philosophers who had wrestled with them through the ages had never, apparently, succeeded in getting anywhere, while, at the same time, providing the key to a resolution of their problems.

It soon appeared, however, that the criterion was beset with difficulties. First, there is simply the question of acceptance. In a broadcast debate with F.C.Copleston, A.J.Ayer introduced the word ‘drogulus’ to stand for ‘a disembodied thing’ whose presence could not be verified in any way. He put it to Copleston: ‘Does that make sense?’ But Copleston replied that it did make sense. He claimed that he could form an idea of such a thing and that this was enough to give it meaning ([5.50], 747).

Second, it proved difficult to formulate the criterion in such a way as to yield the desired results—to exclude the statements of metaphysics while admitting those of ‘science’ (including everyday empirical statements). The formulation I quoted from Ayer was too weak, because all sorts of observations might ‘lead’ someone to regard a proposition as true or as false. In a further formulation he introduced the more rigorous notion of ‘deduction’. A statement is meaningful, he held, if ‘some experiential propositions can be deduced from it’, the latter being defined as propositions ‘which record an actual or possible observation’ ([5.1], 52). A typical example would be ‘This is white’, which might result from the fact that it is snowing. But while it is clear that this fact and this statement are related, the relation does not seem to be one of deduction. There is, for example, no logical deduction from the statement ‘It is snowing’ and, say, the fact that I am looking out of the window, to the conclusion that ‘this is white’, or the conclusion that I am seeing something white.

Suppose, however, that this difficulty could be resolved. In that case ‘It is snowing’ would be vindicated because ‘This is white’ is deducible from it. But clearly there is more than that to the meaning of ‘It is snowing’. And might not the remainder be merely pseudomeaning, for all that Ayer’s criterion has shown? This difficulty was illustrated in a striking way by Carl Hempel, who supposed that some straightforward empirical statement, such as ‘It is snowing’, had been *conjoined* with a piece of ‘metaphysical nonsense’, such as ‘The absolute is perfect’. This conjunction would yield the same deductions as the empirical component by itself; so that the conjunction as a whole would have to be declared meaningful ([5.14]).

Various formulations were attempted by Ayer and others to escape these and other difficulties, but it seems that what is required is not merely deduction, but *analysis*. There must be a way of showing that the *whole* meaning of a statement is, somehow, accounted for by observations and the corresponding observation statements. Moreover, as we shall see, this affects all kinds of ordinary statements and not just the rather fanciful example constructed by Hempel.

❧ IV ANALYSIS ❧

According to Waismann, ordinary empirical statements were to be analysed into ‘elementary propositions’, whose whole meaning would consist in corresponding verificatory experiences.

To analyse a proposition means to consider how it is to be verified. Language *touches* reality with elementary propositions... It is clear

that assertions about bodies (tables, chairs) are not elementary propositions... What elementary propositions describe are: phenomena (experiences).

([5.27], 249)

There is a difference between this and verification in the ordinary sense. The latter is an activity of some kind, and hence it made sense to speak of a *method* of verification. But what seems to be meant in the passage just quoted is that elementary propositions are to be verified by *having* the corresponding 'experiences', as distinct from any activity.

But how is such analysis to proceed? From the true statement that there is a table in my room, it would not follow that anyone is having a relevant experience, since there may not be anyone in the room. The view adopted, known as 'phenomenalism', allowed for this possibility. According to it, a crucial role is played by *hypothetical* statements, such as 'If someone were in the room, he would have such and such experiences'. But in what sense are such statements entailed by the statement under scrutiny? Even if I am in the room, and endowed with normal eyesight, I may fail to see the table. 'You can't miss it' is notoriously unreliable.

There was also a difficulty about entailment in the other direction. From the fact that I am having the experience of seeing something brown, etc., it would not follow that there is a table in the room; and neither would it follow from my having the experience of seeing a *table*, for I might have these and other experiences in the course of a dream or hallucination. Just how far this kind of scepticism may be taken is a matter for debate, but the sceptical view is encouraged by the empiricist reliance on 'experience', conceived as something that occurs in us, is 'imprinted by the senses', etc. This problem has been recognized from the beginnings of empiricism, and in the case of logical empiricism it led to the view that statements about tables and chairs are not 'conclusively' verifiable. Wittgenstein spoke of them as 'hypotheses' which could not be 'definitively verified' ([5.80], 282–5).

A similar development took place with regard to general statements, such as 'All men are mortal'. The 'all men' in this statement is not analysable into any finite conjunction of names, and the truth of the statement would not follow from any finite number of verificatory experiences. The same is true of scientific laws, such as 'Water expands below 4°C', whose meaning is not confined to any finite number of observations.

The discovery that the meaning of scientific laws, in particular, went beyond any finite verification, was especially serious for a philosophy which regarded scientific statements as paradigms of meaningful discourse. One solution, advocated by Schlick, was to deny that a

scientific law is a statement: it is really, he maintained, 'an instruction for the forming of statements'. A genuine statement must be 'conclusively verifiable', and this would be true only of the particular experiential statements which would be produced under that 'instruction'. A statement, he insisted, 'has a meaning only in so far as it can be verified; it only *signifies* what is verified and absolutely *nothing* beyond this'; there cannot be a 'surplus of meaning' beyond that ([5.24], 266–9).

Another approach was used to deal with statements whose verification is impossible for technical reasons. Consider a statement about the far side of the moon. When Schlick and Ayer considered this example, verification was impossible and, for all they knew, might always remain so. The same is true, for us, about speculations concerning life on other planets. But it would seem absurd to claim that whether such questions have meaning depends on the present technology of space exploration. The answer was to describe the relevant statements as 'verifiable in principle'. 'I know what observations would decide it for me, if, as is theoretically conceivable, I were once in a position to make them' ([5.1], 48–9).

But what should we say about scientific statements or theories whose meaning seems to go far beyond their verificatory content, even 'in principle'? Consider the statement that the universe is expanding, and assume that it is based on the observation of a 'red shift' in the light emitted from remote galaxies. It seems clear that the statement is not merely about red shifts. Yet such a 'reduction' of meaning seems to be required by the verificationist analysis. In this connection verificationists enlisted P.W.Bridgman's idea of 'operationism'. On this view, the meaning of statements about distant parts of the universe, for example, would indeed correspond to the relevant scientific 'operations'; there would be no more to it than that. This meant, as Bridgman pointed out, that ordinary words might change their meaning when used in a scientific context. The meaning of 'length', he claimed, 'has changed completely in character' in the context of astronomy. 'Strictly speaking, length when measured...by light beams should be called by another name, since the operations are different' ([5.4], 3).

A further difficulty arose about the analysis of statements about the past. The statement 'It rained yesterday' might be verified, in the ordinary sense, by present evidence including, perhaps, asking other people. But the statement obviously does not *mean* any of these present things ([5.67], 329). Ayer offered a variety of analyses in attempting to meet the difficulty, including the bold claim that the tense of a statement is not part of its meaning, so that there would be no difference of meaning between 'George VI was crowned in 1937', 'George VI is being crowned in 1937', and 'George VI will be crowned in 1937' ([5.1], 25, [5.3], 186).

☞ V THE ELIMINATION OF EXPERIENCE ☞

In one way or another, the analysis of different kinds of statements would lead to the ultimate 'elementary propositions', variously described as 'experiential propositions', 'observation-statements' etc., whereby, as Waismann put it, 'language touches reality'. At this stage the speaker or hearer passes from linguistic activity to the occurrence of a suitable experience or sensation which is supposed to give meaning to the words. But here arose a problem which produced a serious split in the ranks of the Circle. Experience and sensation are personal and in some sense private; must not the same be true, then, of meaning? On this view, the sentence 'I am thirsty', as Carnap argued, 'though composed of the same sounds, would have different senses when uttered by [different people]'. But what, in that case, becomes of the claims of science, and of language itself, to be communal activities? There was, thought Carnap, a ready way of disposing of such awkward questions. 'These pseudo-questions', he declared, 'are automatically eliminated by using the formal mode.' By the 'formal mode' he meant a discourse that confined itself to statements and did not try to go beyond these, to what he called 'the material mode'. There was, he held, no need to talk about 'the content of experience', 'sensations of colour' and the like; we should instead refer to the corresponding *statements*, which he called 'protocol statements'. These, and not the corresponding experiences, would occupy the fundamental role in the system—that of 'needing no justification and serving as the foundation for all the remaining statements of science' ([5.7], 78–83).

Carnap was uncertain about the form that these protocol statements should take, proposing such expressions as 'Joy now', 'Here now blue' and 'A red cube is on the table' (Ibid., 46–7). But Otto Neurath argued that such expressions could not be fitted into the system of science, unless the reference of 'now' and 'here', and the identity of the speaker, were known to others. He gave the following as a suitable example: 'Otto's protocol at 3:17 o'clock: [At 3:16 o'clock Otto said to himself: (at 3:15 o'clock there was a table in the room perceived by Otto)] ([5.17], 163). This example, however, is still not sufficiently purged of personal elements. We who read it today would not know where in the system to place '3:17' or 'the room'; and the same would be true of 'Otto', were it not for independent knowledge of who Otto was. But perhaps Neurath was indicating the way towards a still more complex kind of statement, which would be wholly independent of reflexive reference.

Now it is clear that Neurath's example is meant as a protocol statement, because the term 'protocol' is used in it. But, now that the connection with experience has been cut, what entitles it to this

designation? Why should such statements be regarded as 'needing no justification and serving as the foundation' of science? Neurath's answer was that there are, indeed, no statements having this status. 'No sentence', he declared, 'enjoys the "*Noli me tangere*" which Carnap ordains for protocol sentences' (Ibid., 164–5). To illustrate the point he asked the reader to imagine an ambidextrous person writing down two contradictory protocols at the same time.

After the elimination of experience, what becomes of verification and truth? Neurath proposed that we might think of the system of science as a kind of 'sorting machine, into which the protocol sentences are thrown'. When a contradiction occurs, a bell rings, and then some exchange of protocol sentences must be made; but it does not matter which (Ibid., 168). This conception of truth, known as the 'coherence theory', would strike most people as paradoxical and is open to various objections. An objection made by Schlick was that on this view we 'must consider any fabricated tale to be no less true than a historical report' ([5.24], 376).

Schlick, describing himself as 'a true empiricist' (Ibid., 400) was resolute in his opposition to the elimination of experience. 'I would not', he declared, 'give up my own observation propositions under any circumstances... I would proclaim, as it were: "What I see, I see"' (Ibid., 380). In a number of writings he tried to overcome the difficulty about the subjectivity of experience without giving up this cardinal tenet of empiricism. In one of them he maintained that statements have both a 'structure' and a 'content'. The former they share with corresponding facts; and 'my propositions express these facts by conveying to you their logical structure' (Ibid., 292). But there is also a private 'content', which 'every observer fills in' for himself, and which is 'ineffable' (Ibid., 334).

In this matter too, logical empiricism was anticipated in the writings of 'classic' empiricists. According to Locke, we commonly think that words have shared meanings, but this is a mistake, given that meaning is tied to mental entities which he called 'ideas':

Though words, as they are used by men, can properly and immediately signify nothing but the Ideas that are in the mind of the speaker, yet [men]...suppose their words to be marks of the ideas in the minds also of other men, with whom they communicate.

([5.78], 3.2.4)

Locke accepted this difficulty rather lightly, claiming that it was not a serious obstacle to communication. Such a treatment may seem acceptable for a philosophy which concerned itself primarily with

questions of knowledge. But in the new *logical* empiricism the matter could not be passed over so lightly.

A further development, beyond the scope of this article, was the celebrated 'private language' argument of Wittgenstein's later work, in which he made a decisive break from empiricist ideas about language, arguing that the alleged 'private' meaning would not be meaning, in the required sense, at all ([5.29], 1–243ff.).

VI THE UNITY OF SCIENCE

Another common feature that the new empiricism shared with the old was its 'reductionism'. Locke, for example, had insisted that the various kinds and aspects of knowledge could all be reduced to a single type and source, namely the 'sensations' with which our sense organs furnish us in 'experience' ([5.78], 2.1.24). In the case of the new empiricism a similar but linguistic reductionism led to a grandiose project known as the *International Encyclopedia of Unified Science*. In this work it was hoped to show that all the different sciences, including the physical, biological and human sciences, could be expressed in a fundamental common vocabulary. Carnap's proposal for this purpose was what he called the 'thing-language'—that which we use 'in speaking about properties of the observable (inorganic) things surrounding us': such words as 'hot', 'cold', 'heavy', 'light', 'red', 'small', 'thick' etc. (It will be noticed that this proposal, unlike the verification principle, is about words rather than statements.)

One aspect of the 'unity of science' that is of particular interest is its application to human beings. It was thought that descriptions of human feelings, for example, could be reduced to statements about observed behaviour ('behaviourism'), or other physical occurrences such as those in the brain. (Here we see the beginnings of the 'physicalism' which, in various forms, is prominent in the philosophical literature of today.) The difficulties of behaviourism can be brought out by their effect on Wittgenstein in his 1930–33 lectures as recorded by G.E. Moore. 'When we say "He has toothache"', asked Wittgenstein, 'is it correct to say that his toothache is only his behaviour, whereas when I talk about my toothache I am not talking about my behaviour?' This cannot be so, because 'when we pity a man for having toothache, we are not pitying him for putting his hand to his cheek'. Again, 'is another person's toothache "toothache" in the same sense as mine?'. He now saw that according to the verification principle, the meanings, following the difference in methods of verification, must indeed be utterly different. Indeed, the difference was not merely *between* methods of verification, since there is no verification at all in case of the first person: 'there is no such thing as verification for "I

have", since the question "How do you know you have toothache?" is nonsensical' ([5.16], 307).

Carnap tried to accommodate such difficulties in a number of writings. In one of these he admitted that a person N_1 , 'can confirm more directly than N_2 a sentence concerning N_1 's feelings, thoughts etc.'; but, he went on, 'we now believe, on the basis of physicalism, that the difference...is only a matter of degree' ([5.10], 79).

VII THE 'ELIMINATION OF METAPHYSICS'

One of the main objectives of logical empiricism was to provide a way of demarcating the meaningful statements of science and ordinary life from the 'pseudo-statements' of metaphysics. Now the word 'metaphysics' may mean various things. The verificationists used such examples as Heidegger's statement 'The nothing nothings', and F.H. Bradley's talk about 'the Absolute', as in the statement: 'The Absolute enters into, but is itself incapable of, evolution and progress'. This, said Ayer, was 'a remark [he had] taken at random' from Bradley's *Appearance and Reality*. It was, he claimed, 'not even in principle verifiable', and therefore nothing more than a 'metaphysical pseudo-proposition' ([5.1], 49).

Now such a sentence, plucked 'at random' out of its context, might well strike the reader as meaningless. But is this so because it is unverifiable? Perhaps, if we read Bradley's argument, we would find there the means of assessing the truth of his statement. *That* would be the appropriate method of verification in this case. In taking the statement out of its context, Ayer had merely denied us access to the relevant method of verification.

Perhaps what Ayer had in mind was that the method of verification would not be *empirical*. Now this might well be true; but what would it show? It might show that the statement itself is not empirical; but perhaps it was never intended to be so. Merely to classify it as non-empirical is not to show that it is a 'pseudo-proposition', nor even that it is unverifiable.

Another class of statements to which verificationists turned their attention were those about God. Such statements, it was argued, were not necessarily meaningless, but the meaning ascribed to them should not exceed their verificatory content. Carnap spoke of an early phase of the concept of God, in which He was conceived as a corporeal being dwelling, say, on Mount Olympus. Such statements would satisfy the verificationist criterion, but this would not be true of the metaphysical accretions of later phases of the concept. Ayer put the matter thus:

If the sentence 'God exists' entails no more than that certain types of phenomena occur in certain sequences, then to assert the existence of a god will be simply equivalent to asserting that there is the requisite regularity in nature.

([5.1], 152)

Here again the requirement is that of sense experience, of the observation of phenomena by means of the senses. But is this the only kind of experience? In a further passage Ayer spoke of 'mystical intuition'. He would not, he said, deny that 'the mystic might be able to discover truths by his own special methods'. But, he went on, the mystic's statements, like others, 'must be subject to the test of actual experience'. But is not the mystic's experience itself a kind of 'actual experience'? Some further argument would be needed to show that such experiences cannot count as veridical.

This difficulty is part of a fundamental problem about the whole empiricist programme. How is their preference for empirical statements, and empirical methods of verification, itself to be justified? John Locke, the father of empiricism, posed the question: 'Whence has [the mind] all the materials of reason and knowledge?', to which he replied: '... in one word, from *experience*: in that, all our knowledge is founded; and from that it ultimately derives itself ([5.78], 2.1.2). But if this were so, how could this knowledge itself have been obtained? The claim that all knowledge comes from experience cannot itself be derived from experience.

A similar difficulty arises if we turn the verification principle or the criterion of verifiability on themselves. They are not themselves empirical statements: must they not suffer the same fate as other non-empirical statements? As Bradley observed, 'the man who is ready to prove that metaphysics is wholly impossible...is a brother metaphysician with a rival theory of first principles' ([5.77], 1).

This difficulty was recognized by verificationists, who made various proposals to overcome it. Schlick claimed that the verification principle was 'nothing but a simple statement of the way in which meaning is *actually* assigned to propositions, both in everyday life and science' (5.24], 458–9); while Ayer said that his criterion of verifiability was to be regarded 'not as an empirical hypothesis, but as a definition' [5.1], 21). But what reason would there be for accepting this definition or Schlick's claim? As we have seen, they are not confirmed by the various ways in which the word 'meaning' is actually used.

Another idea was to describe the principle or the criterion as a 'proposal' or 'methodological principle'. This would exempt them from self-application, since a proposal cannot be described as true or false, verified or unverified. But what would it mean to adopt the proposal in

question? According to it, I am to describe certain statements as meaningless. But how can I do that unless I *believe* them to be meaningless? (Of course I could *say the word* 'meaningless', but that is a different matter.)

Leaving this difficulty aside, we may ask what would be gained if such a proposal were to be adopted. One of the motives behind it, as we have seen, was that of reductionism and the 'unity of science'. It was thought, and hoped, that the multifarious jungle of human discourse could all be reduced to a single type. Wittgenstein, in his later writings, spoke disparagingly of such aspirations as due to a 'craving for generality'. He now maintained that the uses of language—'language-games', as he called them—are irreducibly various, and that the philosopher's task was to notice and expound the differences, resisting any temptation to impose an artificial uniformity.

❧ VIII THE ACCOMMODATION OF ETHICS ❧

How are ethical statements to be accommodated under verificationist criteria? Should they be accommodated at all? Carnap, at one stage, declared: 'we assign them to the realm of metaphysics'. But while it might be thought that metaphysical discourse can safely be set aside as unnecessary for the conduct of human life, this could hardly be so in the case of moral discourse. Could the latter be regarded, perhaps, as a kind of empirical discourse?

According to Schlick, this was the proper way of regarding it, as is clear from the first sentence of his book on the subject: 'If there are ethical questions which have meaning, and are therefore capable of being answered, then ethics is a science' ([5.22]). He went on to maintain that all of these conditions are fulfilled in the case of ethics. Words such as 'good', he claimed, are used to express desires; and these belong to the science of psychology. The 'proper task of ethics' was to examine the causal processes, social and psychological, which would explain why people have the desires they have.

But cannot something be described as morally good or desirable even if people do not desire it? According to Schlick, this would make no sense. 'If... I assert that a thing is desirable simply in itself, I cannot say what I mean by this statement; it is not verifiable and is therefore meaningless' ([5.22], 19). There is no place in Schlick's account for the aspect of morality on which Kant laid so much emphasis: the conflict between desire and duty, which is such a familiar aspect of moral life. He rejected Kant's account of moral discourse, accusing him of being out of step with the ordinary meaning of 'I ought' (*Ibid.*, no). Yet it makes good sense for a

person to say, for example, that he ought to do X because he promised, even though it is contrary to his desire.

A more common approach among logical empiricists towards moral statements was to deny that they are really statements. In a paper published in 1949, Ayer referred to his earlier view, 'which I still wish to hold, that what are called ethical statements are not really statements at all, that they are not descriptive of anything, that they cannot be either true or false'. This view, he now admitted, 'is in an obvious sense incorrect', since in ordinary English 'it is by no means improper' to speak of ethical statements as statements or descriptions, or to describe these as true or false. Nevertheless, he continued, 'when one considers how these ethical statements are actually used, it may be found that they function...very differently from other statements'. Yet, after all, 'if someone still wishes to say [they] are statements of fact, only it is a queer sort of fact, he is welcome to do so' ([5.3], 231–3). Here again is the craving for uniformity—a wish to deny that ethical facts are facts, because they do not conform to a preferred model.

To support his denial Ayer resorted to the existence of moral disagreement. 'Let us assume that two observers agree about all the circumstances of [a] case..., but that they disagree in their evaluation of it.' In that case, he claimed, 'neither of them is contradicting himself (Ibid., 236). Now in such a case we might indeed conclude that there is 'no fact of the matter'. But there are many other cases in which this is not so. If I have said I will do you a favour, then I *would* be contradicting myself if I denied responsibility for doing what I said. In that case it would be true, and a fact, that I am under an obligation to do what I said. And, as Ayer recognized, the word 'true' is freely used in moral discourse, in various contexts.

As we have seen, Schlick regarded moral statements as factual and verifiable, while Carnap and Ayer tried to dispose of them in other ways. Another writer tried to analyse them into factual and non-factual components. This was the moral philosopher C.L.Stevenson, whose works were cited with approval by logical empiricists. According to the first of Stevenson's 'working models', the statement 'This is wrong' means 'I disapprove of this; do so as well'. (He dealt similarly with the words 'ought' and 'good'.) The first part of this, he pointed out, is amenable to verification, while the second, being an imperative, is not ([5.25], 21, 26).

A difficulty with which Stevenson wrestled was about applying this account to someone who is *asking* himself whether X is wrong. This would not be a factual psychological question, about whether he does in fact approve of X; the question for him would be whether he *ought* to approve of it. Another difficulty is that of making sense of the imperative 'do so as well'. A person can be requested to do something only if he can choose to

do it; but this is not the case with approval. If you give me suitable reasons, I may *come to see* that X is wrong; but I cannot do so at will, in response to an imperative.

The connection with reasons was, however, denied by Stevenson. He admitted that 'a man's willingness to say that X is good, and hence to express his approval, will depend partly on his beliefs', but pointed out that 'his reasons do not "entail" his expression of approval' ([5.26], 67). Now this is true enough; indeed, it is not clear in what sense an expression can be 'entailed'. But it remains the case that on the basis of suitable reasons I may come to see (recognize, know it to be a fact) that X is wrong and ought not to be done. If such facts do not conform to the reductionist programme of logical empiricism, then it may be the programme that should be questioned, rather than the status of moral facts.

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