

to treat the fine (or the admirable) as itself part—the most important part—of the human good; and indeed, he ultimately seems to recognize only two objects of desire, the good and the pleasant (*NE VIII.2*, 1155b18–21; cf. e.g. *EE VII.2*, 1235b18–23). In this context *the pleasant* will include only those pleasures that are not *fine* and good. For this move we may compare Plato's *Gorgias* (474C–475D), where Socrates actually reduces *fine* to good, *pleasant*, or *both*. Later Greek philosophy trades on, while sometimes modifying, this complex of ideas, which also forms the basis for the analysis of beauty in literature or in the visual arts.

See also Aristotle; Beauty; Good, The; Plato; Pleasure; Socrates.

Bibliography

- Aristotle. *Eudemian Ethics*. In *The Complete Works of Aristotle*, edited by Jonathan Barnes. Princeton, NJ: Princeton University Press, 1984.
- Aristotle. *Nicomachean Ethics*. Translated by Christopher Rowe. In *Aristotle: Nicomachean Ethics*, edited by Sarah Broadie and Christopher Rowe. Oxford: Oxford University Press, 2002.
- Plato. *Gorgias*. In *Plato, Complete Works*, edited by John M. Cooper. Indianapolis: Hackett, 1997.
- Plato. *Hippias Major*. In *Plato, Complete Works*, edited by John M. Cooper. Indianapolis: Hackett, 1997.
- Plato. *Lysis*. Translated by Christopher Rowe. In *Plato's Lysis*, edited by Terry Penner and Christopher Rowe. Cambridge Studies in the Dialogues of Plato. Cambridge, U.K.: Cambridge University Press, 2005.
- Plato. *Phaedrus*. Translated by Christopher Rowe. Harmondsworth: Penguin Books, 2005.
- Plato. *Symposium*. Translated by Christopher Rowe. In his *Plato: Symposium*. Warminster/Oxford: Aris & Phillips/Oxbow Books, 1998.

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KAMES, LORD

See *Home, Henry*

KANT, IMMANUEL

(1724–1804)

Immanuel Kant, the propounder of the critical philosophy, was born at Königsberg in East Prussia; he was the son of a saddler and, according to his own account, the grandson of an emigrant from Scotland. He was educated at the local high school, the Collegium Fridericianum,

and then at the University of Königsberg, where he had the good fortune to encounter a first-class teacher in the philosopher Martin Knutzen. After leaving the university, about 1746, Kant was employed for a few years as a tutor in a number of families in different parts of East Prussia. He kept up his studies during this period and in 1755 was able to take his master's degree at Königsberg and to begin teaching in the university as a *Privatdozent*. He taught a wide variety of subjects, including physics, mathematics, and physical geography as well as philosophy, but nevertheless remained poor for many years. It was not until 1770, when he was appointed to the chair of logic and metaphysics at Königsberg, that his financial stringencies were eased.

Kant's first book, *Gedanken von der wahren Schätzung der lebendigen Kräfte* (Thoughts on the True Estimation of Living Forces), was published as early as 1747 (Königsberg), and between 1754 and 1770 he produced an impressive stream of essays and treatises. His earlier works are primarily contributions to natural science or natural philosophy, the most notable being his *General History of Nature and Theory of the Heavens* of 1755; it was not until after 1760 that philosophical interests in the modern sense became dominant in his mind. Kant's publications had already won him a considerable reputation in German learned circles by the time he obtained his professorship. The ten years following his appointment form a period of literary silence during which Kant was engaged in preparing his magnum opus, the *Critique of Pure Reason*. The appearance of the *Critique* was eagerly awaited by Kant's friends and philosophical colleagues, but when it at last came out in 1781 the general reaction was more bewilderment than admiration. Kant tried to remove misunderstandings by restating the main argument in the *Prolegomena to Every Future Metaphysics* of 1783 and by rewriting some of the central sections of the *Critique* for a second edition in 1787. At the same time he continued, with most remarkable energy for a man of his years, the elaboration of the rest of his system. By 1790 the *Critique of Practical Reason* and the *Critique of Judgment* were in print, and of the major treatises only *Religion within the Bounds of Mere Reason* (1793) and *Metaphysic of Morals* (1797) had still to appear. Kant then enjoyed a tremendous reputation throughout Germany and was beginning to be known, though scarcely to be understood, in other European countries. In his declining years, however, he suffered the mortification of seeing some of the ablest young philosophers in his own country, among them Johann Gottlieb Fichte, Friedrich von Schelling, and J. S. Beck, proclaim that he had not really understood his own philosophy and

propose to remedy the deficiency by producing “transcendental” systems of their own. There is reason to believe that the work on which Kant was engaged in the last years of his life was intended as a counterblast to such critics. But Kant was not able to complete it before his death, and all that remains of it are the fragments gathered together under the title *Opus Postumum*.

Kant’s outer life was almost entirely uneventful. He never married. The one occasion on which he might have become politically prominent was in 1794 when, after the appearance of his book on religion, the Prussian king asked him not to publish further on a topic on which his views were causing alarm to the orthodox. But Kant duly promised, and no scandal ensued. For the rest, he fulfilled the duties of his professorship and took his turn as rector of the university; dined regularly with his friends; admired Jean-Jacques Rousseau and the French Revolution from afar; conversed eagerly with travelers who brought him news of a wider world he never saw himself. Never very robust in body, he carefully conserved his physical resources and was in good health until a relatively short time before his death. He was nearly eighty when he died.

CHARACTER OF KANT’S PHILOSOPHICAL WORK

Kant was the first of the major philosophers of modern times to spend his life as a professional teacher of the subject. He was required by university regulation to base his philosophy lectures on particular texts, and he used for this purpose not the works of such major thinkers as René Descartes and John Locke, but the handbooks of his professorial predecessors, notably Christian Wolff, Alexander Gottlieb Baumgarten, and G. F. Meier. Wolff and Baumgarten had dressed out the philosophy of Gottfried Wilhelm Leibniz in what they took to be decent academic garb, presenting Leibniz’ thoughts in the form of a system and with an air of finality foreign to the original; Meier did the same for the doctrines of formal logic. Their example had a near-fatal effect on Kant, for he too thought that philosophy must be thorough if it is to be academically respectable—meaning, among other things, technical and schematic.

In the *Critique of Pure Reason* Kant set out his theories in what he later called progressive order, starting from what was logically first and working forward to familiar facts; in that work he also employed an elaborate terminology of his own and an apparatus of “parts,” “divisions,” and “books” whose titles are alarming and whose appropriateness to the subject matter is not immediately

obvious. It is not surprising that his first readers were unable to discover what the work as a whole was about. The *Critique of Practical Reason* and the *Critique of Judgment* were still more pedantic in form, since in them Kant persisted with much of the formal framework already used in the *Critique of Pure Reason*, in each case proceeding from a part labeled “Analytic” to another labeled “Dialectic,” uncovering one or more “antinomies” in dealing with the dialectic, and ending with an untidy appendix irrelevantly titled “Doctrine of Method.” The fact that Kant was already an old man when he composed these works doubtless explains his attachment to what some commentators have called his architectonic; it is a major obstacle to the proper grasp and unprejudiced evaluation of his ideas. Yet, as passages in his ethical writings in particular show, Kant was capable of expounding his thoughts with clarity, even with eloquence. He was not by nature a bad writer, but he accepted uncritically the scholastic manner cultivated by his fellow professors.

The first task in reading Kant is thus to cut through the formal academic dress in which he clothes his opinions. When this is done, what emerges is not a provincial pedant like Wolff or Baumgarten, but a person of remarkable intellectual and moral stature. Kant’s knowledge of the major European philosophers was often no more than superficial, and his estimate of the work of some of his own contemporaries was certainly overgenerous. But he had, for all that, a sure sense of what was intellectually important at the time; he alone among the eighteenth-century philosophers at once appreciated the greatness of Isaac Newton and was fully aware of the challenge for ethics Newton’s work presented once its seemingly deterministic implications were understood. To sum up Kant’s mature philosophy in a single formula: He wished to insist on the authority of science and yet preserve the autonomy of morals. To achieve this result was a gigantic task, involving consideration of the whole question of the possibility of metaphysics as well as the construction of a theory of scientific knowledge and the elaboration of an ethical system.

Nor was Kant one to be content with mere generalities; he sought to work out his position in detail, with many specific arguments, as well as to state a general case. But the obscurities of his language combine with the extent of his intellectual ambitions to prevent the average reader from grasping precisely what Kant was after; individual points are picked up, but the shape of the whole is not discerned. Yet to be fair to Kant the reader must see the individual views in the wide setting in which Kant saw them himself. To estimate their philosophical value with-

out taking account of their position in the Kantian system, as many critics have tried to do, is quite indefensible.

PRECITICAL WRITINGS

Kant's philosophical career is commonly divided into two periods, that before 1770, usually referred to as "precritical," and that after 1770, usually referred to as "critical." The word *critical* comes from Kant's own description of his mature philosophy as a form of "critical idealism," an idealism, that is to say, built on the basis of a critique of the powers of reason. The precritical period of Kant's thought is interesting primarily, though not exclusively, for its anticipations of his later ideas. Kant was educated by Knutzen in the Wolff-Baumgarten version of Leibniz, and he was, like his master, an independent Leibnizian from the first, although it was many years before he made a decisive break with the Leibnizian way of thinking. The main influence operating against Leibniz in Kant's early thought was Newton, to whose work he had also been introduced by Knutzen. In the more narrowly philosophical field another independent Leibnizian, Christian August Crusius, proved an important subsidiary influence. Just when David Hume awakened Kant from his "dogmatic slumber" is uncertain, but it seems likely that Kant had moved some way in the direction of empiricism before that event took place.

CAUSATION. How little the early Kant had learned from Hume can be seen from some of his first metaphysical essays. In the *Principium Primorum Cognitionis Metaphysicae Nova Dilucidatio* (Königsberg, 1755) he discoursed in effect on the subject of causality, discussing at length the relationship of the Leibnizian principle of sufficient reason to the logical principles of identity and contradiction. Kant knew at this stage, as Crusius did, that Wolff's attempt to subordinate the real to the logical was a mistake, but he had only a hazy idea of what he was later to call the synthetic nature of propositions asserting real connections. He moved a step nearer his mature view in the 1763 essay on negative quantities (*Versuch, den Begriff der negativen Grössen in die Weltweisheit einzuführen*, Königsberg) when he pointed out that opposition in nature is quite different from opposition in logic: Two forces acting against one another are quite unlike a proposition in which the same predicate is simultaneously affirmed and denied. But in none of his writings of the time did Kant explicitly raise the question of the sphere of application of the causal principle, as Hume did.

EXISTENCE. Kant's failure to press home his questions on causation is paralleled in his otherwise striking treatment of existence in another work published in 1763, "The Only Possible Ground of Proof of God's Existence." He began this work by declaring that even if the proposition that existence is no predicate or determination of anything seems "strange and contradictory," it is nevertheless indubitable and certain. "It is not a fully correct expression to say: 'A sea unicorn is an existent animal'; we should put it the other way round and say: 'To a certain existing sea animal there belong the predicates that I think of as collectively constituting a sea unicorn.'" On these grounds Kant rejected the Cartesian version of the Ontological Argument. But he held, even so, that an alternative conceptual proof of God's existence could be found: Nothing could be conceived as possible unless (as the point had already been put in the *Nova Dilucidatio*) "whatever of reality there is in every possible notion do exist, and indeed, absolutely necessarily. ... Further, this complete reality must be united in a single being." There must, in other words, be a perfect being if there are to be any possibilities. Kant was to recall this proof in his derivation of the idea of the *ens realissimum* in the *Critique of Pure Reason*, but he then no longer believed that it had constitutive force. His treatment of attempts to produce causal proofs of God's existence in the *Critique* was also altogether more trenchant than in the precritical works, for though he saw there that the ordinary First Cause Argument was unsatisfactory, he regarded the Argument from Design as generally acceptable, even if not logically compulsive.

METAPHYSICAL PROPOSITIONS. Kant was more successful in another treatise written at the same period, "Untersuchungen über die Deutlichkeit der Grundsätze der natürlichen Theologie und der Moral" (On the Distinctness of the Principles of Natural Theology and Morals; 1764). The Berlin Academy had proposed the question, Are metaphysical truths generally, and the fundamental principles of natural theology and morals in particular, capable of proofs as distinct as those of geometry? If not, what is the true nature of their certainty? Kant answered by drawing a series of radical distinctions between argument in philosophy and argument in mathematics. The mathematician starts from definitions that are in effect arbitrary combinations of concepts; the philosopher must work toward definitions, not argue from them, since his business is to "analyze concepts which are given as confused." Mathematics contains few unanalyzable concepts and indemonstrable propositions; philosophy is full of them. Then too, the relationship

between mathematical ideas can always be observed *in concreto*, whereas the philosopher, having nothing to correspond to mathematical diagrams or symbolism, necessarily works on a more abstract level. The lesson of all this might seem to be that philosophical truths are incapable of strict demonstration, but Kant did not draw this conclusion in the case of natural theology, where he held to his attempted conceptual proof, though he inclined toward it in respect to “the primary grounds of morals.” In general, Kant’s tendency was to say that metaphysics must be an analytic activity that should follow a method that is fundamentally Newtonian: “It is far from the time for proceeding synthetically in metaphysics; only when analysis will have helped us to distinct concepts understood in their details will synthesis be able to subsume compounded cognitions under the simplest cognitions, as in mathematics” (*Critique of Practical Reason and Other Writings*, Beck translation, 1949, p. 275).

Kant viewed the prospects of attaining genuine metaphysical knowledge with increasing skepticism as the 1760s went on. In the enigmatic *Dreams of a Spirit-Seer* of 1766 he compared the thought constructions of metaphysics to the fantasies of Swedenborg, in a manner that is scarcely flattering to either. Metaphysical contentions are groundless, since metaphysical concepts such as spirit cannot be characterized in positive terms. To survive, metaphysics must change its nature and become a science of the limits of human knowledge. Kant’s skepticism about metaphysics was increased by his discovery of the antinomies, which is often dated 1769 although something like the third antinomy is to be found in the *Nova Dilucidatio*. Astonishingly, however, in his inaugural dissertation in 1770 he reverted in some degree to the old dogmatic conception of the subject and argued for the possibility of genuine knowledge of an intelligible world. But the main interest of the dissertation lies in its account of sensory knowledge, which prepared the way for the fundamental criticisms of metaphysical pretensions in the *Critique of Pure Reason*.

THE INAUGURAL DISSERTATION

Kant’s Latin dissertation, “On the Form and Principles of the Sensible and Intelligible Worlds,” publicly defended on August 21, 1770, was his inaugural lecture as professor of logic and metaphysics at Königsberg. At least one of the themes of the dissertation, the status of the concept of space, represented a long-standing interest. As early as 1747 Kant had argued that the proposition that space has three dimensions is contingent; given a different law of the effects of different substances on one another, “an

extension with other properties and dimensions would have arisen. A science of all these possible kinds of space would undoubtedly be the highest enterprise which a finite understanding could undertake in the field of geometry” (“Living Forces,” Handyside translation, in *Kant’s Inaugural Dissertation and Early Writings on Space*, p. 12). Later, however, he regarded three-dimensionality as a necessary property of space, and used its necessity as a ground for rejecting Leibniz’ account of the concept. In a short essay on space published in 1768 Kant had seemed to suggest that Newton’s view of space as an absolute reality was the only alternative to Leibniz, but in the dissertation he rejected both theories and widened his treatment of the question so that it covered time as well as space. Despite this extension the dissertation is best viewed as directed mainly against Leibniz.

SPACE AND TIME. In general, Leibniz had followed the other great rationalists in interpreting perception as a confused form of thinking. Like Descartes, he had treated the deliverances of the senses as sometimes clear but never distinct. In the dissertation Kant developed two main arguments against this position. He maintained in the first place that it could not do justice to the special character of space and time, which are not, as Leibniz supposed, systems of relations abstracted from particular situations and confusedly apprehended, but rather unique individuals of which clear knowledge is presupposed in all perceptual description. The ideas of space and time are intuitive rather than conceptual in character; moreover, they are “pure” intuitions insofar as the essential nature of their referents is known in advance of experience and not as a result of it.

SPACE AND GEOMETRY. To reinforce this point Kant brought forward his second argument, that Leibniz’ theory could not account for the apodictic character of geometry. There was, Kant supposed, an essential relation between geometry and space, for geometry “contemplates the relations of space” and “does not demonstrate its universal propositions by apprehending the object through a universal concept, as is done in matters of reason, but by submitting it to the eyes as a singular intuition, as is done in matters of sense” (“Dissertation,” in *Kant’s Inaugural Discussion and Early Writings on Space*, Sec. 15 C). But if space is what Leibniz said it was and if, as Kant added, “all properties of space are borrowed only from external relations through experience,” then:

geometrical axioms do not possess universality, but only that comparative universality which is acquired through induction and holds only so

widely as it is observed; nor do they possess necessity, except such as depends on fixed laws of nature; nor have they any precision save such as is matter of arbitrary convention; and we might hope, as in empirical matters, some day to discover a space endowed with other primary affections, and perhaps even a rectilinear figure enclosed by two straight lines. (Sec. 15 D)

Kant's own account of space at this stage was that it "*is not something objective and real*, neither substance, nor accident, nor relation, but [something] *subjective and ideal*; it is, as it were, a schema, issuing by a constant law from the nature of the mind, for the co-ordinating of all outer *sensa* whatever" (Sec. 15D). One major advantage of this subjectivist view, in Kant's eyes, was that it explains the possibility of applying geometry to the physical world. Space being a universal form of sensibility, "nothing whatsoever ... can be given to the senses save in conformity with the primary axioms of space and the other consequences of its nature, as expounded by geometry" (Sec. 15 E).

APPEARANCE AND REALITY. Kant's view had another, more startling implication, namely that we cannot know things as they really are through sense perception. If space and time are contributed by the knowing mind, spatial and temporal objects will be altered in the very act of being apprehended. It follows that the world known through the senses—the world investigated by the physical sciences and familiar in everyday experience—can be no more than a phenomenal world. Kant was prepared to accept this conclusion in the dissertation, but he balanced it by saying that over and above this phenomenal world is another world of real objects, knowable not by the senses but by reason. Reason lacks intuitive powers—we cannot be acquainted with things as they are. But (and in this the contrast with the *Dreams* is at its strongest) reason possesses certain concepts of its own, among them "possibility, existence, necessity, substance, cause," by means of which it can arrive at a "symbolic cognition" of such things; that is, know some true propositions about them. The intellect, in its real as opposed to its logical use, can form the concept of a perfect being and use this both to measure the reality of other things and for moral purposes.

ACHIEVEMENTS. The doctrine of pure intellectual concepts in the dissertation is at best impressionistic and had to be completely rethought in the ten years that followed. But against this may be set Kant's positive achievements in the dissertation, seen from the point of view of his

future work. First, Kant had convinced himself that there is an absolute difference between sensing and thinking, and that sense experience need not be in any way confused. Second, he had worked out the main lines, though by no means all the details, of what was to be his mature theory of space and time. Third, he had revived the old antithesis of things real and things apparent, objects of the intellect and objects of the senses, to cope with the consequences of his views about space and time; in this way he was able to show (or so he thought) that physics gives us genuine knowledge, though only of appearances, and that the task of telling us about things as they really are is reserved for metaphysics. Fourth and last, he had recognized the existence of a special class of concepts, "given through the very nature of the intellect," and had seen that these have an important bearing on the question of the possibility of metaphysics.

What Kant had not done was to pose the problem of metaphysics with all its wider implications. As in the *Dreams*, he treated the question whether we have any knowledge of a world of pure spirit as one that is asked primarily for its theoretical interest. It was intellectual curiosity, that is to say, which at this stage prompted Kant to inquire whether physics and metaphysics could coexist, and, if they could, what should be said of their respective objects. He retained this curiosity when he wrote the *Critique of Pure Reason*, but it was not by then his only motive. For he had seen by 1781 that the question of the possibility of metaphysics was important not only to the academic philosopher, but because of its bearing on the universally interesting topics of God, freedom, and immortality, to the plain man as well; that it was a matter not just of intellectual, but also of moral, concern.

CRITIQUE OF PURE REASON: THEME AND PRELIMINARIES

Kant's principal task in the *Critique of Pure Reason* was to determine the cognitive powers of reason, to find out what it could and could not achieve in the way of knowledge. The term *reason* in the title was intended in its generic sense, to cover the intellect as a whole; Kant was not exclusively interested in the reason that he himself distinguished from and opposed to understanding. He was, however, particularly concerned with the capacities of "pure" reason, that is, with what reason could know when operating by itself and not in association with another faculty. Kant believed it important to answer this question for two reasons. He saw that there are spheres (mathematics, for instance) in which it is plausible to claim that pure reason is a source of important truths. He

also saw that in another field, that of metaphysics, remarkable claims were advanced on reason's behalf: It was alleged that, by simply thinking, we could arrive at ultimate truth about the world, establishing thus a series of propositions whose certainty was unassailable and whose subject matter was of supreme importance. Kant, who had himself made this sort of claim in the dissertation, never doubted that what the metaphysician wants to say matters, but he did question his competence to say it. The fact that reason "precipitates itself into darkness and contradictions" once it enters this field struck him as deeply significant; the "intestine wars," the interminable disputes, of metaphysicians could only mean that their claims were pitched too high.

Nor was the scandal of metaphysics—the fact that nothing in metaphysics could be regarded as settled—of concern only to metaphysicians. By failing to make good his proofs, the metaphysician brought doubt on the acceptability of his conclusions, including such fundamental articles of belief as that God exists and that the will is free. In proposing a radical reexamination of the capacities of pure reason, Kant's ultimate motive was to safeguard such convictions by making clear that although they cannot be matters of knowledge, they can all the same be held to as matters of what he called pure rational faith.

TYPES OF JUDGMENT. In the preface to the *Critique*, Kant formulates his main question as "how much can understanding and reason know apart from all experience?" (A xvii). (The first edition is customarily referred to as A, the second edition as B.) In the introduction, he takes his first step toward an answer by substituting the formula "How are synthetic *a priori* judgments possible?" Two closely connected sets of distinctions lie behind these celebrated words. First, Kant distinguishes propositions that are *a priori* from all others; an *a priori* judgment "in being thought is thought as *necessary*" and is also thought "with strict universality, that is, in such a manner that no exception is allowed as possible" (B 3–4). *A priori* judgments have the twin characteristics of necessity and universality, neither of which can be found in conclusions from experience.

In holding that experience can present us with no more than contingent truths Kant echoes the views of many of his predecessors. But in his other distinction, between synthetic and analytic judgments, he shows greater originality. A judgment is analytic, he explains, if what is thought in the predicate-concept has already been thought in the subject-concept; a judgment is synthetic if

this condition does not obtain. Thus, "All bodies are extended" is analytic because our idea of a body is of something that is extended or occupies space; "All bodies have weight" is synthetic because the notion of weight is not comprised in the notion of body (we learn by experience that bodies have weight). In analytic judgments, again, the connection of subject and predicate is "thought through identity"; or, as Kant puts it elsewhere in the *Critique*, the highest principle of all analytic judgments is the principle of contradiction. It follows from this that every analytic judgment is *a priori* in that it is true or false without regard to experience; every analytic judgment is either necessarily true or necessarily false, and we establish its truth or falsity by reference only to definitions of the terms it contains and to the principle of contradiction. Synthetic judgments, by contrast, require for their authentication a different sort of reference, since in their case the connection of subject and predicate terms is "thought without identity." In the case of everyday judgments of fact, for example, we need to consult experience to see whether the connection asserted actually holds.

So far Kant's distinction is simply a more elaborate version of Hume's division of propositions into those that assert relations of ideas and those that express matters of fact and existence, a version inferior to Hume's in that it is formally tied to statements of the subject-predicate form. But at this point Kant gives the distinction a fresh twist by asserting that there are judgments that are both synthetic and *a priori*, thus cutting across the usual classifications. Nearly all the propositions of mathematics answer this description, according to Kant; he also thinks it obvious that "*natural science (physics) contains a priori synthetic judgments as principles.*" He gives two examples: "in all changes of the material world the quantity of matter remains unchanged; and ... in all communication of motion action and reaction must always be equal" (B 17). The very existence of these judgments shows that reason has special cognitive powers of its own, and so lends plausibility to the claims of metaphysicians. But before accepting the claims of metaphysicians, Kant suggests, we need to ask ourselves how (under what conditions) it is possible to assert judgments of this type in the two fields concerned. Only when this question is answered can we decide whether metaphysicians can draw support from the example of mathematics and "pure" physics. This inquiry is what Kant is concerned with in the first half of the *Critique*.

ANALYTIC AND SYNTHETIC. The terms in which Kant states his problem seem at first sight clear, but the clarity diminishes on closer inspection. There is the criticism

that he offers a dual account of the analytic-synthetic distinction, once in psychological and once in logical terms, and the criticism that reference to the principle of contradiction alone is inadequate for the logical formulation of the distinction (he should have referred to logical laws generally). Apart from these two matters, Kant's treatment is marred by a failure to offer any discussion of his key idea, "what is thought in a concept." This omission is the more remarkable because Kant in fact had views on the subject of definition, views that are hard to reconcile with his apparent assumption that every judgment is unequivocally analytic or synthetic. Elsewhere in the *Critique* he states that, according to the real meaning of "definition," an empirical concept "cannot be defined at all, but only made explicit" (B 755). He means that we cannot give the "real essence" (in Locke's terminology) of such a concept, but only its "nominal essence," or conventional signification, which is liable to change as knowledge increases or interests shift. If this is correct, it seems to be only by convention, or provisionally, that the judgment "All bodies are extended" is analytic and the judgment "All bodies have weight" synthetic.

Nor is Kant's other distinction, between a priori and a posteriori, as simple as he pretends. He tries to clarify it by explaining that the first class of judgments have the characteristics of necessity and universality, which serve as criteria that are "inseparable from one another." He fails to notice, however, that the necessity that belongs to synthetic a priori judgments must on his own account differ from that which characterizes analytic judgments. Analytic judgments are, or rather claim to be, logically necessary—to deny a true analytic judgment would be, if Kant is correct, to dispute the validity of the law of contradiction. But though no synthetic judgment can contravene the laws of logic, none can be true in virtue of these laws and of meanings alone. Accordingly, if any synthetic judgment is to be described as necessary, it must be necessary in some further sense.

Kant recognizes in practice that the synthetic a priori judgments he takes to be valid have their own special kind of necessity. In his own terminology, they are "transcendentally" necessary; necessary, that is to say, if we are to have the knowledge and experience we actually have. But he would have done better to acknowledge the ambiguity in his term *a priori* from the outset. It would also have been helpful had he given some elucidation of his statement that, when a judgment is thought with strict universality, "no exception is allowed as possible." He cannot mean that no exception is logically possible, or every a priori judgment would be analytic. But he does not, at

least at this early stage, make clear what other sort of possibility he has in mind.

TRANSCENDENTAL AESTHETIC

Kant's next step in the solution of the problem of how synthetic a priori judgments are possible is to examine the two types of case in which, in his view, we undoubtedly can make synthetic a priori judgments, and then to exhibit the bearing of his results on the possibility of metaphysical knowledge. In his short but important *Prolegomena to Every Future Metaphysics* he approaches these tasks directly. In the *Critique* itself his method is more roundabout, since he proposes there to delineate the entire cognitive powers of the mind and so to clarify the background against which synthetic a priori judgments are made. This leads him to undertake an inquiry first into the a priori elements involved in sensory knowledge (the "Transcendental Aesthetic") and then into the corresponding elements involved in thought (the "Transcendental Logic"). The sharp distinction between the senses and the intellect argued for in the dissertation is the obvious basis of this division.

A PRIORI INTUITIONS. It seems at first sight contradictory to say that there might be a priori elements involved in sensory knowledge. According to an old philosophical and psychological tradition, sensation is an essentially passive affair; the senses present us with data and we have no choice but to accept. Kant was quite ready to agree to this as a general account of sensation. But he was persuaded that there are some features of sensory experience that cannot be accepted as empirically given.

Kant identifies these features by a process similar to that in the dissertation: an examination of our ideas of space and time. These ideas, he argues, represent the form of experience rather than its matter; through them we structure the sensory given in the very act of sensing it. To establish this position Kant appeals to a variety of considerations.

First, he insists on the fundamental and ubiquitous character of space and time, as opposed to features like color and sound. Spatial predicates apply to whatever we know through the five senses, temporal predicates both to these and to the immediately experienced flow of our inner lives. Second, he argues that we cannot acquire the ideas of space and time by reflecting on what is empirically given. Some philosophers had said that we come by the idea of space by noticing such things as that one object is adjacent to another, and that we come by the idea of time by observing the way in which events suc-

ceed, are simultaneous with, or precede one another. Kant points out that the very description of such situations presupposes familiarity with space and time as such. For to know what is meant by saying that one thing is “next to” or “on top of” another we need to appreciate how the things in question are situated in a wider spatial framework, which in turn falls within a yet wider spatial system, until we come to the thought of space as a whole. Particular spaces are not instances of space, but limitations of it, and space is accordingly a special sort of particular. The same argument applies to time. Adding to these two points the fact that we know certain things to be necessarily true of space and time (space has only three dimensions, different times are not simultaneous but successive), Kant infers that the ideas of space and time are not only “intuitions,” but “*a priori* intuitions.”

MATHEMATICS. Kant finds confirmation for his view of space and time exactly as he had in the dissertation: in the thought that this view alone can explain the possibility of pure and applied mathematics. Pure geometry is possible because we are able to “construct,” or show the real possibility of, its concepts in pure intuition. An experiment conducted in imagination shows at once that a triangle is a real spatial possibility, whereas a figure bounded by two straight lines is not. Applied geometry is possible because whatever is apprehended by the senses must necessarily accord with the forms of sensibility. Kant attempts at various points in his writings to extend his doctrine of the importance of pure intuition for mathematical thinking from geometry to the other parts of mathematics, but it cannot be said that he is ever convincing on this point. His reasons for saying that “seven and five are twelve” is a synthetic proposition were sharply and properly criticized by Gottlob Frege. His account of algebra (B 745, 762) is so sketchy as to be virtually unintelligible. Kant tries to say that in algebra there is a “symbolic construction” corresponding to the “ostensive construction” of the concepts of geometry, but it is not in the least clear what this has to do with the pure intuition of either space or time.

Some critics speak as if Kant’s failure to produce a satisfactory philosophy of mathematics invalidated the whole “Aesthetic,” and it is true that the central point of this part of his work is destroyed if his main contentions about mathematics are rejected. Kant’s explanations fall to the ground if it turns out that there is no intrinsic connection between mathematics and space and time, or if it is held that mathematical propositions are analytic, not synthetic *a priori*. But it does not immediately follow that the whole Kantian doctrine of space and time must be

rejected, for many of his arguments on this matter are independent of his philosophy of mathematics. Nor is it decisive against him that the treatment of space and time in modern physics is very different from his; he claims to be dealing with the space and time of immediate perception.

SIGNIFICANCE. Apart from the questions about truth, however, it is vital to appreciate the importance of the conclusions of the “Aesthetic” in the economy of the *Critique of Pure Reason* as a whole. The “transcendental ideality” of space and time carries with it, for Kant, the proposition that whatever we know through the senses (including “inner sense”) is phenomenal; Kant’s celebrated distinction between appearances and things-in-themselves has its origin, if not its justification, at this point. And the view that space and time are *a priori* forms of intuition is not only the model on which Kant constructed his theory of categories as concepts embodying the pure thought of an object in general; the view is carried over intact into the “Transcendental Analytic,” and plays a crucial part there. To treat the theories of the “Aesthetic” as if they merely embodied a series of views that Kant had outgrown by the time he completed the *Critique*, as some commentators have proposed to do, is not in accord with Kant’s own intentions. It is also to ignore a series of arguments that are of independent philosophical interest, and that demand careful notice from anyone writing on the philosophy of perception.

PURE CONCEPTS OF THE UNDERSTANDING

The main contentions of the aesthetic are to be found in the dissertation. Of the doctrine of pure intellectual concepts put forward in that inaugural lecture, on the other hand, almost nothing survives in the *Critique of Pure Reason*.

OBJECTIVE REFERENCE. In the dissertation Kant argues along two lines: First, that pure intellectual concepts are not derived from sense experience (they could not be described as “pure” if they were); and second, that they serve to give us information about things as they really are. Soon after writing this work, however, Kant realized that there was a fundamental difficulty in this position, a difficulty he stated at length in a letter to his friend Marcus Herz dated February 21, 1772. It was that of knowing how “pure” concepts could be said to determine an object of any kind. To elucidate the difficulty, Kant isolated two contrasting types of intelligence, *intellectus ectypus*, “which derives the data of its logical procedure from the

sensuous intuition of things,” and *intellectus archetypus*, “on whose intuition the things themselves are grounded.” The concepts of the first type of intelligence, deriving as they do from objects, have a guaranteed relationship to objects. The concepts of the second type determine objects, because, in this sort of case, thinking itself brings objects into existence in the same way in which “the ideas in the Divine Mind are the archetypes of things.” But the human intelligence, as described in the dissertation, answers to neither description, for some of its concepts are not empirically derived and yet none of its thinking is creative in the sense specified. The problem then arises, How can these concepts be said to have objective reference; how can we know that in using them we are thinking about anything actual? It is this problem that Kant professes to have solved in the *Critique of Pure Reason*. Roughly speaking, his solution is that pure concepts can be shown to determine an object if the object is phenomenal. By contrast, when an attempt is made to use them to specify characteristics of “things in general,” there is no guarantee that anything significant is being said.

ANALYTIC AND DIALECTIC. The details of Kant’s explanation of how pure concepts can be said to have objective reference is to be found in the lengthy section of the *Critique* labeled “Transcendental Logic” and divided into two main parts, “Transcendental Analytic” and “Transcendental Dialectic.”

The first part contains an inventory of what at this point Kant calls pure concepts of the understanding, or categories, with an account of the function they perform in human knowledge and a series of arguments purporting to show that, in the absence of such pure concepts, objective knowledge would be impossible for human beings. In addition, the “Analytic” lists the principles that rest on these pure concepts and offers independent proofs of these principles. Transcendental analytic is said by Kant to be a “logic of truth,” insofar as “no knowledge can contradict it without at once losing all content, that is, all relation to an object, and therefore all truth” (B 87). It deals, in short, with the proper use of a priori concepts, which is the use they have when they provide a framework for empirical inquiries.

Transcendental dialectic is introduced as if it were merely the negative counterpart of analytic—as if its sole purpose were to expose the illusions generated when dogmatic philosophers, unaware of the sensuous conditions under which alone we can make successful use of a priori concepts, attempt to apply them outside the sphere of possible experience. In fact a large part of the section

titled “Dialectic” is devoted to the exposure of metaphysical sophistries. But insofar as Kant recognizes in this part of his work the existence of a further set of intellectual operations involved in scientific inquiry, he seeks to show that the faculty of theoretical reason as well as that of the understanding has its appropriate pure employment.

JUDGMENT OR BELIEF. A good way to approach the central doctrines of the analytic is to see them as an intended answer to Hume. Kant’s knowledge of Hume was limited—he had no firsthand acquaintance with the *Treatise of Human Nature*—but he grasped the importance of many of Hume’s most challenging points. For instance, Hume had argued that “*belief is more properly an act of the sensitive, than of the cogitative part of our natures*” (*Treatise*, edited by L. A. Selby-Bigge, 1888, Book I, Part IV, Sec. 1, p. 183); in the last resort it is a matter of subjective conviction. It is one of Kant’s main objects in the analytic to demonstrate that such a view cannot do justice to an all-important feature of what Hume calls belief and he calls judgment, namely, its claim to be true. When I judge that something is the case I do not merely commit myself to a certain assertion; there is a sense in which I commit all rational persons too, for I purport to state what holds objectively, that is to say for everyone. To make judgment primarily a matter of feeling, something private to an individual person, is to leave out what is most characteristic of it. Similarly, to explain thinking about matters of fact and existence in terms of the association of ideas, as Hume did, is to confuse the objective with the subjective, to put science on the level of idle reverie. Empirical thinking, to deserve its name, must proceed according to rules, and there is all the difference in the world between a rule, which cannot of its nature be private, and association, which is the connecting of ideas on a purely personal plane.

THE UNITY OF EXPERIENCE. There are many philosophers who would accept this criticism of Hume but would deny that empirical thinking involves not only rules, but rules that are a priori or necessary rules. To understand why Kant asserts that thinking must proceed according to necessary rules, we must explain his attitude to another of Hume’s doctrines, the famous contention that “all our experimental conclusions proceed upon the supposition that the future will be conformable to the past” (*Enquiry concerning Human Understanding*, Sec. IV, Part II). Kant agrees with Hume that empirical knowledge involves connecting one part or element of experience with another; he agrees too that connection of this sort (“synthesis”) proceeds on a principle that is neither

analytically true nor empirically probable. But he refuses to follow Hume in deriving the principle from “Custom or Habit,” for he sees more clearly than Hume the consequences of adopting this “sceptical solution.” If it were really the case that events were as “loose and separate” as Hume supposed, not only should we be deprived of any insight into the connections of things, but we should have no unitary consciousness of any sort. For it is a necessary condition of having a unitary consciousness that we be able to relate what is happening here and now to things and events that lie outside our immediate purview; if the ability to relate is not a real possibility, then neither is unitary consciousness. What Kant calls in one place (A 113) “the thoroughgoing affinity of appearances” (the fact that appearances are capable of being connected in a single experience) thus relates closely to the ability of the observer to recognize himself as a single person with diverse experiences. In fact the relation is one of mutual implication.

It may be useful to cite Kant’s explanation as he gave it in the first edition of the *Critique*, in a passage in which all the most characteristic ideas of the “Analytic” appear and which also illustrates Kant’s persistent but nonetheless questionable tendency to move from saying that unity of consciousness means that appearances must be capable of connection to the conclusion that they must be capable of connection according to universal and necessary laws.

There can be in us no items of knowledge, no connection or unity of one item of knowledge with another, without that unity of consciousness which precedes all data of intuitions, and by relation to which representation of objects is alone possible. This pure original unchangeable consciousness I shall name *transcendental apperception*. ... This transcendental unity of apperception forms out of all possible appearances, which can stand alongside one another in one experience, a connection of all these representations according to laws. For this unity of consciousness would be impossible if the mind in knowledge of the manifold could not become conscious of the identity of function whereby it synthetically combines it in one knowledge. The original and necessary consciousness of the identity of the self is thus at the same time a consciousness of an equally necessary unity of the synthesis of all appearances according to concepts, that is, according to rules, which not only make them necessarily reproducible but also in

so doing determine an object for their intuition, that is, the concept of something wherein they are necessarily interconnected. (A 107–108)

ROLE OF CATEGORIES. If the synthesis of appearances is to proceed in accordance with necessary laws, we must clearly operate not just with empirical but also with a priori concepts. But this must not be taken to mean that some items or features of fact can be known apart from all experience. For the role of an a priori concept is fundamentally different from that of its empirical counterpart. Categories are concepts of a higher order than empirical concepts; like the ideas of space and time, they have to do with the form of experience rather than its matter. Our possession of categories accordingly supplies no knowledge of particular things; categories are fertile only when brought to bear on empirical data. Thus, because we hold to the a priori concept of cause, we interrogate nature in a certain way; thanks to it, we refuse to believe that there could be an uncaused event. But the answers we get to our interrogation depend primarily not on the form of our questions, but on what turns up in experience. Those who accuse Kant of having believed in the material a priori have failed to understand his theory.

To summarize this part of Kant’s argument: If we are to have knowledge (and it is Kant’s assumption that we do), various conditions must be fulfilled. The different items that fall within our experience must be capable of being connected in a single consciousness; there can be no happenings that are genuinely loose and separate. But the connections thus demanded must be objective connections—they must hold not just for my consciousness, but for “consciousness in general,” for everyone’s. An objective connection for Kant is a connection determined by a rule, and a rule is of its nature something that claims intersubjective validity. Finally, if we are to establish the operation of empirical rules we must proceed in accordance with nonempirical rules of a higher order, rules that ensure that our different experiences are capable of connection within a single experience.

JUDGMENTS. In view of the close relation Kant sees between the making of judgments and the use of a priori concepts, it is perhaps not surprising that he tries to arrive at a full list of such concepts by scrutinizing the formal properties of judgments. In this connection he invokes the doctrines of general or formal logic, a science he believed had been brought to completion at a single stroke by Aristotle. Few scholars have been convinced by this section of his argument, for it seems clear that Kant adapted the list of judgment forms to suit his list of cate-

gories, rather than deriving the categories from the judgment forms. In any case, it is not obvious how formal logic, which is a logic of consistency, can supply a clue to the content of what professes to be a logic of truth.

IMAGINATION AND UNDERSTANDING. In the first part of the “Analytic” Kant has much to say not only about concepts, judgments, and the understanding but also about the imagination. For example, he remarks in a cryptic passage:

Synthesis in general is the mere result of the power of imagination, a blind but indispensable function in the soul, without which we should have no knowledge whatsoever, but of which we are scarcely ever conscious. To bring this synthesis to concepts is a function which belongs to understanding, and it is through this function of the understanding that we first obtain knowledge properly so called. (B 103)

The contrasting and, in places, overlapping roles of understanding and imagination are among the most puzzling features of Kant’s exposition. The reason why they are both introduced is related to the fact that, in the second edition of the *Critique of Pure Reason* in particular, Kant was concerned with two quite distinct questions. He first asked himself what conditions have to be fulfilled if any sort of discursive consciousness is to have objective knowledge; he then went on to put the question as it relates to the human discursive consciousness, which not only intuits data passively, but does so under the particular forms of space and time. When the first question is uppermost Kant tends to speak of the understanding; when the second is to the fore, he brings in the imagination as well. The passage quoted above, typical of many, suggests that it is the business of the imagination to connect, whereas that of the understanding is to make explicit the principles on which the connecting proceeds. But in one chapter, “Schematism of the Pure Concepts of Understanding,” a more satisfying account of the relationship is offered.

SCHEMATA. The problem of the chapter on what Kant called “schematism” is the central problem of the analytic: How can concepts that do not originate in experience find application in experience? At first Kant speaks as if there were no comparable difficulty in the case of concepts originating in experience, although he later makes clear that there are schemata corresponding both to empirical and to mathematical concepts. To possess the concept triangle is to know its formal definition, to be

able to frame intelligible sentences containing the word *triangle*, and so on; to possess the schema corresponding to the concept triangle is to be able to envisage the variety of things to which the word *triangle* applies. Thus for Kant a schema is not an image, but a capacity to form images or (perhaps) to construct models. Pure concepts of the understanding are such that they “can never be brought into any image whatsoever” (B 181); the thought they embody, springing from the pure intellect, cannot be pictured or imagined. Yet there must be some connection between the abstract idea and the experienced world to which that idea is expected to apply; it must be possible to specify the empirical circumstances in which pure concepts of the understanding can find application. Kant thinks that for the categories this requirement is met by the fact that we can find for each of them a “transcendental schema,” which is, he explains, a “transcendental determination of time.” Without such a schema the categories would be devoid of “sense and significance,” except in a logical (verbal) way. With it, use of the categories is clearly restricted to the range of things that fall within time—meaning, for Kant, restricted to phenomena.

The meaning of this baffling doctrine can perhaps best be grasped through Kant’s examples of schemata:

The schema of substance is permanence of the real in time, that is, the representation of the real as a substrate of empirical determination of time in general. ... The schema of cause... is the real upon which, whenever posited, something else always follows. It consists, therefore, in the succession of the manifold, in so far as that succession is subject to a rule. ... The schema of necessity is existence of an object at all times. (B 183–184)

It emerges from these cryptic sentences that the transcendental schema is something like an empirical counterpart of the pure category. It is what the latter means when translated into phenomenal terms. In Kant’s own words, the schema is “properly, only the phenomenon, or sensible concept, of an object in agreement with the category” (B 186). A category without its corresponding “sensible concept” would be a bare abstraction, virtually without significance. Insofar as he argues that schematization is the work of the imagination, Kant has found a genuine function for the imagination to perform.

ANALYTIC OF PRINCIPLES: PURE PHYSICS. In the first half of the “Analytic” Kant undertook to produce a “transcendental deduction,” that is, a general proof of validity, of the categories. In the second half of the “Analytic” he

gives a series of demonstrations of the synthetic a priori principles that rest on individual categories.

The categories are divided, for this and other purposes, into four groups: quantity, quality, relation, and modality. The four sets of corresponding principles are labeled axioms of intuition, anticipations of perception, analogies of experience, and postulates of empirical thought in general. Only one principle falls under each of the first two classes; the third contains a general principle and three more specific principles; the fourth contains three separate though closely connected principles. The first two classes are grouped together as “mathematical” principles; the third and fourth are described as “dynamical.” Mathematical principles are said to be “immediately evident” and again to be “constitutive of their objects”; they apply directly to appearances. Dynamical principles are concerned with “the existence of such appearances and their relation to one another in respect of their existence.” They are no less necessary than mathematical principles, but must be distinguished from them “in the nature of their evidence” and in that they are not “constitutive” but “regulative.”

Behind this formidable façade some interesting ideas are hidden. In the first place, Kant makes stimulating though not altogether convincing remarks on the subject of proving principles of the understanding. The statement that every event has a cause carries strict necessity with it and therefore cannot be grounded on an inductive survey of empirical evidence. But equally it is not analytic, and so not open to straightforward conceptual proof. To be assured of its authenticity we consequently require a different type of argument altogether, which Kant calls a “transcendental” argument “from the possibility of experience.” His idea is that only if the principles of the understanding are taken to be operative and in order can we have the type of experience we in fact have. Kant perhaps supposes that this type of proof is logically compulsive, but if so he overlooks the difficulty of setting up the original premise, of being sure that only if such-and-such were true should we have the experiences we have. But even with this defect his procedure has an immediate appeal, and is not without modern imitators.

AXIOMS OF INTUITION. The details of the particular arguments for the principles corresponding to the categories also deserve careful attention. The principle of axioms of intuition, that “all intuitions are extended magnitudes,” is perhaps the most difficult to take seriously, since what it purports to prove has apparently already been dealt with in the “Aesthetic.” Kant is once more ask-

ing questions about the application of mathematics to the world; in this section of the *Critique* the problem that apparently troubles him is how we know that inquiries about sizes or areas are always appropriate when we are dealing with things that occupy space. His solution is that they must be appropriate, since every such thing can be regarded as an aggregate of parts produced by the observer as he synthesizes his experiences. “I cannot represent to myself a line, however short, without drawing it in thought, that is, generating from a point all its parts one after another” (B 203).

ANTICIPATIONS OF PERCEPTION. Under the term “anticipations of perception” Kant is concerned with the question of the applicability of mathematics to sensations. What guarantee have we, he asks, that every sensation will turn out to have a determinate degree, in principle quantifiable? Might we not find, for instance, that an object is colored but with no precise depth of saturation, or a smell present in a room but with no specific magnitude? Kant attempts to rule out such possibilities by attention to the formal properties of sensations. We cannot anticipate the matter of sensation, but we can say in advance of experience that every sensation will have intensive magnitude, that is, a determinate degree, because it is possible to think of any given sensation as fading away until it is imperceptible, and conversely as being built up by continuous transitions on a scale from zero to the magnitude it has. Whatever may be the merits of this solution, there can be no doubt of the importance, and for that matter the novelty, of the question Kant asks here.

ANALOGIES OF EXPERIENCE. The section on the analogies of experience contains ideas as significant as any in Kant’s writings.

The permanence of substance. The principle of the first analogy is that of the permanence of substance: “in all change of appearances substance is permanent; its quantum in nature is neither increased nor diminished.” To believe in the permanence of substance is to believe that, whatever happens, nothing goes completely out of existence and nothing totally new is created: All change is transformation. Kant justifies the acceptance of this presupposition (which in his view, it should be remembered, applies only to things phenomenal) by arguing that without it we could not have a unitary temporal system. Coexistence and succession make sense only against a background that abides, and since time itself cannot be perceived, that background has got to be one of permanent things. This does not mean that we can determine a

priori what form the permanent will take; empirical scientists are to pronounce on that question, and their answers may obviously change from time to time. All that Kant seeks to rule out is the possibility that there might be no permanent at all. His argument is defective at a vital point here, but presumably he is saying that if things could go completely out of existence, so that it would make no sense to ask what became of them, the establishment of connections between one part of experience and another would be impossible. Experience would be (or at least might be) full of unbridgeable gaps, with the result that no one set of happenings could be integrated with another, and the unity of time would be totally destroyed.

Causation. Kant carries his argument further in his discussion of the second and third analogies, in which he argues for the necessary operation of the concepts of cause and reciprocity (causal interaction). But just as the notion of substance he justifies is very different from that held by metaphysicians, so is the Kantian concept of cause different from that of, say, Leibniz; it seems at first sight much closer to Hume's idea of a cause as an invariable antecedent. Causality for Kant as for Hume is a relation between successive events; a cause is an event that regularly precedes its effect. But whereas Hume is content to treat the occurrence of regular sequences as an ultimate and entirely contingent fact, Kant believes that without the presumption of sequences that are regular (determined by a rule) there could be no knowledge of objective succession. His reason is that we have to distinguish successions that happen only in ourselves, successions merely in our apprehension, from those that occur in the objective world and are independent of us. We can do this only if an objective sequence is defined as a sequence happening according to a rule. The objective world is a world of events the occurrence of each of which determines the precise place in time of some other event. But though events are necessarily connected in this way, we must not conclude that causal connections can be established a priori; for Kant as for Hume causal propositions are one and all synthetic and empirical. All we can know a priori is that there are such connections to be found, provided we have the skill or good fortune to discover them.

POSTULATES OF EMPIRICAL THOUGHT. One way of expressing Kant's attitude to substance and causality is to say that he thinks the principle of substance licenses us to ask the question, What became of that? Whenever something happens, and that the principle of causality licenses the parallel question, What brought that about? If someone tried to say that things might go out of existence alto-

gether, or happen for no reason at all, Kant would say that these were logical but not real possibilities. The contrast between real and logical possibility is explored by Kant in the section "The Postulates of Empirical Thought." This section contains an explanation of the notions of possibility, actuality, and necessity from the critical point of view. By "really possible" Kant means "that which agrees with the formal conditions of experience, that is, with the conditions of intuition and of concepts" (B 265). A two-sided figure enclosing a space is not really possible, though its concept is not self-contradictory, because such a figure does not accord with the formal conditions of intuition. Telepathy and precognition are not real possibilities; they "cannot be based on experience and its known laws" (B 270), presumably because their actuality would violate some principle of the understanding, although Kant fails to make the point clear. The notion of real possibility is for Kant intermediate between logical and empirical possibility. We need it and can use it only because the world we have to deal with is a world that is not independently existent, but has its being in essential relation to consciousness.

PHENOMENA AND THINGS-IN-THEMSELVES. The distinction between phenomena and things-in-themselves, insisted on in the "Aesthetic" to explain our having a priori knowledge of the properties of space and time, is invoked again in the "Analytic" to account for "pure physics." If the world we confronted were one of things-in-themselves, a priori knowledge of it, even of the very restricted sort for which Kant argues, would be quite impossible. The fact that we have such knowledge—that we possess the principles discussed above—is taken by Kant as proof that the objects of our knowledge are phenomena or appearances. He does not mean by this, however, that they are private objects, at least insofar as they are spatial. The world we know in everyday and scientific experience is common to many observers; if not independent of consciousness as such, it is independent of particular consciousnesses. Parts of it are known only to particular experiencers—my inner life, for example, is accessible only to me—but that does not affect the general point.

Kant's acceptance of the distinction between phenomena and things-in-themselves has met with much criticism. Without the idea of the thing-in-itself, said his contemporary F. H. Jacobi, we cannot enter the world of the *Critique of Pure Reason*; with it we cannot remain inside. At the end of the "Analytic" Kant tries to defend himself against criticism of this sort by arguing that though he says that the objects of experience are phe-

nomena and is prepared to admit that the obverse of a phenomenon is a noumenon or intelligible object, he is committed to noumena only in a negative sense. Having said that the categories, one of which is existence, apply only to phenomena, he cannot with consistency hold any other view. Nor is his position at this stage as devoid of logic as some have tried to make out. After all, to describe things as phenomena he does not need to assert that there actually are things of a different kind; he needs only the idea of such things. To talk about things as they might be in themselves is no more objectionable than to speak of an *intellectus archetypus*, as Kant did in the letter to Herz, or of an intuitive understanding, as he constantly does in both the *Critique of Pure Reason* and the *Critique of Judgment*.

THE ELIMINATION OF DOGMATIC METAPHYSICS

At the end of the section of the *Critique of Pure Reason* devoted to the transcendental analytic, there is a passage that can be taken as summarizing the second stage in Kant's emancipation from Leibnizian rationalism:

The Transcendental Analytic leads to this important conclusion, that the most the understanding can achieve *a priori* is to anticipate the form of a possible experience in general. And since that which is not appearance cannot be an object of experience, the understanding can never transcend those limits of sensibility within which alone objects can be given to us. Its principles are merely rules for the exposition of appearances; and the proud name of an Ontology that presumptuously claims to supply, in systematic doctrinal form, synthetic *a priori* knowledge of things in general ... must, therefore, give place to the modest title of a mere Analytic of pure understanding. (B 303)

Kant thus repudiates the possibility of knowledge through pure concepts of things as they really are; in 1770 he had still clung to it. Having disposed of ontology, Kant needed to consider, to complete the negative side of his work, the tenability of the remaining parts of metaphysics (rational psychology, rational cosmology, and natural theology in Baumgarten's classification), and this he did in the section titled "Transcendental Dialectic." To complete his own alternative to rationalism he needed to clarify the status of the propositions involved in "pure practical faith." His attempt to meet this requirement is made at the very end of the *Critique*, especially in the chapter "The Canon of Pure Reason" (B 823ff.).

REASON. Most of the conclusions of the "Dialectic" follow directly from those of the "Analytic," though there are new points of interest. As in the "Analytic," Kant's views are expressed inside a framework that is heavily scholastic. Kant claimed that human beings have an intellectual faculty in addition to the understanding. This additional faculty is reason, and it is equipped with a set of *a priori* concepts of its own, technically known as ideas of reason. An idea of reason can have no object corresponding to it in sense experience, for the ambition of reason is to arrive at absolute totality in the series of conditions for the empirically given, and in this way to grasp the unconditioned that falls outside experience altogether. However, this ambition can never be realized, and the only proper function for reason in its theoretical capacity is to regulate the operations of the understanding by encouraging it to pursue the search for conditions to the maximum extent that is empirically possible.

THE KNOWING SUBJECT. Kant's handling of the "psychological idea" at the beginning of the main part of the "Dialectic" is exceptionally brilliant. He maintains in the "Analytic" that what he there calls the "I think," or the unity of apperception, is the ultimate condition of experience, in the sense of being the logical subject of experience or the point to which all experience relates. All experience is experience for a subject; whatever thoughts or feelings I have I must be capable of recognizing as my thoughts or feelings. But the subject here referred to is not something substantial; it is merely a logical requirement, in that nothing follows about the nature of my soul or self from the fact that I say "I think." So far from being "an abiding and continuing intuition" (the sort of thing Hume vainly sought in the flow of his inner consciousness), for Kant the "representation 'I' ... [is] simple, and in itself completely empty ... we cannot even say that this is a concept, but only that it is a bare consciousness which accompanies all concepts. Through this I or he or it (the thing) which thinks, nothing further is represented than a transcendental subject of thoughts = X" (B 404). The same view is expressed in an earlier passage in the *Critique*, where Kant says that "in the synthetic original unity of apperception, I am conscious of, myself, not as I appear to myself, nor as I am in myself, but [I am conscious] only that I am. This representation is a thought, not an intuition" (B 157).

REFUTATION OF RATIONAL PSYCHOLOGY. These subtleties are unknown to the exponents of rational psychology, who develop the whole of their teaching around a "single text," which is "I think." From the fact that I am

the subject of all my thoughts they infer that I am a thinking substance; from the fact that the “I” of apperception is logically simple they conclude that I am, in substance, simple and not composite. The proposition that “in all the manifold of which I am conscious I am identical with myself” is taken by them as implying that I am possessed of continuing personal identity. Finally, my distinguishing my own existence as a thinking being from that of other things, including my own body, is put forward as proof that I am really distinct from such things and so could in principle exist in complete independence of them. None of these inferences is justified, for in each case a move is attempted from an analytically true premise to a synthetic conclusion. As Kant remarks, “it would, indeed, be surprising if what in other cases requires so much labour to determine—namely, what, of all that is presented in intuition, is substance, and further, whether this substance can be simple ...—should be thus given me directly, as if by revelation, in the poorest of all representations” (B 408).

MIND AND BODY. Kant presents the doctrines of rational psychology in his own idiosyncratic way, but anyone who reflects on the theories of Descartes will see that Kant was by no means attacking men of straw. Kant’s treatment of the fourth paralogism, “of Ideality,” is of special interest in this connection. Descartes inferred from his *cogito* argument that mind and body were separate in substance, which meant that the first could exist apart from the second. Bound up with this was the view that I am immediately aware of myself as a mind, but need to infer the existence of material things, which is in principle open to doubt. A great many philosophers have subscribed to this opinion, but Kant thought he could show it to be definitively false. In order to say that my inner experiences come one before another I need to observe them against a permanent background, and this can only be a background of external objects, for there is nothing permanent in the flow of inner experience. As Kant put it in the second edition, in which he transposed the argument to the discussion of existence in connection with the postulates of empirical thought), “*The mere, but empirically determined, consciousness of my own existence proves the existence of objects in space outside me*” (B 275). Kant is in no sense a behaviorist; he thinks that empirical self-knowledge is to be achieved through inner sense and declares in one passage that, for empirical purposes, dualism of soul and body must be taken as correct. Yet his commitment to “empirical realism” is quite unambiguous.

THE ANTI-NOMIES. Of the remaining parts of the “Dialectic,” only the sections on the antinomies and on the existence of God can be discussed here. In the “Antinomy of Pure Reason,” Kant first sets out a series of pairs of metaphysical doctrines (which he says have to do with cosmology but which are in fact of wider interest). The two doctrines in each pair seem to contradict one another directly. He then produces for each pair what he regards as watertight proofs of both sides of the case, maintaining that if we adopt the dogmatic standpoint assumed without question by the parties to the dispute, we can prove, for example, both that the world has a beginning in time and that it has no beginning in time, both that “causality in accordance with laws of nature is not the only causality” and that “everything in the world takes place solely in accordance with laws of nature.” Thus Kant exhibits in systematic form the famous contradictions into which, as he notes, reason precipitates itself when it asks metaphysical questions. Kant is enormously impressed by the discovery of these contradictions, and it is regrettable only that he does not sufficiently discuss their formal character or illustrate them with genuine examples.

The only way to avoid these antinomies, in Kant’s opinion, is to adopt his own (critical) point of view and recognize that the world that is the object of our knowledge is a world of appearances, existing only insofar as it is constructed; this solution enables us to dismiss both parties to the dispute in the case of the first two antinomies, and to accept the contentions of both parties in the case of the other two. If the world exists only insofar as it is constructed, it is neither finite nor infinite but indefinitely extensible and so neither has nor lacks a limit in space and time. Equally, if the world is phenomenal we have at least the idea of a world that is not phenomenal; and natural causality can apply without restriction to the first without precluding the application of a different type of causality to the second. This is admittedly only an empty hypothesis so far as theoretical reason is concerned, but Kant argues that it can be converted into something more satisfactory if we take account of the activities of practical (moral) reason.

THE EXISTENCE OF GOD. The fourth antinomy is concerned with God’s existence. Kant’s full treatment of the subject is not in the section on the antinomies but in that headed “The Ideal of Pure Reason,” the locus classicus for Kant’s criticisms of speculative theology. These criticisms have proved as devastating as those he brought against rational psychology.

Speculative proofs. There are, Kant argues, only three ways of proving God's existence on the speculative plane. First, we can proceed entirely a priori and maintain that the very idea of God is such that God could not *not* exist; this is the method of the Ontological Argument. Second, we can move from the bare fact that the world exists to the position that God is its ultimate cause, as in the First Cause, or Cosmological, Argument. Finally, we can base our contention on the particular constitution of the world, as in the "physicotheological proof" (the Argument from Design).

Kant argues that all three types of proof are fallacious. The Ontological Argument fails because it treats existence as if it were a "real predicate," whereas "it is not a concept of something which could be added to the concept of a thing. It is merely the positing of a thing, or of certain determinations, as existing in themselves" (B 626). The First Cause Argument fails on several counts: because it uses the category of cause without realizing that only in the schematized form is the category significant; because it assumes that the only way to avoid an actually infinite causal series in the world is to posit a first cause; finally and most important, because it presupposes the validity of the Ontological Proof, in the step which identifies the "necessary being" or First Cause with God. The Argument from Design makes all these mistakes and some of its own, for even on its own terms it proves only the existence of an architect of the universe, not of a creator, and such an architect would possess remarkable but not infinite powers.

The moral proof. In spite of Kant's criticisms of the classical arguments for God's existence, he is neither an atheist nor even a believer in the principle of *credo quia impossibile*. He both believes in God and holds that the belief can be rationally justified. For although speculative theology is, broadly, a tissue of errors, moral theology is perfectly possible. But the moral proof of God's existence differs from the attempted speculative proofs in at least two significant respects. First, it begins neither from a concept nor from a fact about the world, but from an immediately experienced moral situation. The moral agent feels called upon to achieve certain results, in particular to bring about a state of affairs in which happiness is proportioned to virtue, and knows that he cannot do it by his own unaided efforts; insofar as he commits himself to action he shows his belief in a moral author of the universe. Affirmation of God's existence is intimately linked with practice; it is most definitely not the result of mere speculation. Again, a proof like the First Cause Argument claims universal validity; standing as it does on purely

intellectual grounds it ought, if cogent, to persuade saint and sinner alike. But the moral proof as Kant states it would not even have meaning to a man who is unconscious of moral obligations; the very word *God*, removed from the moral context that gives it life, is almost or quite without significance. Accordingly Kant states that the result of this proof is not objective knowledge but a species of personal conviction, embodying not logical but moral certainty. He adds that "I must not even say '*It is morally certain that there is a God ...*,' but '*I am morally certain*'" (B 857). In other words, the belief or faith Kant proposes as a replacement for discredited metaphysical knowledge can be neither strictly communicated nor learned from another. It is something that has to be achieved by every man for himself.

ETHICS

Kant perhaps intended originally to make the *Critique of Pure Reason* the vehicle of his entire philosophy, but it was clear before he completed it that some of his views, especially those on ethics, could be only touched on there. In the years immediately following its publication he displayed exceptional energy in defending and restating the theories he had already put forth and in extending his philosophy to cover topics he had hitherto not treated, or not treated in detail. By 1788 he had not only published the second, substantially revised edition of the *Critique of Pure Reason*, but had laid the foundations for his ethics in his short but influential *Groundwork of the Metaphysics of Morals* (1785) and had undertaken a more elaborate survey of moral concepts and assumptions in the *Critique of Practical Reason* (1788). He had also, in passing, written his essay *Metaphysical Foundations of Natural Science* (1786), intended as a first step toward a projected but never completed metaphysics of nature. Two years after the *Critique of Practical Reason* he produced yet another substantial work, the *Critique of Judgment*, in which he expressed his views on, among other topics, aesthetics and teleology.

MORAL ACTIONS. If he had published nothing else but the *Groundwork of the Metaphysics of Morals* Kant would be assured a place in the history of philosophy. Difficult as it is to interpret in some of its details, this work is written with an eloquence, depth of insight, and strength of feeling that make an immediate impact on the reader and put it among the classics of the subject. Kant says that his "sole aim" in the book is "to seek out and establish *the supreme principle of morality*." He wishes to delineate the basic features of the situation in which moral decisions

are made, and so to clarify the special character of such decisions.

The situation as he sees it is roughly as follows. Man is a creature who is half sensual, half rational. Sensuous impulses are the determining factor in many of his actions, and the role of reason in these cases is that assigned to it by Hume; it is the slave or servant of the passions. But there is an identifiable class of actions in which reason plays a different part, leading rather than following. This is the class of moral actions. Such actions have the distinguishing feature that they are undertaken not for some ulterior end, but simply because of the principle they embody.

INTENTIONS AND MORAL JUDGMENTS. The moral worth of an action, as Kant puts it (*Grundlegung*, 2nd ed., p. 13), lies “not in the purpose to be attained by it, but in the maxim in accordance with which it is decided upon.” Whether or not I attain my ends does not depend on me alone, and my actions cannot be pronounced good or bad according to the effects they actually bring about. But I can be praised or blamed for my intentions, and I can, if I choose, make sure that the maxim or subjective principle of my action accords with the requirements of morality. To do this I have only to ask myself the simple question whether I could will that the maxim should become a universal law, governing not merely this particular action of mine, but the actions of all agents similarly circumstanced. For it is a formal property of moral as of scientific judgments, recognized in practice even by the unsophisticated, that they hold without distinction of persons; the result is that an action can be permissible for me only if it is permissible for anyone in my situation.

PRACTICAL REASON. There are difficulties in this position of which Kant seems to have been unaware. In particular, he never asks how I am to decide what is the correct description, and hence the maxim, of my act or proposed act. Nor is it obvious how the theory shows the falsity of Hume’s view that “reason alone can never be a motive to any action of the will”—how it can be shown, in Kant’s language, that pure reason really is practical. The practical effectiveness of reason is manifested not in the capacity to reflect, which both Kant and Hume allow, but in the power to originate or inhibit action. Kant obviously thinks that the facts of temptation and resistance to temptation, which he sees as ubiquitous in the moral life, have a clear bearing on the question whether reason really has such a power. Recognition that I ought to follow a certain course of action, whether I want to or not, and that anything that is morally obligatory must also be

practically possible, is enough in his view to show that I am not necessarily at the mercy of my desires. In favorable cases, at any rate (Kant pays too little attention to the factors that diminish and sometimes demolish responsibility), I am free to resist my sensuous impulses and to determine my actions by rational considerations alone.

CONSEQUENCES OF THE MORAL LAW. Some commentators have seen Kant as an ethical intuitionist, but this view is clearly mistaken. His “practical reason” is not the faculty of insight into the content of the moral law; it is rather the capacity to act. In determining what the moral law commands, I have initially no other resources at my disposal than the reflection that it must be applied impartially. But in practice this criterion carries others with it. If the moral law applies without distinction of persons, Kant believes it follows that I must treat all human beings as equally entitled to rights under it, and that therefore I must regard them as ends in themselves and never as merely means to my own ends. Further, once I recognize that other people are morally in the same position as I am myself, and that we belong to the same moral community, I recognize both that I can legitimately pursue those of my purposes that do not conflict with the moral law and that I also have a duty to facilitate the like pursuit on the part of my fellows. So though Kant is a formalist in his view of moral reason (as in his view of the theoretical intellect), he sees his ethics as having practical consequences of the first importance. He sets these consequences out in his lectures on ethics and develops them in detail later in his 1797 *Metaphysic of Morals*. To judge him by the *Groundwork* alone, or even by the *Groundwork* and the *Critique of Practical Reason* taken together, is to do less than justice to the scope of his ethical reflection.

MORAL IMPERATIVES. Previous moral philosophies, Kant writes, whether they put their stress on moral sense or on moral reason, have all been vitiated by a failure to recognize the principle of the autonomy of the will. Utilitarianism, for instance, is a heteronomous ethical theory because, according to its supporters, the point of a moral action is to promote an end or purpose beyond the action, the greatest happiness of the greatest number. Kant is not unaware of the importance of ends and purposes in actions: In the *Critique of Practical Reason* he corrects the one-sidedness of the *Groundwork* by discoursing at length on the concept of “good” as well as on that of “duty.” But he holds, even so, that consideration of ends cannot be of primary importance for the moral agent, since a moral action is one that is commanded for its own sake, not with a view to some purpose it is

expected to bring about. The imperatives of morality command categorically, unlike those of skill or prudence, which have only hypothetical force. A rule of skill or a counsel of prudence bids us take certain steps if we wish to attain a certain end—good health or overall happiness, for example. There is no “if” about a command of morality; it bids me act in a certain way whether I want to or not, and without regard to any result the action may bring about. It represents a course of conduct as unconditionally necessary, not just necessary because it conduces to a certain end.

FREEDOM AND NECESSITY. The concepts of duty, the categorical imperative, the moral law, and the realm of ends (in which we are all at once subjects and lawgivers) are intended by Kant to illuminate the moral situation. But even when we know what that situation is, there are many features of it that remain mysterious. Morality as Kant expounds it involves autonomy of the will, and such autonomy clearly makes no sense except on the supposition of freedom. But how we can think of the will as free and at the same time regard ourselves as subject to the moral law, that is, as under obligation, has still to be explained. To throw light on this question, Kant invokes the concept of the two worlds, the sensible and the intelligible, to which he made appeal in the *Critique of Pure Reason*. Insofar as I exercise the faculty of reason I have to regard myself as belonging to the intelligible world; insofar as I exercise my “lower” faculties I am part of the world of nature, which is known through the senses. Were I a purely rational being, possessed of what Kant sometimes calls a “holy will,” all my actions would be in perfect conformity with the principle of autonomy, and the notions of obligation and the moral law would have no meaning for me. They would similarly have no meaning if I were a purely sensuous being, for then everything I did would occur according to natural necessity, and there would be no sense in thinking that things ought to be otherwise. The peculiarities of the human moral situation arise from the fact that men are, or rather must think of themselves as being, at once intelligible and sensible. Because I regard myself as belonging to the intelligible order, I see myself as “under laws which, being independent of nature, are not empirical but have their ground in reason alone” (*Critique of Practical Reason*, p. 109). But I am also a natural being, and those laws therefore present themselves to me in the form of commands that I acknowledge as absolute because I recognize that the intelligible world is the ground of the sensible. We can thus see “how a categorical imperative is possible.”

What we cannot see, if Kant is to be believed, is how freedom is possible. “All men think of themselves as having a free will. . . . Moreover, for *purposes of action* the footpath of freedom is the only one on which we can make use of reason in our conduct. Hence to argue freedom away is as impossible for the most abstruse philosophy as it is for the most ordinary human reason” (*Critique of Practical Reason*, p. 113–115). Yet freedom remains what it is in the *Critique of Pure Reason*, “only an idea whose objective reality is in itself questionable,” and there is a *prima facie* clash between the claim to freedom and the knowledge that everything in nature is determined by natural necessity. Kant seeks to dissolve the antinomy of freedom and necessity by means of two expedients. First, he insists that the idea of freedom required for morals is not a theoretical but a practical idea. Freedom does not need to be established as a metaphysical fact; it is enough that we find it necessary to act on the assumption that freedom is real, since “every being who cannot act except under the idea of freedom is by this alone—from the practical point of view—really free” (p. 100). The status of the proposition that the will is free is identical with that of the proposition that there is a God. Both are postulates of practical reason—beliefs that we “inevitably” accept; but they are emphatically not items of knowledge in the strict sense of that term. Second, Kant sees no difficulty in our accepting the postulate of freedom, because there is no contradiction in thinking of the will as free. As an object of theoretical scrutiny I must regard myself as a phenomenon; as a moral agent possessed of a will I transfer myself to the intelligible world of noumena. I can be at once under necessity *qua* phenomenon and free *qua* noumenon. But the question of how I can be free leads to the extreme limits of practical philosophy. Freedom cannot be explained, for we lack all insight into the intelligible world; the most we can do is make clear why it cannot be explained. The critical philosophy purports to have performed this task.

EPISTEMOLOGY AND ETHICS. Kant advocates a form of nonnaturalist theory in ethics. But neither his ethics nor his theory of knowledge can be fully understood in isolation one from the other. The two together constitute an overall theory that is not so much a metaphysics as a substitute for a metaphysics: A theory that argues that human insight is strictly limited, but urges that, so far from being regrettable, this testifies to “the wise adaptation of man’s cognitive faculties to his practical vocation” (*Critique of Practical Reason and Other Writings*, Beck translation, 1949, p. 247). If we knew more, we might indeed do as we ought, for “God and eternity in their

awful majesty would stand unceasingly before our eyes,” but we should not then do things as a matter of duty, but rather out of fear or hope. And thus the world would be poorer, for we should lose the opportunity to manifest “good will,” the only thing in the world, “or even out of it, which can be taken as good without qualification.”

THE CRITIQUE OF JUDGMENT

None of Kant’s other writings is as forceful or original as the first two *Critiques* and the *Groundwork*. The *Critique of Judgment* contains some fresh ideas of remarkable power, but it constitutes a series of appendixes or addenda to Kant’s earlier work rather than something wholly new. It should really be seen as three or four separate essays whose connecting link is the concept of purpose.

SYSTEM OF SCIENCE. The first essay, the introduction, begins with a pedantic discussion of the status of the power of judgment. It then takes up a problem aired in the appendix to the “Dialectic” in the *Critique of Pure Reason*—the problem of the special assumptions involved in the belief that we can construct a system of scientific laws. If we are to have such a system, Kant argues, we must proceed on the principle that nature is “formally purposive” in respect of empirical laws; that nature is such that we can make sense of it not merely in general, but also in detail. Kant’s object is to show that this principle is not a constitutive principle of things, but simply a subjective maxim of judgment.

In the *Critique of Pure Reason* (B 670ff.) Kant argues for what he calls the regulative employment of the ideas of reason: the use of ideas to order empirical inquiries in such a way that we try at once to find greater and greater diversity of form in the material before us and to group different species and subspecies together under ever higher genera. In actual practice we assume that nature will display the unity-in-diversity required for this program to be carried out, but we cannot prove that it will do so as we can prove that whatever falls within experience will conform to the categories. Hence we are concerned not with objective rules, but only with maxims, defined in this connection as “subjective principles which are derived, not from the constitution of an object but from the interest of reason in respect of a certain possible perfection of the knowledge of the object” (B 694).

In the *Critique of Pure Reason* Kant ascribes these maxims to reason. In the *Critique of Judgment*, he assigns them to judgment, in effect the identical doctrine. The difference is accounted for by two facts. First, by the time

Kant wrote the *Critique of Judgment*, the term *reason* suggested to him nothing but practical reason. Second, he had come to think that if the power of judgment is genuinely separate from understanding on the one hand and reason on the other it must have a priori principles of its own. A division within the power of judgment itself, into determinant and reflective activities, had helped to make this last point plausible, at least in the eyes of its author.

AESTHETICS. The “Critique of Aesthetic Judgment,” the first major division of the *Critique of Judgment*, uses the term *aesthetic* in what has become its modern sense. The discussion is Kant’s contribution to the controversies initiated by Lord Shaftesbury and Francis Hutcheson when they made both moral and aesthetic judgments matters of feeling; Kant rejects this view and also explains why he yet cannot approve of Baumgarten’s attempt to “bring the critical treatment of the beautiful under rational principles, and so to raise its rules to the rank of a science” (B 35, note *a*). Kant needs to show, for the purposes of his general philosophy, that aesthetic judgments are essentially different from moral judgments on the one hand and scientific judgments on the other. This need apart, he had a long-standing independent interest in the subject; in 1764, thirty years before the *Critique of Judgment*, he published an essay on the beautiful and the sublime (*Beobachtung über das Gefühl des Schönen und Erhabenen*, Königsberg). Such an interest may seem surprising in view of the obvious limitations of Kant’s own aesthetic experience; he had some feeling for literature, especially for satire, but little or no real knowledge of either painting or music. But what he has in mind in discussing the beautiful is the beauty of nature as much as anything, and his main interest is not in making aesthetic judgments, but in deciding on their logical status.

Judgments of taste, as Kant calls them, are peculiar in that they not only rest on feeling but also claim universal validity. That they rest on feeling seems to him obvious: When I ascribe beauty to an object or scene I do so not because I have observed some special character in it, but because contemplation of its form gives me immediate delight. But it is an entirely disinterested form of delight, quite different from that we feel concerning things that are agreeable, or even things that are good. When we take pleasure in something beautiful we are not desiring to possess it, or indeed taking up any attitude toward its existence. The fact that aesthetic delight is disinterested allows us to think of it as universally shared:

Since the delight is not based on any inclination of the subject (or any other deliberate interest), but the Subject feels himself completely *free* in

respect to the liking which he accords to the object, he can find as reason for his delight no personal conditions to which his own subjective self might alone be party. Hence he must regard it as resting on what he may also presuppose in every other person; and therefore he must believe that he has reason for demanding a similar delight from every one. (*Critique of Judgment*, Meredith translation, Sec. 6)

Because they claim universal validity, judgments of taste appear to rest on concepts, but to think that they do is a mistake. The universality attaching to judgments of taste is not objective but subjective; to explain it we must refer to “nothing else than the mental state present in the free play of imagination and understanding (so far as these are in mutual accord, as is requisite for *cognition in general*)” (Sec. 9). As in the *Critique of Pure Reason*, Kant argues that both imagination and understanding are involved in the apprehension of any spatiotemporal object but that when we simply contemplate any such object aesthetically, no definite concept is adduced; and so the two faculties are in free play. It is the harmony between the faculties in any act of aesthetic contemplation that Kant takes to be universally communicable, and believes to be the basis for the pleasure we feel.

In addition to analyzing judgments about the beautiful, Kant devoted considerable attention in the *Critique of Judgment* to another concept which figured prominently in the aesthetics of his day, that of the sublime. Burke and others had given what was in effect a psychological description of the conditions in which we judge, say, the sight of a mountain range or a storm at sea to be sublime. Kant was all the more anxious to specify more exactly the meaning of such judgments and to establish their transcendental conditions because he was convinced that we here also have to do with a feeling that is held to be universally communicable. The feeling for the sublime, as he explained it, is connected not with the understanding, as is that for the beautiful, but with reason. To put his view somewhat crudely, we are at first abashed by the formlessness of some parts of nature, only to be elevated when we reflect on the utter inadequacy of these objects to measure up to our own ideas, and in particular to our moral ideas. Thus the sublime is not, as might at first sight be supposed, a quality which inheres in natural objects, but a feeling which the contemplation of natural objects provokes in us. It could have no existence for a being totally lacking in culture (a savage might feel fear on observing “thunderclouds piled up the vault of heaven,” to use one of Kant’s own examples, but could

not recognize their sublimity), yet it is not a mere product of culture or social convention. “Rather is it in human nature that its foundations are laid, and, in fact, in that which, at once with common understanding, we may expect everyone to possess and may require of him, namely, a native capacity for the feeling for (practical) ideas, that is, for moral feeling” (Sec. 29).

TELEOLOGY. One of Kant’s motives for wanting to avoid making beauty an objective characteristic was that he thought such a view would lend force to the Argument from Design, and so encourage the revival of speculative theology. If things could be said to possess beauty in the same sort of way in which they possess weight, it would be a short step to talking about the Great Artificer who made them to delight us. Arguments of the same general kind were still more vividly present to his mind when he came to write the second main section of the *Critique of Judgment*, the “Critique of Teleological Judgment.” Indeed, he ended the book with a lengthy section that underlines yet again the shortcomings of “physicotheology” and points up the merits of “ethicotheology.”

Before confronting theology directly, Kant embarked on a detailed and penetrating discussion of the nature and use of teleological concepts. The existence of organic bodies, he argues, is something for which we cannot account satisfactorily by the mechanical principles sanctioned by the physical sciences; to deal with organic bodies we must employ a distinct principle, the principle of teleology, which can do justice to the fact that “*an organized natural product is one in which every part is reciprocally both means and end*” (Sec. 66). Such a principle cannot be used for cognitive purposes in the strict sense; it can be employed only by reflective judgment to guide “our investigation of ... [organic bodies] by a remote analogy with our own causality according to ends generally, and as a basis for reflection upon their supreme source” (Sec. 65). Teleology is a concept that occupies an uneasy intermediate position between natural science and theology. We cannot help using it to describe the world about us, yet we cannot assign to it full scientific status. Kant mitigates the austerities of this position by suggesting in his section “The Antinomy of Judgment” that in the end the mechanical and teleological principles stand on the same level, both belonging to reflective judgment. But it is hard to see how this can be made consistent with the doctrines of the *Critique of Pure Reason*, which ascribes constitutive force to the concepts of “pure physics,” or even with the distinction in the *Critique of Judgment* itself between explaining something and merely “making an estimate” of it. We use the categories to

explain, but can employ teleological concepts only for the purpose of making an estimate. Kant's underlying attitude to the whole question is revealed most clearly in the passage at the end of Sec. 68 of the *Critique of Judgment*, where he asks why teleology "does not ... form a special part of theoretical natural science, but is relegated to theology by way of a propaedeutic or transition." He answers:

This is done in order to keep the study of the mechanical aspect of nature in close adherence to what we are able so to subject to our observation or experiment that we could ourselves produce it like nature, or at least produce it according to similar laws. For we have complete insight only into what we can make and accomplish according to our conceptions. But to effect by means of art a presentation similar to organization, as an intrinsic end of nature, infinitely surpasses all our powers. (Meredith translation)

It would be interesting to know if Kant would say the same were he alive today.

OTHER PHILOSOPHICAL WRITINGS

After publishing the three *Critiques*—Kant was sixty-six when the *Critique of Judgment* appeared—he continued to publish essays and treatises on a wide variety of philosophical subjects. Most of these are in fact contributions to applied philosophy, for he took the view that scientific inquiries and practical activities alike stand in need of philosophical foundations. In many cases he attempts to supply these foundations by means of the principles established in his main works—hence the general shape of his philosophies of science and religion, and of his political philosophy. It would, however, be wrong to see these as no more than mechanical applications of general Kantian conclusions. For although Kant was deeply and indeed unduly devoted to system, he also had a wide and in some cases penetrating knowledge of many different branches of learning and human activity, and there are few philosophical topics that he touches without illuminating; in fact, Kant gave the names still in use to most of the branches of applied philosophy he took up.

PHILOSOPHY OF NATURE. In the preface to his *Metaphysical Foundations of Natural Science*, Kant argues that the very concept of scientific knowledge is such that we can use the term properly only when dealing with truths that are both apodictically certain and systematically connected. A discipline that is thoroughly and entirely empirical cannot comply with these requirements; hence

Kant pronounces chemistry to be no better than "systematic art or experimental doctrine." But the situation is different in physics. Although Kant was as firmly persuaded as any empiricist that detailed knowledge of the physical world could be arrived at only by observation and experiment, he was also sure that physics has an unshakable a priori basis that makes it worthy of the name of science. It owes this, in Kant's judgment, to the fact that its fundamental concepts are capable of mathematical expression, as those of chemistry are not, and to the close connection of these concepts with the categories, the basic concepts of rational thought.

The main object of the *Metaphysical Foundations* is to demonstrate the second of these points by means of an examination of the idea of matter. Starting from what professes to be an empirically derived definition of matter, "that which is capable of movement in space," Kant proceeds to a deduction of its main properties in the light of the table of categories. The result is, in effect, a rereading or reinterpretation of then-current physical theory in which all the main doctrines of Newton find their place, but which is distinctive in that the atomism professed by many physicists of the day is rejected in favor of a dynamical theory of matter resembling that of Leibniz. Kant argues in the *Critique of Pure Reason* that only mistaken metaphysics leads scientists to think they must accept the notions of absolutely homogeneous matter and absolutely empty space. In the *Metaphysical Foundations* he works out an alternative conception of matter in terms of moving forces, omnipresent but varying in degree, and puts it forward as both theoretically satisfactory and consistent with the empirical findings.

It is difficult not to see in these views the beginnings of *Naturphilosophie* as it was to be practiced by Schelling and G. W. F. Hegel, the more so if we read the *Metaphysical Foundations* in the light of Kant's further treatment of the subject in the notes published as *Opus Postumum*. But in 1786 at any rate Kant was still far from committing the extravagances of the speculative philosophers of nature. For one thing, he was both more knowledgeable about and more respectful of the actual achievements of physical scientists than were his romantic successors, doubtless because, unlike them, he was something of a physical scientist himself. For another, the lesson he drew from his 1786 inquiries was not how much physical knowledge we can arrive at by the use of pure reason, but how little. To establish the metaphysical foundations of natural science was a useful task, but it was in no sense a substitute for empirical investigation. Despite these differences from *Naturphilosophie*, it must be allowed that *Metaphysical*

Foundations testifies, in name as well as in content, to the extent of Kant's commitment to rationalism (his theory of science could scarcely be further from Hume's) and to the way in which he was at least tempted by the constructivism favored by some of his younger contemporaries.

PHILOSOPHY OF HISTORY. Although Kant was quite unaware of the problems about historical knowledge and explanation with which philosophers since Wilhelm Dilthey have dealt, he made an important and characteristic contribution to speculative philosophy of history in his essay "Idee zu einer allgemeinen Geschichte in weltbürgerlicher Absicht" (Idea of a Universal History from a Cosmopolitan Point of View; *Berliner Monatsschrift*, November 1784, 386–410). Observing that the actions of men, when looked at individually, add up to nothing significant, he suggests that nature or providence may be pursuing through these actions a long-term plan of which the agents are unaware. To see what the plan may be we have to reflect on two points: First, that nature would scarcely have implanted capacities in human beings if she had not meant them to be developed, and second, that many human intellectual capacities (for example, the talent for invention) are such that they cannot be satisfactorily developed in the lifetime of a single individual.

The development of such capacities belongs to the history of the species as a whole. Kant suggests that the hidden plan of nature in history may well be to provide conditions in which such capacities are more and more developed, so that men move from barbarism to culture and thus convert "a social union originating in pathological needs into a moral whole." The mechanism of the process lies in what Kant calls the "unsocial sociability" of human beings—the fact that they need each other's society and help and are nevertheless by nature individualists and egotists—which ensures that men develop their talents to the maximum extent, if only to get the better of their fellows, and at the same time necessitates man's eventually arriving at a form of civil society that allows for peaceful rivalry under a strict rule of law. But such a "republican" constitution would be of no value unless it had its counterpart in the international sphere, for the struggles of individuals against one another are paralleled by the struggles of states. We must accordingly conclude that the final purpose of nature in history is to produce an international society consisting of a league of nations, in which war is outlawed and the way is finally clear for peaceful competition between individuals and nations.

The difficulty with this as with other lines of Kant's thought is to understand its relation to empirical inquiries. From what Kant says it seems clear that he intended "philosophical" history to be an alternative to history of the everyday kind, not a substitute for it. Nor did he pretend to be writing philosophical history himself; his essay merely puts forward the idea of or offers a "clue" to, such a history, leaving it to nature to produce someone really capable of making sense of the historical facts as Johannes Kepler and Newton made sense of physical facts. It is difficult to see, even so, how Kant could have possessed the idea of history as meaningful without knowing the facts, or alternatively how he could know that the idea throws light on the facts when it was discovered without any reference to them.

PHILOSOPHY OF LAW AND POLITICS. Kant's views about law and politics, like his philosophy of history, are obviously tied up with his ethics. Kant holds that legal obligations are a subspecies of moral obligation; thus the rational will, and neither force nor the commands of God, is the basis of the law. His standpoint in philosophy of law is thus broadly liberal, though his attitude on many particular legal issues is far from liberal as the term is now understood. He holds, for instance, that if one of the partners to a marriage runs away or takes another partner, "the other is entitled, at any time, and incontestably, to bring such a one back to the former relation, as if that person were a thing" (*Metaphysic of Morals*, Sec. 25). He is notorious as a strong supporter of the retributive theory of punishment and an uncompromising advocate of the death penalty for murder. The explanation of his harshness in these matters is to be found in his legalistic approach to ethics, which leaves little room for sympathy or forgiveness.

In politics also Kant combines a fundamentally liberal attitude with specific views that are conservative, if not reactionary. Following Rousseau, he attempts to explain political authority partly in terms of the general will and partly in terms of the original contract. Insofar as he insists on the contract, which he interprets not as a historical fact but as a regulative idea, he is advocating a version of political liberalism which lays particular emphasis on the rule of law; insofar as he grounds supreme political authority in the will of the people as a whole, he is obviously flirting with more radical doctrines—from whose consequences he is quick to draw back. An admirer of the French Revolution, he nevertheless denies that the subjects of the most ill-governed states have any right of rebellion against their rulers. And though the mixed constitution he favors is one in which citizens can make their

voices heard through their representatives, he is for confining the franchise to persons who possess “independence or self-sufficiency,” thus excluding from “active” citizenship (according to Sec. 46 of the *Metaphysic of Morals*) apprentices, servants, woodcutters, plowmen, and, surprisingly, resident tutors, as well as “all women.” The truth is, however, that Kant’s political theorizing was done in a vacuum; in his day there was no real chance for a Prussian professor of philosophy to influence political events.

PHILOSOPHY OF RELIGION. In the sphere of religion the views of a professor of philosophy could be influential, and Kant’s views on this subject were certainly provocative. He treats religion as essentially, if not quite exclusively, a matter of purity of heart—thus dispensing with speculative theology altogether and assigning a meager importance to the institutional side of religion. To adopt the religious attitude, as Kant sees it, is to look on duties as if they were divine commands. But this, he explains, is only to insist on the unconditioned character, the ineluctability, of moral obligation; it is a way of representing morality, not a way of going beyond it. Knowledge of the supersensible, as Kant thought he had shown in the *Critique of Pure Reason*, is impossible; and although moral practice carries with it belief in God and a future life, the whole meaning and force of that belief is to be found in a persistence in moral endeavor and a determination to repair moral shortcomings. The pure religion of morality needs no dogma apart from these two fundamental articles of belief, which are accessible immediately to the simplest intelligence. Still less has it any need of the external trappings of religion—priests, ceremonies, and the like—although the body of believers must think of themselves as belonging to a church, universal but invisible, and the practices of visible churches sometimes serve to stimulate or strengthen moral effort, in a way which is useful but not indispensable.

The religion of morality is on this account a religion of all good men. Despite this, Kant took a particular interest in Christianity, which he saw as at least approximating true religion though corrupted by the presence of extraneous elements derived from Judaism. His book *Religion within the Bounds of Mere Reason* (1793) is in effect a commentary on and a reinterpretation of Christian doctrine and practice, written with the object of making this conclusion clear. In this reinterpretation the doctrine of original sin is transformed into a doctrine of the radical evil in human nature, which is the positive source of moral failing; and that of the Incarnation is replaced by an account of the triumph of the good prin-

ciple over the bad, the part of the historical Jesus being taken by an idea of reason, that of man in his moral perfection. Kant sets aside the historical elements in Christianity as having no importance in themselves: Whatever is true in the religion must be derivable from moral reason. To think of the uttering of religious formulas or the performance of formal services to God as having a value of their own is to fall into the grossest superstition. It is perhaps scarcely surprising that these sentiments, whose attraction for youth can be seen in Hegel’s *Jugend-schriften*, should have struck the Prussian authorities as subversive and led the orthodox King Frederick William II to demand that Kant refrain from further pronouncements on religion. Though Kant, in his letter acceding to this demand, protested that he had no thought of criticizing Christianity in writing his book, it is hard to take his protest quite seriously, for he had certainly meant to suggest that many of the beliefs and actions of practicing Christians were without value, if not positively immoral. Indeed, the originality and continuing interest of his work on religion connect directly with that fact.

THE OPUS POSTUMUM. In the last years of his life—from about 1795 on—Kant was engaged in the composition of what would have been a substantial philosophical work; the preparatory notes for it have been published as *Opus Postumum*. Its original title was “Transition from Metaphysical Foundations of Natural Science to Physics,” and in its original form its object was to carry further the process, begun in 1786 in the *Metaphysical Foundations of Natural Science*, of finding an a priori basis for physics. No longer content with the formal structure for which he had argued earlier, Kant thought he had to show that some of the particular laws of nature could be known in advance of experience. The broadest types of physical possibility were determined by the constitution of the human mind; it was this, for example, which explained the presence in nature of just so many fundamental forces, and even of an omnipresent ether.

These speculations about the foundations of physics led Kant to epistemological considerations of a wider kind. The whole subject of the relation of the form of experience to its matter, with the question how far the form shapes the matter, arose in his mind anew, doubtless because of the criticisms directed against the formalist position of the *Critique of Pure Reason* by self-professed disciples such as Fichte. In 1799 Kant dissociated himself publicly from the views expressed in Fichte’s *Wissenschaftslehre*, according to which the subject of knowledge “posits” the objective world and so, in a way, creates nature. Yet the evidence of the *Opus Postumum* is that at

this time, or shortly thereafter, Kant was toying with similar ideas and was even using some of the same vocabulary. It is perhaps fortunate for Kant's reputation that he was not able to get his final philosophical thoughts into publishable form.

See also Aesthetic Judgment; Appearance and Reality; Aristotle; Baumgarten, Alexander Gottlieb; Beck, Jakob Sigismund; Burke, Edmund; Causation; Cosmological Argument for the Existence of God; Crusius, Christian August; Descartes, René; Determinism and Freedom; Dilthey, Wilhelm; Ethics, History of; Fichte, Johann Gottlieb; Geometry; Hegel, Georg Wilhelm Friedrich; History and Historiography of Philosophy; Hume, David; Intuition; Jacobi, Friedrich Heinrich; Kepler, Johannes; Knutzen, Martin; Leibniz, Gottfried Wilhelm; Locke, John; Logic, History of; Meier, Georg Friedrich; Newton, Isaac; Ontological Argument for the Existence of God; Perception; Propositions; Reason; Rousseau, Jean-Jacques; Schelling, Friedrich Wilhelm Joseph von; Space; Teleology; Time; Wolff, Christian.

Bibliography

WORKS BY KANT

Collected Works

Gesammelte Schriften. 23 vols., edited under the supervision of the Berlin Academy of Sciences. Berlin: Reimer, 1902–1955. The standard collected edition of Kant's writings; contains his correspondence and hitherto unpublished notes (including those for the *Opus Postumum*) as well as everything he published. Further volumes covering Kant's lectures are in preparation.

Kants Werke. 10 vols, edited by Ernst Cassirer. Berlin: Cassirer, 1912–1922. Contains the published works, with full indications of the contents of the original editions.

Philosophische Bibliothek series. Leipzig and Hamburg, 1904–. Separately bound editions of all the treatises listed below under the head "Main Treatises," with useful introductions; also includes *Kleinere Schriften zur Geschichtsphilosophie, Ethik, und Politik*.

Main Treatises

Allgemeine Naturgeschichte und Theorie des Himmels. Königsberg and Leipzig, 1755. English translation by W. Hastie in *Kant's Cosmogony* (Glasgow, 1900).

Der einzig mögliche Beweisgrund zu einer Demonstration des Daseins Gottes. Königsberg, 1763. No serviceable translation.

Träume eines Geistersehers, erläutert durch Träume der Metaphysik. Königsberg, 1766. Translated by E. F. Goerwitz into English as *Dreams of Spirit-Seer* (New York, 1900).

De Mundi Sensibilis atque Intelligibilis Forma et Principiis Dissertatio. Königsberg, 1770. Translated into English in Handside's *Kant's Inaugural Dissertation and Early Writings on Space* (Chicago: Open Court, 1929).

Kritik der reinen Vernunft. Riga, 1781; 2nd ed., Riga, 1787. The first edition is customarily referred to as A, the second edition as B. The most useful modern edition is by Raymond Schmidt (Leipzig, 1926). There are English translations by Francis Heywood (London, 1838); J. M. D. Meiklejohn (London, 1854), F. Max Müller (2 vols., London, 1881), and N. Kemp Smith (London Macmillan, 1929). Kemp Smith's version is the fullest and most reliable.

Prolegomena zu einer jeden künftigen Metaphysik die als Wissenschaft auftreten können. Riga, 1783. English translations are available by John Richardson (*Prolegomena to Future Metaphysics*, in *Metaphysical Works of the Celebrated Immanuel Kant*, London, 1836), J. P. Mahaffy and J. H. Bernard (*The Prolegomena*, London, 1872), E. B. Bax (*Kant's Prolegomena and Metaphysical Foundations of Natural Science*, London, 1883), Paul Carus (*Prolegomena to Any Future Metaphysics*, Chicago, 1902), L. W. Beck (same title as Carus's, New York: Liberal Arts Press, 1951), and P. G. Lucas (same title as Carus's, Manchester, U.K., 1953). The Beck and Lucas translations are much the best.

Grundlegung zur Metaphysik der Sitten. Riga, 1785; 2nd ed., Riga, 1786. Translated into English by T. K. Abbott as *Fundamental Principles of the Metaphysics of Morals* (in *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, London, 1873), by L. W. Beck as *Foundations of the Metaphysics of Morals* (in *Critique of Practical Reason and Other Writings in Moral Philosophy*, Chicago: University of Chicago Press, 1949), by H. J. Paton (from the 2nd edition) as *The Moral Law, or Kant's Groundwork of the Metaphysics of Morals* (London: Hutchinson, 1948). All three versions are good; Paton's is the most elegant. Quotations in the text of this article are from Paton's translation; the citations to page numbers in the 2nd edition are taken from Paton's marginal notation.

Metaphysische Anfangsgründe der Naturwissenschaft. Riga, 1786. Translated into English by E. B. Bax (in *Kant's Prolegomena and Metaphysical Foundations of Natural Science*, London, 1883).

Kritik der praktischen Vernunft. Riga, 1788. Translated into English by T. K. Abbott, and also by L. W. Beck, as *Critique of Practical Reason* in the books cited for the *Grundlegung zur Metaphysik der Sitten*. The Beck translation is accurate but somewhat clumsy; it has been published separately (New York, 1956).

Kritik der Urteilkraft. Berlin and Liebau, 1790. Translated into English by J. H. Bernard as *Kritik of Judgement* (London, 1892; later reprinted as *Critique of Judgement*). Also translated by J. C. Meredith in two parts, *Critique of Aesthetic Judgement* (Oxford, 1911) and *Critique of Teleological Judgement* (Oxford, 1928), which were reissued together as *The Critique of Judgement* (Oxford: Clarendon Press, 1952). Both the Bernard and the Meredith versions are of poor quality; Meredith's is slightly the better. Kant wrote an introduction to the *Kritik* that he discarded; it is available as *Erste Einleitung in die Kritik der Urteilkraft*, Vol. V, *Kants Werke* (Berlin, 1922), and in English translation by H. Kabir as *Immanuel Kant on Philosophy in General* (Calcutta: Calcutta University Press, 1935).

Die Religion innerhalb der Grenzen der blossen Vernunft. First part published separately, Berlin, 1792; published complete at Königsberg, 1793. Translated into English by John Richardson as *Religion within the Sphere of Naked Reason* (in

Essays and Treatises, London, 1798), by J. W. Semple as *Religion within the Boundary of Pure Reason* (Edinburgh, 1838), T. M. Greene and H. H. Hudson as *Religion within the Limits of Reason Alone* (Chicago: Open Court, 1934; 2nd ed., with new matter by J. R. Silber, New York: Harper, 1960). The 1960 edition (Greene-Hudson-Silber) is the best.

Zum ewigen Frieden: ein philosophischer Entwurf. Königsberg, 1795. The two best English translations are L. W. Beck's *Perpetual Peace* (in *Critique of Practical Reason and Other Writings in Moral Philosophy*, Chicago, 1949; separately bound, New York, 1957) and C. J. Friedrich's *Inevitable Peace* (New Haven, CT, 1948).

Metaphysik der Sitten, Part I, *Metaphysische Anfangsgründe der Rechtslehre*; Part II, *Metaphysische Anfangsgründe der Tugendlehre*. Separately bound, Königsberg, 1797. Part I translated into English by W. Hastie as *Kant's Philosophy of Law* (Edinburgh, 1887). Part II translated into English by James Ellington as *Metaphysical Principles of Virtue* (Indianapolis, 1964) and by Mary Gregor as *The Doctrine of Virtue* (New York: Harper and Row, 1964).

Anthropologie in pragmatischer Hinsicht. Königsberg, 1798. No English translation.

Eine Vorlesung über Ethik, edited from student's notes by P. Menzer. Berlin, 1924. Translated into English by Louis Infield as *Lectures on Ethics* (London: Methuen, 1930).

Kant on History. Indianapolis, 1963. Translations by L. W. Beck, R. E. Anchor, and E. L. Fackenheim; contains Kant's minor essays on philosophy of history.

WORKS ON KANT

Life

The main sources for Kant's life, apart from his letters, are three memoirs published in Königsberg in 1804: L. E. Borowski's *Darstellung des Lebens und Characters Immanuel Kants*; R. B. Jachmann's *Immanuel Kant, geschildert in Briefen an einen Freund*; and E. A. C. Wasianski's *Immanuel Kant in seinen letzten Lebensjahren*. Wasianski's memoir is extensively used in Thomas De Quincey's "The Last Days of Kant" (*Works*, Vol. XII). See also Ernst Cassirer's *Kants Leben und Lehre* (Berlin, 1921), and for a useful short life Karl Vorländer's *Immanuel Kants Leben* (Leipzig, 1911).

Commentaries

Rudolf Eisler's *Kantlexicon* (Berlin, 1930) and Heinrich Ratke's *Systematisches Handlexicon zu Kants Kritik der reinen Vernunft* (Leipzig, 1929) are valuable aids to the Kantian student. The periodical *Kantstudien* has published many important contributions to Kantian scholarship and discussion.

For commentaries on the *Critique of Pure Reason*, see Hans Vaihinger, *Kommentar zur Kritik der reinen Vernunft*, 2 vols. (Stuttgart: Spemann, 1881–1892), which covers the opening sections only; N. Kemp Smith, *A Commentary to Kant's Critique of Pure Reason* (London: Macmillan, 1918; rev. ed., 1923), which is strongly influenced by Vaihinger's "patchwork" theory; H. J. Paton, *Kant's Metaphysic of Experience*, 2 vols. (London: Allen and Unwin, 1936), which covers the first half only and is sharply critical of Kemp Smith; A. C. Ewing, *A Short Commentary on Kant's Critique of Pure Reason* (London: Methuen, 1938). T. D. Weldon, *Kant's Critique of Pure Reason* (Oxford, 1945; 2nd ed., Oxford: Clarendon Press, 1958).

On the theory of knowledge see also H. A. Prichard, *Kant's Theory of Knowledge* (Oxford: Clarendon Press, 1909); A. C. Ewing, *Kant's Treatment of Causality* (London: K. Paul, Trench, Trubner, 1924); W. H. Walsh, *Reason and Experience* (Oxford: Clarendon Press, 1947); Graham Bird, *Kant's Theory of Knowledge* (London: Routledge and Paul, 1962); R. P. Wolff, *Kant's Theory of Mental Activity* (Cambridge, MA: Harvard University Press, 1963).

For commentaries on the *Critique of Practical Reason* and other works on ethics, see L. W. Beck, *A Commentary on Kant's Critique of Practical Reason* (Chicago, 1960), a good source; H. J. Paton, *The Categorical Imperative* (London: Hutchinson, 1947), a detailed commentary on the *Grundlegung*; W. D. Ross, *Kant's Ethical Theory* (Oxford, 1954); A. R. C. Duncan, *Practical Reason and Morality* (Edinburgh, 1957); M. J. Gregor, *Laws of Freedom* (Oxford: Blackwell, 1963), which expounds the *Metaphysic of Morals*; P. A. Schilpp, *Kant's Pre-Critical Ethics* (Evanston, IL: Northwestern University, 1938), A. E. Teale, *Kantian Ethics* (London: Oxford University Press, 1951).

For commentaries on the *Critique of Judgment*, see Konrad Marc-Wogau, *Vier Studien zu Kants Kritik der Urteilskraft* (Uppsala, Sweden, 1938); H. W. Cassirer, *A Commentary on Kant's Critique of Judgment* (London: Methuen, 1938).

Commentaries on other aspects of Kant's thought are also available. On the precritical writings, see Giorgio Tonelli, *Elementi metafisici e metodologici in Kant precritico* (Turin, 1959). On Kant's philosophy of religion, see C. C. J. Webb, *Kant's Philosophy of Religion* (Oxford: Clarendon Press, 1926) and F. E. England, *Kant's Conception of God* (London: Allen and Unwin, 1929). On Kant's philosophy of history, see Klaus Weyand, *Kants Geschichtsphilosophie* (Cologne: Cologne University Press, 1964). On Kant as a scientist, see Erich Adickes, *Kant als Naturforscher*, 2 vols. (Berlin, 1924–1925). On the *Opus Postumum*, see Erich Adickes, *Kants Opus Postumum dargestellt und beurteilt* (Berlin, 1920).

General Studies

S. Körner, *Kant* (Harmondsworth, U.K., 1955) is the best general introduction; see also G. J. Warnock's chapter in *A Critical History of Western Philosophy*, edited by D. J. O'Connor (New York: Free Press of Glencoe, 1964).

Edward Caird, *The Critical Philosophy of Kant*, 2 vols. (Glasgow, 1889), criticizes Kant from the Hegelian position. Martin Heidegger, *Kant und das Problem der Metaphysik* (Bonn: Cohen, 1929) examines Kant as an "ontologist." H. J. de Vleeschauwer, *La déduction transcendentale dans l'oeuvre de Kant*, 3 vols. (Antwerp, 1934–1937), presents an exhaustive survey of Kant's writings on the problem; de Vleeschauwer offers a one-volume summary in *L'évolution de la pensée kantienne* (Paris, 1939), which has been translated into English by A. R. C. Duncan as *The Development of Kantian Thought* (London: Nelson, 1962). Gottfried Martin, *Immanuel Kant, Ontologie und Wissenschaftstheorie* (Cologne, 1951), translated into English by P. G. Lucas as *Kant's Metaphysics and Theory of Science* (Manchester, U.K.: Manchester University Press, 1955), is influenced but not dominated by Heidegger. Richard Kroner, *Kants Weltanschauung* (Tübingen, 1914), translated into English by J. E. Smith as *Kant's Weltanschauung* (Chicago: University of Chicago Press, 1956), stresses Kant's emphasis on the practical. R. Daval, *La métaphysique de*

Kant (Paris: Presses Universitaires de France, 1951), presents “schematism” as the key idea in Kant’s thought.

RECENT TRANSLATIONS

The Cambridge Edition of the Works of Immanuel Kant: Lectures on Metaphysics. Edited and translated by Karl Ameriks and Steve Naragon. Cambridge, U.K.: Cambridge University Press, 1997.

Critique of Pure Reason. Edited and translated by Paul Guyer and Allen W. Wood. Cambridge, U.K.: Cambridge University Press, 1998.

Ethical Philosophy. Translated by James W. Ellington. Indianapolis: Hackett, 1983.

Immanuel Kant: Critique of Judgment. Translated by Werner S. Pluhar. Indianapolis: Hackett, 1987.

Immanuel Kant: Critique of Pure Reason: Unified Edition (with all variants from the 1781 and 1787 editions). Edited and translated by Werner S. Pluhar. Indianapolis: Hackett, 1996.

The Metaphysics of Morals. Edited and translated by Mary Gregor. Cambridge, U.K.: Cambridge University Press, 1996.

Opus Postumum/Immanuel Kant. Edited by Eckart Forster. Translated by Eckhart Forster and Michael Rosen. Cambridge, U.K.: Cambridge University Press, 1993.

Perpetual Peace and Other Essays on Politics, History, and Morals. Translated by Ted Humphrey. Indianapolis: Hackett, 1983.

Prolegomena to Any Future Metaphysics: That Will Be Able to Come Forward as Science with Selections from the Critique of Pure Reason. Rev. ed. Edited and translated by Gary Hatfield. Cambridge, U.K.: Cambridge University Press, 2004.

RECENT SECONDARY LITERATURE

Allison, Henry E. *Kant’s Theory of Freedom*. New York: Cambridge University Press, 1990.

Ameriks, Karl. *Kant and the Fate of Autonomy: Problems in the Appropriation of the Critical Philosophy*. New York: Cambridge University Press, 2000.

Ameriks, Karl. *Kant’s Theory of Mind: An Analysis of the Paralogisms of Pure Reason*. 2nd ed. New York: Oxford University Press, 2000.

Beck, Lewis White. *Early German Philosophy; Kant and His Predecessors*. Cambridge, MA: Belknap Press of Harvard University Press, 1969.

Cohen, Ted, and Paul Guyer, eds. *Essays in Kant’s Aesthetics*. Chicago: University of Chicago Press, 1982.

Di Giovanni, George. *Freedom and Religion in Kant and His Immediate Successors: The Vocation of Humankind, 1774–1800*. New York: Cambridge University Press, 2005.

Findlay, John N. *Kant and the Transcendental Object: A Hermeneutic Study*. New York: Oxford University Press, 1981.

Forster, Eckhart, ed. *Kant’s Transcendental Deductions: The Three Critiques and the Opus Postumum*. Stanford, CA: Stanford University Press, 1989.

Friedman, Michael. *Kant and the Exact Sciences*. Cambridge, MA: Harvard University Press, 1992.

Guyer, Paul, ed. *The Cambridge Companion to Kant*. New York: Cambridge University Press, 1992.

Guyer, Paul. *Kant and the Claims of Knowledge*. New York: Cambridge University Press, 1987.

Guyer, Paul. *Kant and the Claims of Taste*. 2nd ed. New York: Cambridge University Press, 1997.

Guyer, Paul, ed. *Kant and the Experience of Freedom: Essays on Aesthetics and Morality*. New York: Cambridge University Press, 1993.

Guyer, Paul. *Kant on Freedom, Law, and Happiness*. New York: Cambridge University Press, 2000.

Henrich, Dieter. *Aesthetic Judgment and the Moral Image of the World: Studies in Kant*. Stanford, CA: Stanford University Press, 1992.

Keller, Pierre. *Kant and the Demands of Self-Consciousness*. Cambridge, U.K.: Cambridge University Press, 1998.

Kitcher, Patricia. *Kant’s Critique of Pure Reason: Critical Essays*. Lanham: Rowman & Littlefield, 1998.

Kuehn, Manfred. *Kant: A Biography*. New York: Cambridge University Press, 2001.

Longuenesse, Beatrice. *Kant and the Capacity to Judge: Sensibility and Discursivity in the Transcendental Analytic of the Critique of Pure Reason*. Translated by Charles T. Wolfe. Princeton, NJ: Princeton University Press, 1998.

Neiman, Susan. *The Unity of Reason: Rereading Kant*. New York: Oxford University Press, 1994.

Stratton-Lake, Philip. *Kant, Duty, and Moral Worth*. London; New York: Routledge, 2000.

Van Cleve, James. *Problems from Kant*. New York: Oxford University Press, 1999.

Walker, Ralph C. S. *Kant*. New York: Routledge, 1999.

Walker, Ralph C. S. *Kant: The Arguments of the Philosophers*. Boston: Routledge & Kegan Paul, 1978.

Watkins, Eric. *Kant and the Metaphysics of Causality*. New York: Cambridge University Press, 2005.

Wood, Allen W. *Kant*. Malden, MA: Blackwell, 2005.

Wood, Allen W. *Self and Nature in Kant’s Philosophy*. Ithaca, NY: Cornell University Press, 1984.

Yovel, Yirmiahu. *Kant and the Philosophy of History*. Princeton, NJ: Princeton University Press, 1980.

W. H. Walsh (1967)

Bibliography updated by Tamra Frei (2005)

KANT, IMMANUEL
[ADDENDUM]

Immanuel Kant’s philosophy continues to exercise significant influence on philosophical developments and generates an ever-growing body of scholarly literature. Work on Kant has progressed in two main directions. Central doctrines of the *Critique of Pure Reason* have been reconstructed, examined, and revised in the light of current philosophical concerns and standards; and the focus of scholarship has widened to include aspects and parts of Kant’s work hitherto neglected, especially in the areas of ethics, aesthetics, philosophy of history, political philosophy, anthropology, and philosophy of science.