

Immanuel Kant (1724-1804)

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Biography

Immanuel Kant was the paradigmatic philosopher of the European Enlightenment. He eradicated the last traces of the medieval worldview from modern philosophy, joined the key ideas of earlier rationalism and empiricism into a powerful model of the subjective origins of the fundamental principles of both science and morality, and laid the ground for much in the philosophy of the nineteenth and twentieth centuries. Above all, Kant was the philosopher of human autonomy, the view that by the use of our own reason in its broadest sense human beings can discover and live up to the basic principles of knowledge and action without outside assistance, above all without divine support or intervention.

Kant laid the foundations of his theory of knowledge in his monumental *Critique of Pure Reason* (1781). He described the fundamental principle of morality in the *Groundwork of the Metaphysics of Morals* (1785) and the *Critique of Practical Reason* (1788), in the conclusion of which he famously wrote:

Two things fill the mind with ever new and increasing admiration and awe, the more often and steadily reflection is occupied with them: *the starry heaven above me and the moral law within me*. Neither of them need I seek and merely suspect as if shrouded in obscurity or rapture beyond my own horizon; I see them before me and connect them immediately with my existence.

(5: 161–2; see **List of works** for method of citation)

Kant tried to show that both the laws of nature and the laws of morality are grounded in human reason itself. By these two forms of law, however, he is often thought to have defined two incommensurable realms, nature and freedom, the realm of what is and that of what ought to be, the former of which must be limited to leave adequate room for the latter. Kant certainly did devote much space and effort to distinguishing between nature and freedom. But as he also says, in the *Critique of Judgment* (1790), it is equally important ‘to throw a bridge from one territory to the other’. Ultimately, Kant held that both the laws of nature and the laws of free human conduct must be compatible because they are both products of human thought imposed by us on the data of our experience by the exercise of our own powers. This was clearly stated in his last book, *The Conflict of the Faculties* (1798):

Philosophy is not some sort of science of representations, concepts, and ideas, or a science of all sciences, or anything else of this sort; rather, it is a science of the human being, of its representing, thinking, and acting – it should present the human being in all of its components, as it is and ought to be, that is, in accordance with its natural determinations as well as its relationship of morality and freedom. Ancient philosophy adopted an entirely inappropriate standpoint towards the human being in the world, for it made it into a machine in it, which as such had to be entirely dependent on the world or on external things and circumstances; it thus

made the human being into an all but merely passive part of the world. Now the critique of reason has appeared and determined the human being to a thoroughly *active* place in the world. The human being itself is the original creator of all its representations and concepts and ought to be the sole author of all its actions.

(7: 69–70)

Thus, Kant derived the fundamental principles of human thought and action from human sensibility, understanding, and reason, all as sources of our autonomy; he balanced the contributions of these principles against the ineliminable inputs of external sensation and internal inclination beyond our own control; and he strove both to demarcate these principles from each other and yet to integrate them into a single system with human autonomy as both its foundation and its ultimate value and goal. These were the tasks of Kant's three great critiques. In the Critique of Pure Reason, the essential forms of space, time and conceptual thought arise in the nature of human sensibility and understanding and ground the indispensable principles of human experience. He then argued that reason, in the narrow sense manifest in logical inference, plays a key role in systematizing human experience, but that it is a mistake to think that reason offers metaphysical insight into the existence and nature of the human soul, an independent world, and God. In the Critique of Practical Reason and Groundwork, however, he argued that reason as the source of the ideal of systematicity is the source of the fundamental law of morality and our consciousness of our own freedom, which is the source of all value, and that we can postulate the truth of the fundamental dogmas of Christianity, our own immortality and the existence of God, as practical presuppositions of our moral conduct but not as theoretical truths of metaphysics. In the Critique of Judgment, Kant argued that the unanimity of taste and the systematic organization of both individual organisms and nature as a whole could be postulated, again not as metaphysical dogmas but rather as regulative ideals of our aesthetic and scientific pursuits; he then went on to argue that it is through these ideals that we can tie together the realms of nature and freedom, because aesthetic experience offers us a palpable image of our moral freedom, and a scientific conception of the world as a system of interrelated beings makes sense only as an image of the world as the sphere of our own moral efforts. In many of his last writings, from Religion within the Limits of Reason Alone (1793) to his final manuscripts, the Opus postumum, Kant refined and radicalized his view that our religious conceptions can be understood only as analogies for the nature of human reason itself.

The Enlightenment began by attempting to bring even God before the bench of human reason – at the turn of the eighteenth century, both Shaftesbury in Great Britain and Wolff in Germany rejected voluntarism, the theory that God makes eternal truths and moral laws by fiat, and argued instead that we ourselves must know what is right and wrong before we could even recognize supposedly divine commands as divine. Kant completed their argument, concluding that the human being ‘creates the elements of knowledge of the world himself, a priori, from which he, as, at the same time, an inhabitant of the world, constructs a world-vision in the idea’ (Opus postumum, 21: 31).

1. Life and works

Immanuel Kant was born on 22 April 1724 in Königsberg, the capital of East Prussia. He was the child of poor but devout followers of Pietism, a Lutheran revival movement stressing love and good works, simplicity of worship, and individual access to God. Kant's promise was recognized by the Pietist minister Franz Albert Schultz, and he received a free education at the Pietist gymnasium. At sixteen, Kant entered the University of Königsberg, where he studied mathematics, physics, philosophy, theology, and classical Latin literature. His leading teacher was Martin Knutzen (1713–51), who introduced him to both Wolffian philosophy and Newtonian physics, and who inspired some of Kant's own later views and philosophical independence by his advocacy of physical influx against the pre-established harmony of Leibniz and Wolff. Kant left university in 1746, just as the major works of the anti-Wolffian Pietist philosopher Christian August Crusius were appearing. Kant's upbringing would have made him receptive to Crusius, and thus he left university imbued with the Enlightenment aims of Wolffian philosophy but already familiar with technical criticisms of it, especially with Crusius's critique of Wolff's attempt to derive substantive conclusions from a single and merely formal first principle such as the logical principle of non-contradiction (see Wolff, C.).

On leaving university, Kant completed his first work, *Thoughts on the True Estimation of Living Forces* (1746, published 1749), an unsuccessful attempt to mediate between Cartesian and Leibnizian theories of physical forces. Kant then worked as a tutor, serving in households near Königsberg for the next eight years. When he returned to the university in 1755, however, he had several works ready for publication. The first of these was *Universal Natural History and Theory of the Heavens*, a much more successful scientific work than his first in which Kant argued for the nebular hypothesis, or origin of the solar system out of a nebular mass by purely mechanical means. The book was scarcely known during Kant's lifetime, however, so the French astronomer Pierre Laplace (1749–1827) developed his version of the nebular hypothesis (published 1796) independently, and the theory became known as the Kant-Laplace hypothesis only later. In 1755, Kant also published two Latin works, his MA thesis *A brief presentation of some thoughts concerning fire*, and his first philosophical work, *A new elucidation of the first principles of metaphysical cognition*, which earned him the right to offer lectures at the university as a *Privatdozent* paid directly by his students. The following year Kant published *The employment in natural philosophy of metaphysics combined with geometry*, of which sample I contains the physical monadology, which made him eligible for a salaried professorship, although he was not to receive one until 1770. In these years, Kant also published four essays on earthquakes and winds.

Kant began lecturing in the autumn of 1755, and to earn a living lectured more than twenty hours a week. His topics included logic, metaphysics, ethics, and physics, and he subsequently added physical geography, anthropology (Germany's first lectures so entitled), pedagogy, natural right and even the theory of fortifications. Except for one small essay on optimism (1759), he did not publish again until 1762, when another burst of publications began. He then published, all in German: *The False Subtlety of the Four Syllogistic Figures* (1762); *The Only Possible Argument in support of a Demonstration of the Existence of God and Attempt to Introduce the Concept of Negative Magnitudes into Philosophy* (1763); *Observations on the Feeling of the Beautiful and Sublime* and *Inquiry concerning the Distinctness of the Principles of Natural Theology* and

Morality (1764), the latter of which was his second-place entry in a competition won by Moses Mendelssohn; *Dreams of a Spirit-Seer*, elucidated by *Dreams of Metaphysics* (1766); and *Concerning the Ultimate Ground of the Differentiation of Directions in Space* (1768). These publications earned Kant widespread recognition in Germany. During this period, Kant was deeply struck by the work of Jean-Jacques Rousseau, especially by his *Social Contract* and the paean to freedom in *Émile* (both 1762). By this time Kant was also acquainted with the philosophy of David Hume, whose two *Enquiries* and other essays, but not *A Treatise of Human Nature*, were published in German as early as 1755.

Having unsuccessfully applied for several chairs at home while declining offers elsewhere, Kant was finally appointed Professor of Logic and Metaphysics in Königsberg in 1770. This event occasioned his inaugural dissertation, and last Latin work, *On the form and principles of the sensible and intelligible world*. Following correspondence about this work with Johann Heinrich Lambert, Johann Georg Sulzer, and Mendelssohn, however, Kant fell into another decade-long silence, broken only by a few progress reports to his recent student Marcus Herz and a few minor essays. Yet during this 'silent decade', Kant was preparing for his enormous body of subsequent works. Beginning in 1781, with the first edition of the *Critique of Pure Reason*, Kant released a steady torrent of books. These include: *Prolegomena to Any Future Metaphysics* that shall come forth as *Scientific*, an attempted popularization of the first *Critique*, in 1783; two essays, 'Idea for a Universal History from a Cosmopolitan Point of View' and 'What is Enlightenment?' in 1784; *The Groundwork of the Metaphysics of Morals* and four other essays in 1785; *The Metaphysical Foundations of Natural Science*, essays on 'The Conjectural Beginnings of Human History' and 'What Does it mean to Orient Oneself in Thinking?' and two other pieces in 1786; a substantially revised second edition of the *Critique of Pure Reason* in 1787; in 1788, the *Critique of Practical Reason* and an essay on 'The Use of Teleological Principles in Philosophy'; the *Critique of the Power of Judgment* as well as an important polemic 'On a discovery according to which any new *Critique of Pure Reason* is rendered dispensable by an older one' in 1790; the political essay 'On the Common Saying: "That may be right in theory but does not work in practice"' and the controversial *Religion within the Limits of Reason Alone* in 1793; *Towards Perpetual Peace* in 1795; the *Metaphysics of Morals*, comprising the 'Doctrine of Right' and the 'Doctrine of Virtue', in 1797, as well as the essay 'On a putative Right to Lie from Love of Mankind'; and his last major works in 1798, a handbook on *Anthropology from a Pragmatic Point of View* and his defence of the intellectual freedom of the philosophical faculty from religious and legal censorship in the restrictive atmosphere of Prussia after Frederick the Great, *The Conflict of the Faculties*. (With Kant's approval, some of his other lecture courses were also published, including *Logic* in 1800 and *Physical Geography and Pedagogy* in 1804.) Kant retired from lecturing in 1797, at the age of seventy-three, and devoted his remaining years to a work which was to be entitled 'The Transition from the Metaphysical First Principles of Natural Science to Physics', but which was far from complete when Kant ceased working on it in 1803. (Selections from his drafts were first published in 1882–4, and they were first fully published as *Opus postumum* in 1936–8). After a lifetime of hypochondria without any serious illness, Kant gradually lost his eyesight and strength and died 12 February 1804.

2. Kant's work to 1770

In his first work, *Living Forces*, Kant tried to mediate a dispute about the measurement of forces between Descartes and Leibniz by employing a distinction between 'living' or intrinsic forces and 'dead' or impressed ones to argue that Leibniz's measure was correct for the former and Descartes's for the latter. This distinction could not be maintained in a uniform mechanics, and the young Kant remained ignorant of the mathematically correct solution, which had been published by D'Alembert in 1743. Nevertheless, the work already showed Kant's lifelong preoccupation with the relation between scientific laws and metaphysical foundations. It also included the observation that the three-dimensionality of physical space is a product of actually existing forces, not the only geometry that is logically possible (10, 1: 24).

Kant's works of 1755 reveal more of his originality and his enduring themes. *Universal Natural History*, deriving the present state of the planets from postulated initial conditions by reiterated applications of the laws of Newtonian mechanics, manifests not only Kant's commitment to those laws, for which he was subsequently to seek philosophical foundations, but also his commitment to thoroughly naturalistic explanations in science, in which God can be the initial source of natural laws but never intervenes within the sequence of physical causes. *New Elucidation*, while not yet a methodological break from the rationalism of Leibniz, Wolff and Alexander Gottlieb Baumgarten (1714–62) (whose textbooks on metaphysics, ethics and aesthetics Kant used for decades), breaks with them on several substantive issues. Kant begins by rejecting Wolff's supposition that the principle of non-contradiction is a single yet sufficient principle of truth, arguing instead that there must be separate first principles of positive and negative truths; following Crusius, Kant was always to remain suspicious of programmes to reduce all truth to a single principle. Kant then criticized previous proofs of the Principle of Sufficient Reason, although his own proof was also a failure. More importantly, he argued that the principle of sufficient reason does not entail the theory of pre-established harmony drawn from it by the Leibnizians: the need for a sufficient reason for any change in a substance proves the necessity rather than impossibility of real interaction among a plurality of substances. Transposed into an epistemological key, this argument was to become central in the first Critique. The work is also noteworthy for the first suggestion of Kant's critique of Descartes's ontological argument for the existence of God (see God, arguments for the existence of), and for a first treatment of the problem of free will as well. Here Kant defended against the indeterminism of Crusius the determinism of Leibniz (see Determinism and indeterminism), although he was later to criticize this as the 'freedom of a turnspit' (5: 97). Kant's later theory of free will attempts to reconcile Crusius and Leibniz.

In the *Physical Monadology* (1756), Kant tries to reconcile the infinite divisibility of space in geometry with the need for simple, indivisible substances in metaphysics - the subsequent theme of the first Critique's second Antinomy (see §8). Kant does not yet appeal to a metaphysical distinction between appearance and reality, but instead argues that because bodies in space are not ultimately composed of particles but of attractive and repulsive forces (1: 484), they may be physically indivisible even when space itself is still mathematically divisible.

Kant's works of the 1760s introduce some of the methodological as well as substantive assumptions of his mature philosophy. The Only Possible Argument details Kant's attack upon the ontological argument, the paradigmatic rationalistic argument because of its presupposition that an existence-statement can be derived from the analysis of a concept. Kant argues that 'existence is not a predicate or a determination of a thing' (2: 72), but rather the 'absolute positing of a thing' (2: 73); that is, the existence of its subject is *presupposed* by the assertion of any proposition, not inferred from the concepts employed in it. Kant also maintains that the other rationalist argument for theism, the argument from the contingency of the world to a necessary cause of it, as well as the empiricists' favourite, the argument from design, fail to prove the existence of a necessary being with all the attributes of God. However, Kant still holds that the existence of God can be proved as a condition of the *possibility* of any reality. Finally, Kant further develops his argument that scientific explanation cannot allow divine intervention in the sequence of events, and that God must be seen only as the original ground of the laws of nature.

Negative Magnitudes announces a fundamental methodological break from rationalism. Inspired by both Crusius and Hume, Kant argues that *real opposition* (as when two velocities in opposite directions or a pleasure and a pain cancel each other out) is fundamentally different from *logical contradiction* (as between a proposition and its negation); he then applies this to causation, arguing that the *real ground* of a state does not entail its existence logically, but is connected to it in an entirely different way. This precludes any proof of the principle of sufficient reason from merely logical considerations alone (2: 202).

The Inquiry into the Distinctness of the Principles of Natural Theology and Ethics continues Kant's attack upon rationalism. The question for this essay was whether metaphysics could use the same method as mathematics, which Kant firmly denied: mathematics, he argues, can prove its theorems by constructing its objects from their very definitions, but metaphysics can only use analysis to tease out the definitions of its objects from given concepts, and cannot construct the objects themselves (2: 276). The claim that the method of philosophy is analysis may sound like rationalism; however, Kant insists that in both metaphysics and ethics philosophy needs *material* as well as *formal* first principles, again precluding any purely logical derivation of philosophical theses. Kant does not yet have a clear account of material first principles - he is sympathetic to Crusius's account of indemonstrable cognitions and to the suggestion of the moral sense theorists Shaftesbury and Hutcheson that the first principles of ethics arise from *feeling*, but not satisfied with either. Without yet naming it, Kant also introduces his distinction between hypothetical and categorical imperatives (2: 298).

Still in 1764, however, the book Observations on the Feeling of the Beautiful and Sublime already announces Kant's departure from moral sense theory and introduces the most fundamental theme of Kant's ethics. Virtue cannot depend merely on benevolent inclination, but only on general principles, which in turn express 'a feeling that lives in every human breast and extends itself much further than over the particular grounds of compassion and complaisance...the *feeling of the beauty and dignity of human nature*' (2: 217). In notes in his own copy of this work, Kant went even further, and first clearly stated his enduring belief that

‘freedom properly understood (moral, not metaphysical) is the supreme principle of all virtue as well as of all happiness’ (20: 31).

In *Dreams of a Spirit-Seer*, Kant ridicules traditional metaphysics by comparing it to the fantasies of the Swedish theosophist Emmanuel Swedenborg; Kant argues instead that metaphysical concepts cannot be used without empirical verification, and that therefore metaphysics can at most be ‘a science of the *boundaries of human reason*’ (2: 368). The work also contains further thoughts on morality, suggesting that the two forces of egoism and altruism define the structure of the moral world in much the way that the forces of repulsion and attraction define that of the physical world (2: 334). But Kant does not yet argue that postulates of practical reason may be a valid alternative to the delusions of metaphysics.

Finally, the brief essay on *Directions in Space* argues that incongruent counterparts, such as right- and left-handed gloves, which have identical descriptions but cannot occupy the same space, prove that the qualities of objects are not determined by concepts alone but also by their relation to absolute space. Kant did not yet raise metaphysical questions about the nature of absolute space or epistemological questions about how we could know it, but this essay can be seen as introducing the distinction between intuitions and concepts which was to be a cornerstone of Kant’s subsequent thought (see §5).

3. The Inaugural Dissertation of 1770 and the problem of metaphysics

Kant’s Inaugural Dissertation of 1770 consolidated many of the gains he had made during the 1760s and introduced a fundamentally new theory about the metaphysics and epistemology of space and time which was to remain a constant in his subsequent thought, but also left open crucial questions about the source of our most fundamental concepts. Although Kant hoped to proceed quickly to his projects in the philosophy of science and in moral and political theory, it was to take him all of the next decade to answer these preliminary questions.

Taking up where *Directions in Space* left off, Kant begins the dissertation with the distinction between intuitions (singular and immediate representations of objects) and concepts (general and abstract representations of them) as distinct but equally important elements in the ‘*two-fold genesis* of the concept [of a world] out of the nature of the mind’. The intellect (Kant does not yet divide this into understanding and reason) provides abstract concepts, under which instances are subordinated; the ‘sensitive faculty of cognition’ provides ‘distinct intuition[s]’ which represent concepts ‘in the concrete’ and within which different parts may be coordinated (2: 387). Kant goes on to claim that ‘whatever in cognition is sensitive is dependent upon the special character of the subject’, that is, the knower, so that sensation, through intuitions, represents things ‘*as they appear*’ (*phenomena*), while the intellect, through concepts, represents things ‘*as they are*’ (*noumena*) (2: 392). Kant then presents the ‘principles of the form of the sensible world’: time and space are the forms of the intuition of all objects (time is the form for all representation of objects, inner or outer, while space is the form for the representation of all outer objects) which do not arise from but are presupposed by all particular perceptions; they are singular rather than general, that is, particular times or spaces are parts of a single whole rather than instances of a general kind; and they must each be ‘the subjective condition which is

necessary, in virtue of the nature of the human mind, for the co-ordinating of all things in accordance with a fixed law', or a '*pure intuition*' rather than '*something objective and real*' (2: 398–400, 402–4). Only thus can we explain our knowledge of both these general claims about space and time as well as particular claims about their structure, such as the theorems of geometry (2: 404). In other words, we can explain the certainty of knowledge about space and time only by supposing that it is knowledge of the structure of our own minds, and thus of how objects appear to us, rather than knowledge about how things are in themselves. This necessarily subjective origin and significance of certainty, which Kant was later to name '*transcendental idealism*', is the foundation for the active role of the human mind in knowledge of the world.

Kant has little to say about the source of intellectual concepts, but continues to believe that they give us knowledge of how things are independently of the structure of our own minds. His main claim, still Leibnizian, is that in order to conceive of things as genuinely distinct substances, yet as collectively interacting in a single world, we must conceive of them as contingent beings all depending upon a single necessary being (2: 407–8). Kant then argues that metaphysical error arises when the principles of sensitive and intellectual cognition are confused, but more particularly when 'the principles which are native to sensitive cognition transgress their limits, and affect what belongs to the intellect' (2: 411) - the opposite of what he will argue later when he claims that metaphysical illusion arises from thinking that human reason can reach beyond the limits of the senses (see §8). Finally, Kant introduces as mere '*principles of convenience*' the principles of universal causation and of the conservation of substance as well as a more general '*canon*' of rationality, that '*principles are not to be multiplied beyond what is absolutely necessary*' (30, 2: 418). A better account of these principles will occupy much of Kant's later work (see §7).

Early readers of Kant's dissertation objected to the merely subjective significance of space and especially time, but Kant was never to surrender this theory. What came to bother him instead was his inadequate treatment of metaphysical concepts such as 'possibility, existence, necessity, substance, cause, etc.' (2: 395). In a famous letter of 21 February 1772 to Marcus Herz (10: 129–35), Kant claimed that the 'whole secret' of metaphysics is to explain how intellectual concepts which neither literally produce their objects (as God's concepts might) nor are merely produced by them (as empirical concepts are) nevertheless necessarily apply to them. But Kant did not yet know how to answer this question.

His first progress on this issue is found in fragments from 1774–5 (Reflections 4674–84, 17: 643–73). Two key ideas are found here. First, Kant finally formulates the problem of metaphysics as that of '*synthetic*' rather than '*analytic*' propositions: how can we know the truth of propositions in which the predicates clearly go beyond anything contained in their subject-concepts but yet enjoy the same universality and necessity as propositions which are mere tautologies, whose predicates are contained in their subject concepts (17: 643–4, 653–5)? Second, Kant here first states that the answer to this question lies in recognizing that certain fundamental concepts, not just the intuitions of space and time, are '*conditions of the concrete representation [of objects] in the subject*' (17: 644) or of the unity of '*experience in general*' (17: 658). Kant's idea is that in order to ground any determinate ordering of either subjective or

objective states in temporal succession, we must use the concepts of substance, causation, and interaction, and that these must therefore be categories which originate in the understanding just as the pure forms of space and time originate in the sensibility.

4. The project of the Critique of Pure Reason

In spite of this progress in 1775, six more years passed before the Critique of Pure Reason finally appeared in 1781. In an unmistakable reference to Locke's Essay concerning Human Understanding (see Locke, J.), Kant began the work with the promise to submit reason to a critique in order to obtain a 'decision about the possibility or impossibility of metaphysics in general and the determination of its sources, its scope and its boundaries' (A xii). The 'chief question' would be 'what and how much can understanding and reason know apart from all *experience*?' (A xvii). Answering this question would require discovering the fundamental principles that human understanding contributes to human experience and exposing the metaphysical illusions that arise when human reason tries to extend those principles beyond the limits of human experience.

But Kant's project was even more ambitious than that, as he was to make clear in the revised edition of the Critique six years later. There, in addition to more explicitly describing his strategy for explaining the certainty of the first principles of human knowledge as one of supposing that 'objects must conform to our knowledge' rather than vice versa (B xvi), Kant described his whole project in broader terms: 'I therefore had to deny *knowledge* in order to make room for *faith*' (B xxx). Kant did not mean to return to the sceptical fideism of earlier thinkers such as Pierre Bayle, who simply substituted religious belief for theoretical ignorance. Instead, Kant argues first that the human mind supplies necessary principles of sensibility and understanding, or perception and conception; next, that if human reason tries to extend the fundamental concepts and principles of thought beyond the limits of perception for purposes of theoretical knowledge, it yields only illusion; but finally that there is another use of reason, a practical use in which it constructs universal laws and ideals of human conduct and postulates the fulfilment of the conditions necessary to make such conduct rational, including the freedom of the will, the existence of God, and the immortality of the soul. This use of reason does not challenge the limits of theoretical reason but is legitimate and necessary in its own right.

In the Introduction, Kant defines his first task as that of explaining the possibility of synthetic a priori judgments. This notion is grounded in two distinctions. First, there is a logical distinction between analytic and synthetic propositions: in analytic propositions, the predicate-concept is implicitly or explicitly contained in the subject-concept (for example, 'A bachelor is unmarried' or 'An unmarried male is male'), so the proposition conveys no new information and is true by identity alone; in synthetic propositions, the content of the predicate is clearly not contained in the subject-concept (for example, 'Bachelors are unhappy') (A 6–7/B 10–11), so the proposition conveys new information and cannot be true by identity alone. Second, there is an epistemological distinction between propositions which are a posteriori, or can be known to be true only on the basis of antecedent experience and observation, and those which are a priori, or known to be true independently of experience, or at least any particular experience (A 1–2/B 1–3). Kant maintains that anything which is known to be universally and necessarily true must be

known a priori, because, following Hume, he assumes that experience only tells us how what has actually been observed is, not how everything must be (A 1–2/B 3–4). Combining these two distinctions yields four possible kinds of judgments. Two of these obviously obtain: analytic a priori judgments, in which we know a proposition to be true by analysis of its subject-concept and without observation; and synthetic a posteriori judgments, in which we know factual statements going beyond subject-concepts to be true through observation. Equally clearly, a third possibility is excluded: there are no analytic a posteriori judgments, for we need not go to experience to discover what we can know from analysis alone. What is controversial is whether there are synthetic a priori judgments, propositions that are universally and necessarily true, and thus must go beyond experience, but which cannot be reached by the mere analysis of concepts. Both rationalists and empiricists had denied such a possibility, but for Kant only it could ground an informative science of metaphysics at all.

Kant's notion of synthetic a priori judgment raises various problems. Critics have long complained that Kant provides no unequivocal criterion for deciding when a predicate is contained in a subject, and twentieth-century philosophers such as W. Quine argued that there are no analytic truths because not even definitions can be held entirely immune from revision in the face of empirical facts. Lewis White Beck showed, however, that this did not affect Kant's project, for Kant himself, in a polemic with the Wolffian Johann August Eberhard, argued that analysis always presupposes synthesis, and that the adoption of any definition itself has to be justified, either by construction or observation; so even conceding that all judgments are ultimately synthetic, Kant's question remains whether any of these are synthetic a priori.

Another issue is just what synthetic a priori judgments Kant intended to justify. In the 'Prolegomena' and the 'Introduction' to the second edition of the Critique, Kant suggests that it is obvious that synthetic a priori judgments exist in what he calls 'pure mathematics' and 'pure physics', and that his project is to show that what explains these also explains other such propositions, in metaphysics. Elsewhere, however, Kant suggests that metaphysics must show that there are any synthetic a priori judgments, even in mathematics and physics. While much of the content of the Critique suggests that Kant's considered view must be the latter, he is far from clear about this.

5. Space, time and transcendental idealism

The first part of the Critique, the 'Transcendental Aesthetic', has two objectives: to show that we have synthetic a priori knowledge of the spatial and temporal forms of outer and inner experience, grounded in our own pure intuitions of space and time; and to argue that transcendental idealism, the theory that spatiality and temporality are only forms in which objects appear to us and not properties of objects as they are in themselves, is the necessary condition for this a priori knowledge of space and time (see Space; Time).

Much of the section refines arguments from the inaugural dissertation of 1770. First, in what the second edition labels the 'Metaphysical Exposition', Kant argues that space and time are both *pure forms of intuition* and *pure intuitions*. They are *pure forms* of intuition because they must precede and structure all experience of individual outer objects and inner states; Kant tries

to prove this by arguing that our conceptions of space and time cannot be derived from experience of objects, because any such experience presupposes the individuation of objects in space and/or time, and that although we can represent space or time as devoid of objects, we cannot represent any objects without representing space and/or time (A 23–4/B 38–9; A 30–1/B 46). They are pure *intuitions* because they represent single individuals rather than classes of things; Kant tries to prove this by arguing that particular spaces and times are always represented by introducing boundaries into a single, unlimited space or time, rather than the latter being composed out of the former as parts, and that space and time do not have an indefinite number of instances, like general concepts, but an infinite number of possible parts (A 24/B 39–40; A 31–2/B 47–8).

Next, in the ‘Transcendental Exposition’, Kant argues that we must have an a priori intuition of space because ‘geometry is a science which determines the properties of space synthetically and yet a priori’ (B 40). That is, the propositions of geometry describe objects in space, go beyond the mere concepts of any of the objects involved – thus geometric theorems cannot be proved without actually constructing the figures – and yet are known a priori. (Kant offers an analogous but less plausible argument about time, where the propositions he adduces seem analytic (B 48).) Both our a priori knowledge about space and time in general and our synthetic a priori knowledge of geometrical propositions in particular can be explained only by supposing that space and time are of subjective origin, and thus knowable independently of the experience of particular objects.

Finally, Kant holds that these results prove transcendental idealism, or that space and time represent properties of things as they appear to us but not properties or relations of things as they are in themselves, let alone real entities like Newtonian absolute space; thus his position of 1768 is now revised to mean that space is epistemologically but not ontologically absolute (A 26/B 42; A 32–3/B 49–50; A 39–40/B 56–7). Kant’s argument is that ‘determinations’ which belong to things independently of us ‘cannot be intuited prior to the things to which they belong’, and so could not be intuited a priori, while space and time and their properties *are* intuited a priori. Since they therefore cannot be properties of things in themselves, there is no alternative but that space and time are merely the forms in which objects appear to us.

Much in Kant’s theory has been questioned by later philosophy of mathematics. Kant’s claim that geometrical theorems are synthetic because they can only be proven by construction has been rendered doubtful by more complete axiomatizations of mathematics than Kant knew, and his claim that such propositions describe objects in physical space yet are known a priori has been questioned on the basis of the distinction between purely formal systems and their physical realization.

Philosophical debate, however, has centred on Kant’s inference of transcendental idealism from his philosophy of mathematics. One issue is the very meaning of Kant’s distinction between appearances and things in themselves. Gerold Prauss and Henry Allison have ascribed to Kant a distinction between two kinds of *concepts* of objects, one including reference to the necessary conditions for the perception of those objects and the other merely leaving them out, with no ontological consequences. Another view holds that Kant does not merely assert that the concepts

of things in themselves lack reference to spatial and temporal properties, but actually denies that things in themselves are spatial and temporal, and therefore maintains that spatial and temporal properties are properties only of our own representations of things. Kant makes statements that can support each of these interpretations; but proponents of the second view, including the present author, have argued that it is entailed by both Kant's argument for and his use of his distinction, the latter especially in his theory of free will (see §8).

The debate about Kant's argument for transcendental idealism, already begun in the nineteenth century, concerns whether Kant has omitted a 'neglected alternative' in assuming that space and time must be *either* properties of things as they are in themselves or of representations, but not both, namely that we might have a priori knowledge of space and time because we have an a priori subjective representation of them while they are also objective properties of things. Some argue that there is no neglected alternative, because although the *concepts* of appearances and things in themselves are necessarily different, Kant postulates only one set of *objects*. This author has argued that the 'neglected alternative' is a genuine possibility that Kant intends to exclude by arguing from his premise that propositions about space and time are *necessarily* true: if those propositions were true *both* of our own representations and of their ontologically distinct objects, they might be necessarily true of the former but only contingently true of the latter, and thus not necessarily true throughout their domain (A 47–8/B 65–6). In this case, however, Kant's transcendental idealism depends upon a dubious claim about necessary truth.

6. Pure concepts of the understanding

The 'Transcendental Analytic' of the Critique breaks new ground, arguing that the most fundamental categories of thought as well as the forms of perception are themselves human products which are necessary conditions of the possibility of experience. Like the 'Transcendental Aesthetic', its first section, the 'Analytic of Concepts', is also divided into a 'metaphysical' and a 'transcendental deduction' (B 159).

In the metaphysical deduction Kant intends to provide a principle to identify the most fundamental concepts of thought, the categories of the understanding, and then to show that our knowledge of any object always involves these categories. The key to his argument is the claim that knowledge is always expressed in a *judgment* (A 68–9/B 93–4); he then argues that there are certain characteristic forms or 'logical functions' of judgment, and that in order for our judgments to be about objects, these logical functions of judgments must also provide the basic concepts for conceiving of objects. Thus Kant first produces a table of the logical functions of judgment, based on the premise that every judgment has a *quantity*, *quality*, *relation* and *modality*, and then produces a table of categories, under the same four headings, showing how objects of such judgments must be conceived. Thus, judgments may be universal, particular, or singular, and then their objects must be unities, pluralities, or totalities; judgments may be affirmative, negative, or infinite, and objects manifest either reality, negation, or limitation; judgments may relate a predicate to a subject (categorical judgment), or else relate one predicate-subject judgment to another as antecedent and consequent (hypothetical judgment) or as alternatives (disjunctive judgment), and objects may correspondingly manifest the relations of inherence and subsistence, causality and dependence, or community or

reciprocity; finally, judgments may be problematic, assertoric, or apodeictic, thus their objects either possible or impossible, existent or non-existent, or necessary or contingent (A 70/B 95; A 80/B 106).

Kant's scheme is intuitively plausible, and he makes use of it throughout his works. But philosophers as diverse as Hegel and Quine have questioned its coherence and necessity. What is troubling for Kant's own project, however, is that he does not show why we must use all the logical functions of judgment, hence why we must use all the categories. In particular, he does not show why we must make not only categorical but also hypothetical and disjunctive judgments. Without such a premise, Kant's arguments for causation, against Hume, and for interaction, against Leibniz, are not advanced. It is unclear whether Kant recognized this defect in the argument of the metaphysical deduction. But he addressed precisely this problem in the subsequent chapter on the 'System of all Principles of Pure Understanding', which does attempt to demonstrate the necessity of the use of each of the categories. This chapter will be discussed in the following section

Kant's aim and his strategy in the transcendental deduction remain debatable, despite his complete revision of this section in the second edition of the Critique. Some view the transcendental deduction as a 'regressive argument' aimed at empiricism, meant to show only that *if* we make judgments about objects then we must use a priori concepts. But if Kant already established this in the metaphysical deduction, the transcendental deduction becomes redundant. It seems more natural to see the latter as intended to fix the *scope* of our use of the categories by showing that we can have *no* experience which is immune from conceptualization under them, thus that the categories enjoy universal objective validity. Because these categories originate in the logical structure of our own thought, Kant holds, we must conceive of ourselves as the autonomous lawgivers for all of nature (A 127–8, B 164).

There are many differences between the two versions of the transcendental deduction, but both employ the fundamental idea that we cannot have some form of *self*-consciousness, or 'transcendental apperception', without also having consciousness of *objects*, which in turn requires the application of the categories; then, since Kant holds that we can have no experience at all without being able to be conscious that we have it, he can argue that we can have no experience to which we cannot apply the categories. The success of this strategy is unclear. The first-edition deduction begins with a debatable analysis of the necessary conditions for knowledge of an object, which slides from the conditional necessity that we must use rules if we are to have knowledge of objects to an absolute necessity that we must have knowledge of objects, and then introduces transcendental apperception as the 'transcendental ground' of the latter necessity (A 106). In the second edition, Kant begins directly with the claim that self-consciousness of our experience is always possible, which has not met with much resistance, but then makes the inference to the necessity of knowledge of objects conceived of through the categories by equating transcendental apperception with a notion of 'objective apperception' that is equivalent to judgment about objects (B 139–40). This makes the connection between self-consciousness and the categorical judgment of objects true by definition, and undermines Kant's claim to provide a synthetic rather than analytic proof of the objective validity of the categories.

In spite of these problems, the idea that self-consciousness depends upon knowledge of objects and thus on the use of the categories to conceive of objects has remained attractive; and some of the most interesting recent work on Kant has been reconstructions of the transcendental deduction, such as those by Peter Strawson, Jonathan Bennett and Dieter Henrich. Others have concluded that Kant only establishes a convincing connection between self-consciousness and categorial thought of objects once he shows that making judgments about objects, using the categories, is a necessary condition for making judgments about the *temporal* order of our experience. This is Kant's project in the next section of the Critique.

7. The principles of judgment and the foundations of science

Kant proceeds from the categories to the foundations of natural science in several steps. First, he argues that the categories, which thus far have merely logical content, must be made 'homogeneous' with experience, or be recast in forms we can actually experience. Since time, as the form of both outer and inner sense, is the most general feature of our sensible experience, Kant argues that the categories must be made homogeneous with experience by being associated with certain determinate temporal relations or 'schemata' (A 138–9/B 177–8). For example, the pure category of ground and consequence, thus far understood only abstractly as the relation of the states of objects that makes them fit to be objects of hypothetical ('if-then') judgments, is associated with the schema of rule-governed temporal succession, something closer to what we can actually experience. Focused as he is on the universality of time, Kant seems to de-emphasize spatiality unduly in the 'Schematism': for example, it would seem more natural to say that the schema of causality is the rule-governed temporal succession of states of objects within an appropriate degree of spatial contiguity.

Next, in the 'System of all Principles of Pure Understanding', Kant argues for the necessity of certain fundamental principles of all natural laws. Following the division of the categories, this chapter is divided into four parts. In the first, the 'Axioms of Intuition', Kant argues that 'All intuitions are extensive magnitudes' (B 202), and thus that all objects of experience can be represented as wholes consisting of homogeneous parts, and thus can be represented mathematically as sums of such units. In the second, the 'Anticipations of Perception', Kant proves that 'In all appearances, the real that is an object of sensation has intensive magnitude, that is, a degree' (B 207). Here he argues that sensations can be assigned a numerical measure that does not represent a sum of separable parts, but rather a position on a scale of intensity, and then infers that because our sensations manifest varying degrees of intensity we must also conceive of the qualities of objects that they represent as manifesting a reality that varies in degree. The first of these two 'mathematical' principles (A 162/B 201) does not add to results already established in the Transcendental Aesthetic, however, and the second depends upon an empirical assumption.

In the next section, the 'Analogies of Experience', dealing with the first of two kinds of 'dynamical' principles, Kant offers some of the most compelling and important arguments in the Critique. In the First Analogy, Kant argues that we can determine that there has been a change in the objects of our perception, not merely a change in our perceptions themselves, only by conceiving of what we perceive as successive states of enduring substances (see Substance).

Because we can never perceive the origination or cessation of substances themselves, but only changes in their states, Kant argues, the sum-total of substances in nature is permanent (B 224). In the Second Analogy, Kant argues for a further condition for making judgments about change in objects: because even when we undergo a sequence of perceptions, there is nothing in their immediate sensory content to tell us that there is an objective change, let alone what particular sequence of change there is, we can only distinguish a '*subjective sequence* of apprehension from the *objective sequence* of appearances' (A 193/B 238) by judging that a particular sequence of objective states of affairs, *a fortiori* the sequence of our perceptions of those states, has been determined in accordance with a rule that states of the second type can only follow states of the first type - precisely what we mean by a causal law. Finally, the Third Analogy argues that because we always perceive states of objects successively, we cannot immediately perceive states of two or more objects to be simultaneous, and can therefore only judge that two such states simultaneously exist in different regions of space if they are governed by laws of interaction dictating that neither state can exist without the other (A 213/B 260).

Kant's arguments have been assailed on the basis of relativity theory and quantum mechanics. But since they are epistemological arguments that our ability to make temporal judgments about the succession or simultaneity of states of affairs depends upon our judgments about substance, causation and interaction, it is not clear that they are open to objection from this quarter. If relativity tells us that the succession or simultaneity of states of affairs may depend upon the choice of inertial frame, then Kant's theory is not refuted, but just predicts that in that case our own judgments about temporal sequence must also vary. If quantum mechanics tells us that causal laws are merely probabilistic, then Kant's theory is again not refuted but just predicts that in that case our temporal judgments cannot be entirely determinate.

In the last section of the 'Principles', Kant assigns empirical criteria to the modal concepts of possibility, actuality and necessity. The main interest of this section lies in the 'Refutation of Idealism' which Kant inserted into it in the second edition. Here Kant argues that temporal judgments about one's own states require reference to objects which endure in a way that mental representations themselves do not, and therefore that consciousness of oneself also implies consciousness of objects external to oneself (B 275–6; also B xxxix-xli). There has been controversy not only about the precise steps of the proof, but also about whether it is supposed to prove that we have knowledge of the existence of things ontologically distinct from our own representations, which seems to undercut Kant's transcendental idealism. However, the argument of 1787 was actually just the first of many drafts Kant wrote (Reflections 6311–16, 18: 606–23), and these suggest that he did mean to prove that we know of the existence of objects ontologically distinct from ourselves and our states, although we cannot attribute to them as they are in themselves the very spatiality by means of which we represent this ontological distinctness.

Finally, in the Metaphysical Foundations of Natural Science, published between the two editions of the Critique (1786), Kant carried his a priori investigation of the laws of nature one step further by introducing not only the empirical notion of change itself but also the further empirical concept of matter as the movable in space (4: 480). With this one empirical addition, he claims,

he can deduce the laws of phoronomy, the vectorial composition of motions in space; of dynamics, the attractive and repulsive forces by which space is actually filled; of mechanics, the communication of moving forces; and of phenomenology, which in Kant's sense - derived from J.H. Lambert, and very different from its later senses in Hegel or Husserl - means the laws for distinguishing apparent from real motions. This work is not an essay in empirical physics but rather an exploration of the conceptual framework into which the empirical results of physics must be fitted.

8. The illusions of theoretical reason

In the 'Transcendental Dialectic', Kant argues that the doctrines of traditional metaphysics are illusions arising from the attempt to use the categories of understanding to gain information about objects that are inaccessible to our forms of intuition. What makes such illusions inevitable is the tendency of human reason to seek the unconditioned, that is, to carry a chain of ideas to its assumed completion even when that lies beyond the bounds of sense. For example, understanding may tell us that wholes consist of parts, and sensibility may allow us to find a smaller part for any given whole; but only reason suggests that decomposition into parts must come to an end in something absolutely simple, something we could never perceive by sense. In its practical use, reason may produce ideas of the unconditioned, such as the idea of the universal acceptability of maxims of action, which do not tell us anything misleading about the world because they do not tell us anything about how the world is at all, only how it ought to be; but in its theoretical use reason appears to tell us things about the world that cannot be confirmed by our senses or are even incompatible with the forms of our perception.

This diagnosis of metaphysical error makes good sense of Kant's procedure in the 'Antinomy of Pure Reason', where he presents a series of conflicts between the form and limits of sensibility as structured by the understanding, on the one hand, and the pretensions of unconditioned reason, on the other. In early sketches of the Dialectic (Reflections 4756–60, 1775–7, 17: 698–713) Kant's diagnoses of all the illusions of traditional metaphysics took this form. In the Critique, however, Kant singled out some metaphysical beliefs about the self and about God for separate treatment in the 'Paralogisms of Pure Reason' and 'Ideal of Pure Reason'. These sections offer powerful criticisms of traditional metaphysical doctrines, but require a more complex explanation of metaphysical illusion than the single idea of reason's search for the unconditioned.

In the 'Paralogisms', Kant diagnoses the doctrines of 'rational psychology' that the soul is a *substance* which is *simple* and therefore incorruptible, *numerically identical* throughout the experience of any person, and necessarily *distinct* from any external object (this is how he reformulates the Fourth Paralogism in the second edition (B 409)), as a tissue of ungrounded assertions mistaking the logical properties of the *representation* 'I' or the *concept* of the self for the properties of whatever it is in us that actually thinks (A 355/B 409). Kant's criticism of the traditional metaphysics of the soul is convincing, but does not depend on reason's postulation of the unconditioned; instead, Kant's demonstration that these doctrines arise from confusion between properties of a representation and what is represented showed that they were not inevitable illusions by destroying their credibility once and for all.

The four metaphysical disputes that Kant presents in the 'Antinomy of Pure Reason' are often read as straightforward conflicts between reason and sensibility; but Kant characterizes them as disputes engendered by pure reason itself, so a more complex reading is required. In fact, both sides in each dispute - what Kant calls the 'thesis' and 'antithesis' - reflect different forms of reason's demand for something unconditioned, and what conflicts with the limits of sensibility is the assumption that these demands give rise to a genuine dispute at all. Kant again uses the contrast between 'mathematical' and 'dynamical' to divide the four disputes into two groups, and resolves the disputes in two different ways.

In the first antinomy the dispute is between the thesis that the world has a beginning in time and a limit in space and the antithesis that it is infinite in temporal duration and spatial extension (A 426–7/B 454–5). In the second antinomy, the dispute is between the thesis that substances in the world are ultimately composed of simple parts and the antithesis that nothing simple is ever to be found in the world, thus that everything is infinitely divisible (A 434–5/B 462–3). In each case, thesis and antithesis reflect reason's search for the unconditioned, but in two different forms: in the thesis, reason postulates an ultimate *termination* of a series, and in the antithesis, an unconditional *extension* of the series. In these 'mathematical antinomies', however, Kant argues that *neither* side is true, because reason is attempting to apply its demand for something unconditioned to space and time, which are always *indefinite* in extent because they are finite yet always extendible products of our own cognitive activity (A 504–5/B 532–3).

In the two 'dynamical antinomies' Kant's solution is different. In the third antinomy, the thesis is that 'causality in accordance with laws of nature' is not the only kind of causality, but there must also be a 'causality of freedom' underlying the whole series of natural causes and effects, while the antithesis is that everything in nature takes place in accord with deterministic laws alone (A 444–5/B 462–3). In the fourth antinomy, the thesis is that there must be a necessary being as the cause of the whole sequence of contingent beings, either as its first member or underlying it, while the antithesis is that no such being exists inside or outside the world (A 452–3/B 480–1). Again, the theses result from reason's desire for closure and the antitheses result from reason's desire for infinite extension. But now the theses do not necessarily refer solely to spatio-temporal entities, so the claims that there must be a non-natural causality of freedom and a necessary being can apply to things in themselves while the claims that there are only contingent existents linked by laws of nature apply to appearances. In this case both thesis and antithesis may be true (A 531/B 559). This result is crucial to Kant, because it means that although theoretical reason cannot prove that either freedom or God exist, neither can it disprove them, and room is left for the existence of freedom and God to gain credibility in some other way.

The last main part of the 'Dialectic' is Kant's critique of rational theology. Here Kant reiterates his earlier critique of the ontological argument as well as his claim that the arguments for the existence of God from contingency and from design - the 'cosmological' and 'physico-theological' proofs - can only get from their ideas of a first cause or architect to the idea of a *perfect* being by the supposition of the ontological argument, and thus fall along with that. But he now precedes this argument with a critique of the argument for God as the ground of all possibility that he had earlier accepted: the very idea that there is an *ens realissimum*, an

individual being containing in itself the ground of ‘the sum-total of all possibility’ (A 573/B 602), is another of the natural but illusory ideas of reason.

Kant does not, however, conclude the first Critique with an entirely negative assessment of pure reason. In an appendix to the ‘Transcendental Dialectic’, he argues that even though reason in its theoretical use cannot yield metaphysical insight, it does supply us with indispensable ‘regulative’ principles, of both the maximal simplicity of natural laws and the maximal variety of natural forms, for the conduct of empirical research; and in the ‘Canon of Pure Reason’, he argues that practical reason supplies an ideal of the highest good, the union of virtue and happiness and ultimately the union of freedom and nature, which is indispensable for moral conduct, not as its direct object but as a necessary condition of its rationality - which in turn gives ground for the practical postulation if not theoretical proof of the existence of God. Kant expands on both of these ideas in subsequent works (see §11 and §13).

9. The value of autonomy and the foundations of ethics

In his theoretical philosophy, Kant argued that we can be certain of the principles that arise from the combination of the forms of our sensibility and understanding, as products of our own intellectual autonomy; but he also argued that any attempt to see human reason as an autonomous source of metaphysical insight valid beyond the bounds of human sensibility leads to illusion. But in his practical philosophy, Kant argues that human reason is an autonomous source of principles of conduct, immune from the blandishments of sensual inclination in both its determinations of value and its decisions to act, and indeed that human autonomy is the highest value and the limiting condition of all other values.

Traditionally, Kant has been seen as an ethical formalist, according to whom all judgments on the values of ends must be subordinated to the obligatory universality of a moral law derived from the very concept of rationality itself. This interpretation has drawn support from Kant’s own characterization of his ‘paradoxical’ method in the Critique of Practical Reason, where he holds that the moral law must be derived prior to any determination of good or evil, rather than vice versa (5: 62–3). But this passage does not do justice to the larger argument of Kant’s practical philosophy, which is that rationality itself is so valuable precisely because it is the means to freedom or autonomy. Kant expressed this in his classroom lectures on ethics, when he said that ‘the inherent value of the world, the *summum bonum*, is freedom in accordance with a will which is not necessitated to action’ (27: 1482), and even more clearly in lectures on natural right given in the autumn of 1784, the very time he was writing the Groundwork of the Metaphysics of Morals, where he said that ‘If only rational beings can be ends in themselves, that is not because they have reason, but because they have freedom. Reason is merely a means’ (27: 1321). Kant makes the same point in the Groundwork when he says that the incomparable dignity of human beings derives from the fact that they are ‘free with regard to all laws of nature, obeying only those laws which’ they make themselves (4: 435).

The strategy of the Groundwork is by no means obvious, and the real character of Kant’s view emerges only gradually. In Section I, Kant tries to derive the fundamental principle of morality from an analysis of ‘ordinary rational knowledge of morality.’ The key steps in his analysis are:

virtue lies in the good will of an agent rather than any natural inclination or any particular end to be achieved; good will is manifested in the performance of an action for the sake of fulfilling duty rather than for any other end; and what duty requires is the performance of an action not for the sake of its consequences but because of its conformity to law as such; thus the maxim, or subjective principle, of virtuous action can only be that ‘I ought never to act except in such a way that I can also will that my maxim should become a universal law’ (4: 402). In Section II, Kant apparently tries to reach the same conclusion from more philosophical considerations: by arguing on the one hand that a moral or practical law must be a categorical rather than hypothetical imperative, that is, one commanding unconditionally rather than depending upon the adoption of some antecedent and optional end, and on the other hand that happiness is too indeterminate an end to give rise to such an imperative, Kant concludes that a categorical imperative can contain ‘only the necessity that our maxim should conform to this law’, thus that ‘there remains nothing to which the maxim has to conform except the universality of a law as such’ (4: 421). This version of the categorical imperative is known as the Formula of Universal Law.

Kant then furnishes further formulations of the categorical imperative, especially the Formula of Humanity as an End in Itself - ‘Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but always at the same time as an end’ (4: 429), which at the very least requires the possibility of rational consent to your action from any agent affected by it - and the formula of the kingdom of ends, the requirement that any proposed course of action be compatible with ‘a whole of all ends in systematic conjunction (a whole both of rational beings as ends in themselves and also of the personal ends which each may set before himself’ (4: 433). The usual interpretation is that these two formulations are supposed to follow from the Formula of Universal Law. However, several factors suggest that Kant did not mean the derivation of that formula from either common sense or ‘popular moral philosophy’ to be self-sufficient, and it is only with the introduction of the notion that humanity is an end in itself because of its potential for freedom, that the real ‘ground of a possible categorical imperative’ is discovered (4: 428). If so, then this is Kant’s theory: the ultimate source of value is human freedom as an end in itself, manifested in interpersonal contexts in the possibility of freely given consent to the actions of others; conformity to the requirement of universal law is the way to ensure that this value is preserved and fostered; and the ideal outcome of the observation of such a law would be a kingdom of ends as a system of freedom, in which all agents freely pursue their freely chosen ends to the extent compatible with a like freedom for all.

10. Duties of right and duties of virtue

In the Groundwork, Kant’s principle of morality gives rise to a fourfold classification of duties, resulting from the intersection of two divisions: between duties to oneself and to others, and between perfect and imperfect duties. Perfect duties are proscriptions of specific kinds of actions, and violating them is morally blameworthy; imperfect duties are prescriptions of general ends, and fulfilling them by means of performing appropriate particular actions is praiseworthy. The four classes of duty are thus: perfect duties to oneself, such as the prohibition of suicide; perfect

duties to others, such as the prohibition of deceitful promises; imperfect duties to oneself, such as the prescription to cultivate one's talents; and imperfect duties to others, such as the prescription of benevolence (4: 422–3, 429–30). It is straightforward what a perfect duty prohibits one from doing; it requires judgment to determine when and how the general ends prescribed by imperfect duties should be realized through particular actions.

In the later *Metaphysics of Morals*, Kant works out a detailed budget of duties that is generally based on this scheme, but with one key distinction: duties of justice (*Recht*) are those of the above duties that can appropriately be enforced by means of the public, juridical use of coercion, and the remainder are duties of virtue, which are fit subjects for moral assessment but not coercion (6: 213, 219). Since freedom is Kant's chief value, coercion is permitted only where it is both necessary to preserve freedom and possible for it to do so. This means that only a small subset of our duties, namely some but not all of our perfect duties to others, are duties of justice, thus proper subjects for public legislation; the majority of our moral duties are duties of virtue which are not appropriate subjects for coercive legal enforcement.

Kant's treatment of the duties of virtue is less complicated than that of the duties of justice, and will be considered first. Kant does not explicitly characterize these as duties to preserve and promote the freedom of oneself and others, as he does in the *Groundwork*, but instead characterizes them as duties to promote one's own perfection and the happiness of others: while one can directly perfect one's own freedom, one can avoid injuring but not directly perfect the freedom of another. On close inspection, however, Kant's duties of virtue require precisely that one perfect both the internal and external conditions for the exercise of one's own freedom and at least the external conditions for the exercise of the freedom of others. Thus, ethical duties to oneself include the prohibition of injury to the physical and mental bases of one's free agency, as by suicide or drunkenness, and the prescription of efforts to improve both the physical and mental conditions for the exercise of one's freedom, as by the cultivation of talents and of one's spiritual and moral faculties themselves; and ethical duties to others include both the prohibition of injuries to the dignity of others as free agents, for example by insulting or ridiculing them ('duties of respect'), and the prescription of efforts to improve the conditions for others' exercise of their own freedom, as by beneficence and sympathy ('duties of love').

Kant's foundation of his political philosophy on the duties of justice is more complicated. From the ultimate value of freedom, Kant derives the universal principle of justice, that an action is right only if 'on its maxim the freedom of choice of each can coexist with everyone's freedom in accordance with a universal law' (6: 230). Kant then argues that coercion is justified when it can prevent a hindrance to freedom, since a hindrance to a hindrance to freedom is itself a means to freedom (6: 231). This is too simple, since coercion might only compound the injury to freedom. Kant needs to add that coercive enforcement of the law is not itself a hindrance to freedom, since the threat of juridical sanction does not deprive a would-be criminal of freedom in the way that his crime would deprive its victim of freedom: the criminal exercises the choice to risk sanction, but deprives his victim of a like freedom of choice.

Kant goes on to argue that the only proper aim of coercive juridical legislation is the prevention of injury to the person and property of others; this is 'Private Law', while 'Public Law' concerns

the proper form of the state, whose function is the enforcement of private law. Kant takes the prevention of injury to persons to be an obvious requirement of duty, needing no special discussion, but the right to property receives extended discussion.

Kant recognizes three classes of property: property in things, property in contracts, and contract-like property in other persons, such as marital rights. His discussion of property in things is the most important for his political theory. The gist of Kant's account is that it would be irrational to deprive ourselves of the right to place physical objects, above all land, at our own long-term disposal, since we are rational agents who may need to use such things to realize our freely chosen ends, while the things themselves are not free agents and have no rights. But since the earth is initially undivided, specific property rights are not innate but must be acquired. Since the claim to any particular thing would limit the freedom of others who might also be able to use it, however, property rights cannot be claimed unilaterally, at least if morality's insistence upon universal acceptability is to be respected, but can only be claimed with the multilateral consent of those others, which they can reasonably give only if they too are accorded similar rights necessary for the successful exercise of their own agency (6: 255–6). For Kant, the right to property is thus not a natural right of isolated individuals, but a social creation depending upon mutual acceptability of claims. The state, finally, exists primarily to make claims to property rights both determinate and secure, and anyone claiming property rights thus has both the right and the obligation to join in a state with others (6: 256–7, 306–8). Since property exists only by mutual consent, and the state exists to secure that consent, the state necessarily has the power to permit only those distributions of property rights sufficiently equitable to gain general consent.

Both claims to property and expressions of philosophical and religious opinions, for example, are expressions of human autonomy. But while one person's property claims may directly limit the freedom of others, and are therefore subject to public regulation, his beliefs do not, and thus do not require the consent of any other. The state therefore has no right to intervene in these matters. This fundamental difference between the state's proper concern with property and its improper concern with personal belief defines Kant's liberalism. It is only implicit in the *Metaphysics of Morals*, but becomes explicit in more purely political writings.

11. Freedom of the will and the highest good

Having considered some practical implications of Kant's conception of autonomy, we now turn to its metaphysical consequences.

In Section III of the *Groundwork*, Kant attempts to prove that the categorical imperative, derived in Section II by the analysis of the concept of free and rational beings in general, actually puts *us* under an obligation by proving that *we* are indeed free and rational beings. In his terminology, he wants to show that it is not merely an analytic but a synthetic a priori proposition that our wills are constrained by this imperative. Both the interpretation and the assessment of the arguments by which he proposes to accomplish this remain controversial.

The first claim that Kant makes is that 'every being who cannot act except under the idea of freedom is just on that account really free in a practical respect, that is, all laws that are inseparably bound up with freedom are valid for it just as if its will were really declared to be

free in itself and in theoretical philosophy', and that every being with a will must indeed act under the idea of freedom (4: 448) (see Will, the). This seems to mean that agents who conceive of themselves as choosing their own actions, whether or not they conceive of themselves as subject to determinism, do not or perhaps even cannot consider any antecedent determinants of their actions in deciding what to do, but only what now seems most rational to do; thus they must govern their actions by rational and therefore moral laws. This seems right for agents considering their own future actions, but leaves unclear how we are to assess the freedom of the actions of others or even our own past actions.

However, Kant goes on to offer what seems to be a theoretical and therefore general proof of the existence of human freedom. He argues that theoretical philosophy has shown that we must distinguish between considering ourselves as phenomena and noumena, or members of the sensible and the intelligible worlds. From the first point of view, we must consider our actions to be governed by the causality of nature, while in the second, since we cannot consider our actions there to be governed by no law at all, we must consider them to be governed by another kind of causality, namely causality in accord with laws of reason (4: 451–3). Thus while our actions appear to be determined by natural causes, in reality they not only can but in fact must accord with laws of reason, hence with the categorical imperative.

There are two problems with this argument. First, it flouts transcendental idealism by assuming positive knowledge about things in themselves. Second, as Henry Sidgwick was to object a century later, it precludes moral responsibility for wrong-doing: if the real laws of our behaviour are necessarily rational and hence moral, any wrong-doing could only show that an agent is not rational, and therefore not responsible, at all.

Whether consciously aware of such objections or not, Kant began to alter his argument for freedom of the will in the Critique of Practical Reason. Here he does not argue from a theoretical proof of our freedom to the fact of our obligation under the moral law, but conversely from our consciousness of that obligation - the 'fact of reason' - to our freedom as the necessary condition of our ability and responsibility to fulfil it (5: 29–31). This argument first assumes that transcendental idealism has left open at least the theoretical possibility of freedom of the will, and then depends upon the famous principle 'ought implies can' ('Theory and Practice', 8: 287). Transcendental idealism, of course, seems problematic to many; and although the 'ought implies can' principle seems an intuitive principle of fairness, Kant does not actually argue for it. Nevertheless, since this argument assumes only that 'ought' implies '*can*', it does not imply that any agent who is obliged under the moral law necessarily *will* act in accordance with it, and thus avoids Sidgwick's problem about the very possibility of wrong-doing.

Kant depends upon this result in his next major treatment of freedom, in Religion within the Limits of Reason Alone, although there he seems to go too far in the other direction by assuming that evil-doing is not just possible but even necessary. Kant begins this discussion with an elegant account of wrong-doing, arguing that because no human being is simply unaware of the demand of morality - that is implied by the 'fact of reason' - acting immorally never comes from mere ignorance of the moral law, but rather from deciding to exempt oneself from this obligation. This position is compatible with the argument for freedom in the second Critique,

although not with that of the Groundwork. However, Kant goes on to argue that an evil rather than virtuous choice of fundamental maxim, or ‘radical evil’, is not only *possible* but inevitable, to be escaped from only by a moral conversion. This doctrine hardly follows from Kant’s previous argument, and seems instead to rest on an odd mixture of empirical evidence and the lingering grip of the Christian doctrine of original sin.

The reality of freedom is only the first of Kant’s three ‘postulates of pure practical reason’; the other two are the existence of God and the immortality of the soul. Again Kant’s argument is that, as the first Critique showed, neither of these can be proven by theoretical metaphysics, but they can nevertheless be postulated as necessary conditions of something essential to morality. In this case, however, they are conditions not of our obligation under the categorical imperative but for the realization of the ‘highest good.’ This is another complex and controversial concept. Kant typically defines it as happiness in proportion to virtue, which is worthiness to be happy (5: 110), but suggests different grounds for the necessity of this conjunction. In the Critique of Practical Reason, Kant sometimes treats happiness and virtue as two separate ends of human beings, one our natural end and the other our moral end, which we simply seek to combine (5: 110). In other places, however, beginning with the ‘Canon of Pure Reason’ in the first Critique, he holds that since what virtue does is precisely to coordinate our mutual pursuit of ends, and happiness arises from the realization of ends, maximal happiness would inevitably follow maximal virtue under ideal circumstances (A 809/B 837). Of course, circumstances are not always ideal for morality: as far as we can see, no one achieves perfect virtue in a normal lifespan, and such virtue as is attained is hardly always rewarded with happiness. To counter this, Kant holds that we may postulate immortality, in which to perfect our virtue, and the existence of God, who can legislate a nature in which the ends of virtue are achieved.

This theory has seemed to many to be Kant’s vain attempt to save his personal faith from his own scathing critique of metaphysics. Before such a claim could even be discussed, we would have to know what Kant really means by a postulate of practical reason. Kant gives several hints about this which have not been adequately explored. In the first Critique, he discusses the practical postulates in a section where he considers readiness to bet as a measure of belief, thus suggesting that what he actually has in mind is Pascal’s wager (see Pascal, B.; Pascal’s wager): since there is no theoretical disproof of these postulates, and nothing to lose if they are false, but their value to happiness is great, it is rational to act as if they were true. In a later essay, a draft on the ‘Real Progress of Metaphysics from the Time of Leibniz and Wolff’ from the early 1790s (posthumously published), Kant makes an even more striking suggestion. There he says that in the assumption of the practical postulates ‘the human being is authorized to grant influence on his actions to an idea which he, in accord with moral principles, has made himself, just as if he had derived it from a given object’ (20: 305). Here the suggestion is that the practical postulates are nothing less than another expression of human autonomy: not theoretical beliefs at all, let alone religious dogmas, but ideas which we construct for ourselves solely to increase our own efforts at virtue. This idea, that God is in fact nothing but an idea of our own making for use within our moral practice, is a thought Kant repeatedly expressed in his very last years (see §14).

12. Taste and autonomy

Under the rubric of ‘reflective judgment’, defined as that use of judgment in which we seek to find unknown universals for given particulars rather than to apply given universals to particulars (5: 179–80), the Critique of the Power of Judgment deals with three apparently disparate subjects: systematicity in scientific concepts generally, natural and artistic beauty, and teleology or purposiveness in particular organisms and in nature as a whole (see Teleology). Even more than the idea of reflective judgment, however, what ties these subjects together is again the idea of autonomy.

In the the first Critique, Kant had suggested, with but few exceptions, that the search for systematicity in scientific concepts and laws - the subordination of maximally varied specific concepts and laws under maximally unified general ones - is an ideal of reason, not necessary for empirical knowledge but still intrinsically desirable. In the third Critique, he reassigns this search to reflective judgment, and argues that we must adopt as a transcendental but indemonstrable principle that nature is adapted to our cognitive needs (5: 185; 20: 209–10). By this reassignment Kant indicates that systematicity is a necessary condition for the acceptance of empirical laws after all, and thus a necessary condition for experience itself. Kant thereby suggests that our empirical knowledge is neither passively received nor simply guaranteed, but dependent on our active projection of the unity of nature.

Kant next turns to judgments of taste as both a further expression of human autonomy and further evidence that the adaptation of nature to our own cognitive needs is both contingent yet reasonably assumed. Judgments of taste, beginning with the simplest such as ‘This flower is beautiful’ and progressing to more complex ones such as ‘This poem is beautiful’ and ‘This landscape is sublime’, are connected to autonomy in two ways: while they claim universal agreement, they must always be based on individual feeling and judgment; and while they must be made free of all constraint by theoretical or moral concepts, they are ultimately symbols of moral freedom itself.

Kant begins from an analysis of the very idea of an ‘aesthetic judgment’. As aesthetic, judgments of taste must both concern and be made on the basis of the most subjective of human responses, feelings of pleasure, but, as judgments, they must still claim interpersonal agreement (5: 203, 212–16). To retain their link to feelings, judgments of taste can never simply report how others respond, but must be based on one’s own free response to the object itself; in this way they express individual autonomy (5: 216, 282–5). But to claim universal agreement, they must be based on cognitive capacities shared by all, yet by a condition of those faculties that is pleasureable because it is not constrained by rules (5: 187). Such a state is one of ‘free play’ between imagination and understanding, in which the imagination satisfies understanding’s need for unity by presenting a form that seems unitary and coherent without any concept, or, even where a concept of human use or artistic intention is inescapable, that seems to have a unity going beyond any such concept - artistic genius lies precisely in such transcendence of concepts (5: 317–18). With debatable success, Kant argues that this ‘free play’ must occur under the same circumstances in all human beings (5: 238–9, 290), and thus that judgments of taste can have the ‘quantity’ of universality and the ‘modality’ of necessity while retaining the ‘quality’ of

independence from direct moral interest and 'relation' to merely subjective, cognitive interests rather than objective, practical ones.

How does aesthetic judgment so understood both express autonomy in a moral sense and also give further evidence of the contingent adaptation of nature to our own needs? Kant answers the latter question with his idea of 'intellectual interest': the very fact that beauty exists, he argues, although it cannot be derived from any scientific laws, can be taken by us as evidence that nature is receptive not only to our cognitive needs but even to our need to see a possibility for success in our moral undertakings (5: 300). Kant's answer to the first question, how taste expresses autonomy in its moral sense, is more complex but also more compelling than this.

Like other eighteenth-century authors such as Edmund Burke, Kant draws a fundamental distinction between the beautiful and the sublime (see Sublime, the). Beauty pleases us through the free play of imagination and understanding. In our response to the sublime, however - which for Kant is not paradigmatically a response to art, but to the vastness and power of nature - we enjoy not a direct harmony between imagination and understanding, which are rather frustrated by their inability to grasp such immensities, but a feeling of them which reveals the power of reason within us (5: 257). And this, although it would seem to involve theoretical reason, symbolizes the power of practical reason, and thus the foundation of our autonomy, in two ways: our power to grasp a truly universal law, such as the moral law, and our power to resist the threats of mere nature, and thus the blandishments of inclination (5: 261-2).

In this way, the sublime symbolizes the sterner side of moral autonomy. But the experience of beauty is also a symbol of morality, precisely because the freedom of the imagination that is its essence is the only experience in which any form of freedom, including the freedom of the will itself, can become palpable to us (5: 353-4). Kant thus concludes his critique of aesthetic judgment with the remarkable suggestion that it is in our enjoyment of beauty that our vocation as autonomous agents becomes not just a 'fact of reason' but a matter of experience as well.

13. Design and autonomy

Kant's critique of teleological judgment in the second half of the Critique of Judgment has an even more complicated agenda than his aesthetic theory. The work has roots in both eighteenth-century biology - which began the debate, lasting until the twentieth century, whether organisms could be understood on purely mechanical principles - and natural theology - that is, the great debate over the argument from design that culminated in Hume's Dialogues concerning Natural Religion. Yet again Kant's motive is to show that even our understanding of nature ultimately drives us to a recognition of our own autonomy.

The work is divided into three main sections: an examination of the necessary conditions for our comprehension of individual organisms; an examination of the conditions under which we can see nature as a whole as a single system; and a restatement of Kant's moral theology. First, Kant argues that an organism is a system of whole and parts manifesting both 'regressive' and 'progressive' causality: the whole is the product of the parts, but the parts in turn depend upon the whole for their own proper functioning and existence (5: 372, 376). But our conception of mechanical efficient causation includes only progressive causation, in which the state of any

system depends upon the prior state of its parts (see Causation). The only way we can understand the regressive causation of the whole with respect to its parts is by analogy to intelligent design, in which an antecedent *conception* of the object as a whole determines the production of the parts which in turn determine the character of the resultant whole. However, Kant insists, we have absolutely no justification for adopting a 'constitutive concept' of natural organisms as a product of actual design; we are only entitled to use an analogy between natural organisms and products of design as 'a regulative concept for reflective judgment to conduct research into objects in a remote analogy with our own causality in accordance with purposes' (5: 375). In other words, seeing organisms as products of intelligent design is a purely heuristic strategy.

However, Kant next argues that if it is natural for us to investigate organisms as if they were products of intelligent design, then it will also be natural for us to try to see nature as a whole as manifesting a purposive design (5: 380–1); and only by seeing the whole of nature as a product of intelligent design - of course, only regulatively - can we satisfy our craving to transform every particularity of nature, which must always be left contingent by our own general concepts, into something that seems necessary (5: 405–7). However, from a merely naturalistic viewpoint the ultimate purpose of nature as a system must remain indeterminate - grass might exist to feed cows, or cows exist to fertilize the grass (4: 426). Nature can be seen as a determinate system only if it can be seen as collectively serving an ultimate end that is itself an intrinsic end, that is, an end with absolute value. This can only be humanity itself (4: 427) - but not humanity merely as a part of nature, seeking happiness, which is neither a determinate end nor one particularly favoured by nature (4: 430), but only humanity as the subject of morality, able to cultivate its freedom (5: 435–6). Thus the urge to see nature as a systematic whole, an inevitable concomitant of our research into the complexities of organic life, can only be satisfied from the moral point of view in which human autonomy is the ultimate value.

Kant is still careful to remind us that this doctrine is regulative, furnishing us with a principle for our own cognitive and practical activity, not constitutive, pretending to metaphysical insight into the nature of reality independent from us. It is therefore particularly noteworthy that the last part of the critique of teleological judgment is a restatement of Kant's moral theology, the argument for belief in the existence of God as a postulate of practical reason. This restatement within a general theory of reflective judgment, the principles of which are meant above all else to guide our own activity, confirms the view that in the end the theory of practical postulates is not meant to support any form of dogma but only to serve as another expression of our own autonomy.

14. The final decade of Kant's public and private career

German intellectuals were drawn to political issues after the French revolution in 1789, and Kant was no exception. Key elements of his political philosophy were presented in essays such as 'Theory and Practice' (1793) and Perpetual Peace (1795) before its formal exposition in the *Metaphysics of Morals* (1797). As was argued above (§10), the foundation of Kantian liberalism is the idea that coercion is justifiable only to prevent hindrances to freedom, and thus to protect personal freedom and regulate property, every claim to which represents a potential constraint of the freedom of others unless they can reasonably agree to that claim as part of a system of property rights; but individual beliefs and conceptions of the good, whether religious

or philosophical, do not directly interfere with the freedom of others and are therefore not a proper object of political regulation. Kant's development of this basic principle into a political philosophy, however, is complex and controversial.

On the one hand, Kant argued from this premise to a firm rejection of any paternalistic government, even benevolent paternalism. Government exists for the protection of the freedom individuals have to determine and pursue their own ends to the extent compatible with the like freedom of others; so a '*paternalistic government*, where the subjects, as minors, cannot decide what is truly beneficial or detrimental to them, but are obliged to wait passively for the head of state to judge how they *ought* to be happy... would be the greatest conceivable *despotism*' (8: 290–1). Further, Kant held that the sovereignty of any government derives solely from the possibility of those who are governed rationally consenting to it, and thus that it is a necessary test of the legitimacy of all laws 'that they can have arisen from the united will of an entire people' (8: 297). These constraints could best be met in a republic, without a hereditary monarchy or aristocracy pitting proprietary privilege against public right. Finally, Kant argued in *Perpetual Peace*, only in a world federation of republics, where no proprietary rulers could identify the forcible extension of their domains with the aggrandizement of their personal property, could a cessation of warfare ever be expected.

On the other hand, Kant accompanied these liberal doctrines with a denial of any right to violent revolution, which has seemed surprising to many. But Kant's thought here is complex. Underlying his position as a whole is his view that in any situation in which different persons are bound to come into contact with each other we have not merely a moral right but a moral obligation to found or uphold a state. But one could easily argue that a tyranny is a state in name only, and that our moral obligation with regard to a tyranny is precisely to replace it at any cost with a legitimate state. Kant offers several reasons why this is not so. One claim is that violent revolution does not leave time for genuine reform in principles (8: 36), and another argument is that people revolt for the sake of greater happiness, which is an illegitimate reason for the overthrow of a state (8: 298). But these are empirical claims, and do not prove that people cannot revolt solely to remove illegitimate constraints to their freedom. Another argument Kant makes is that a constitution granting a legal right to rebel against the highest authority it creates would thereby not create a single highest authority after all, and would thus be self-contradictory (6: 319). This has seemed to many to be a sophism; but it may have been Kant's attempt to get his liberalism past the Prussian censorship, denying a *legal* right to rebel without ever explicitly denying a *moral* right to rebel.

Kant had been battling censorship even before the death of Frederick the Great in 1786. In 'What is Enlightenment?' (1785), he argued that while persons in an official capacity have to obey orders (in what he confusingly calls the 'private use of reason'), no official, not a professor or even a military officer, has to surrender his right to address his views to 'the entire *reading public*' (the 'public use of reason') (8: 37). But Kant's attack on the necessity of an established church in *Religion within the Limits of Reason Alone* (1793), even though legally published with the imprimatur of a non-Prussian university (Jena), outraged the conservative Frederick William II and his minister Wöllner, and Kant was threatened with punishment if he published

further on religion. With an oath of loyalty to his sovereign, Kant promised to desist, but after the death of this king in 1797 he regarded himself as freed from this promise, and the next year issued his most spirited defence of intellectual freedom yet, *The Conflict of the Faculties*. Here Kant argued that while the theological faculty might have the obligation to advance certain dogmas approved by the state, it was nothing less than the official function of the philosophical faculty to subject all views to rational scrutiny; and in any case, a government genuinely concerned with its people's welfare would not want them to base their morality on fear or dogma but only on the free exercise of their own reason. The new government had no stomach for further suppression of the aged philosopher, and Kant was able to publish this defence of intellectual freedom without incident.

Privately, Kant's last years were devoted to the project of closing the gap between the metaphysical foundations of natural science and actual physics, begun about 1796. He never published the work, leaving behind only the notes later published as the *Opus postumum*. Here Kant tried to show that by using the categorial framework and the concept of force we can derive not only the most general laws of mechanics, as he had argued in 1786, but a much more detailed categorization of the forms of matter and its forces. Kant also argued that an imperceptible, self-moving ether or 'caloric' is a condition of the possibility of experience. In the latest stages of this work, however, Kant returned to the broadest themes of his philosophy, and tried to develop a final statement of transcendental idealism. Here he argued that 'The highest standpoint of transcendental philosophy is that which unites God and the world synthetically, under one principle' (21: 23) - where that principle is nothing other than human autonomy itself. God and the world are 'not substances outside my thought, but rather the thought through which we ourselves make these objects' (21: 21): the world is our experience organized by categories and laws of our own making, and God is the representation of our own capacity to give ourselves the moral law through reason. The moral law 'emerges from freedom... which the subject prescribes to himself, and yet as if another and higher person had made it a rule for him. The subject feels himself necessitated through his own reason...' (22: 129). This is a fitting conclusion to Kant's philosophy of autonomy.

List of works

Citations to Kant, with the exception of the *Critique of Pure Reason*, are standardly located by the appropriate volume and page number in Kant (1900-). This practice has been followed in this entry by giving the arabic volume number followed by the arabic page number. Citations to the *Critique of Pure Reason* are given with the pagination of the first (A) and/or second (B) editions, according to whether the passage occurred in one or both editions.

German editions

Kant, I. (1900-) *Kant's gesammelte Schriften* (Kant's Collected Works), ed. Royal Prussian (subsequently German, then Berlin-Brandenburg) Academy of Sciences, Berlin: Georg Reimer, subsequently Walter de Gruyter, 29 vols, in 34 parts.

(28 volumes are published so far. The edition is divided into four parts: *Werke* (Works) (vols 1–9), *Briefe* (Letters) (vols 10–13), *Handschriftlicher Nachlaß* (Handwritten remains) (vols 14–23),

and Vorlesungen (Transcriptions of lectures by other hands) (vols 24–29, no volume 26). This edition, referred to as the ‘Akademie’ edition, is the most complete collection of Kant’s works. While some of its texts of Kant’s published works have been superseded, it remains the only source for most of Kant’s unpublished notes and lectures.)

Kant, I. (1956–62) Immanuel Kant: Werke in sechs Bänden (Immanuel Kant: Works in Six Volumes), ed. W. Weischedel, Wiesbaden: Insel; repr. (in 12 vols but with original pagination) Frankfurt am Main: Suhrkamp Verlag, 1968.

(A more modern edition of Kant’s published works only, also including German translations of Kant’s Latin works. Orthography is modernized, but the texts are more reliable than in the older Akademie edition.)

Kant, I. (1990) Kritik der reinen Vernunft (Critique of Pure Reason), ed. R. Schmidt, with bibliography by Heinrich Klemme, Hamburg: Felix Meiner, 3rd edn.

(Published in the Philosophische Bibliothek series. This edition was the basis for N. Kemp Smith’s translation)

Kant, I. (1996) Kritik der reinen Vernunft Reclam (Critique of Pure Reason), ed. I. Heidemann, Stuttgart: Philipp Reclam Jun.

(Published in the Universal-Bibliothek series. The best modern edition of the work)

Kant, I. (1998) Kritik der reinen Vernunft (Critique of Pure Reason), ed. J. Timmerman, Hamburg: Felix Meiner.

(Replacement for Kant (1990), but presentation of divergences between Kant’s two original editions is not as perspicuous.)

The individual editions of many of Kant’s other works in the Felix Meiner Philosophische Bibliothek have also been updated in the last two decades and are worth consulting.

English translations

The Cambridge Edition of the Works of Immanuel Kant, edited by P. Guyer and A.W. Wood, will provide new or revised translations of all of the works Kant published in his lifetime and extensive selections from his letters, his surviving notes, drafts and fragments and surviving transcriptions of his lectures. As of 2002, the following volumes had appeared:

Kant, I. (1992) Theoretical Philosophy, 1755–1770, trans. and ed. D. Walford, in collaboration with Ralf Meerbote, Cambridge: Cambridge University Press.

(Contains all of Kant’s writings up to 1770 except for scientific works and Observations on the Feeling of the Beautiful and Sublime. Important works contained in this volume include his first metaphysical treatise of 1755, the Only Possible Basis for a Demonstration of the Existence of God (1763), the Dreams of a Spirit-Seer (1766), and the inaugural dissertation of 1770.)

Kant, I. (1992) Lectures on Logic, trans. and ed. J.M. Young, Cambridge: Cambridge University Press.

(Contains the authorized handbook edited by G.B. Jäsche in 1800, and three complete sets of lecture notes from the early 1770s, 1780s and 1790s.)

Kant, I. (1993) *Opus postumum*, ed. E. Förster, trans. E. Förster and M. Rosen, Cambridge: Cambridge University Press.

(Contains extensive selections from the surviving manuscripts of Kant's attempt to write a final book that would both restate the principles of his transcendental idealism and also complete the application of his fundamental principles to natural science.)

Kant, I. (1996) *Practical Philosophy*, ed. and trans. M.J. Gregor with introduction by A.W. Wood, Cambridge: Cambridge University Press.

(Includes new translations of the *Groundwork of the Metaphysics of Morals* and *Critique of Pure Reason*, a revised edition of Gregor's previous translation of the *Metaphysics of Morals*, and Kant's occasional essays on moral and political philosophy.)

Kant, I. (1996) *Religion and Rational Theology*, ed. and trans. G. Di Giovanni and A.W. Wood, Cambridge: Cambridge University Press.

(Includes a new translation of *Religion within the Boundaries of Mere Reason*; the *Conflict of the Faculties*, which presents Kant's main argument for the intellectual freedom of philosophers; and Kant's lectures on philosophical theology.)

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(Contains complete sets of notes from 1775–84, 1784–5 and 1793–4.)

Kant, I. (1997) *Lectures on Metaphysics*, ed. and trans. K. Ameriks and S. Naragon, Cambridge: Cambridge University Press.

(Contains complete lecture series from the mid-1770s, 1782–3, 1790–1 and 1794–5, as well as selections from other sets of notes as early as 1762–4. Kant's views on both empirical and rational psychology are particularly well represented.)

Kant, I. (1998) *Critique of Pure Reason*, ed. and trans. P. Gruyer and A.W. Wood, Cambridge: Cambridge University Press.

(In addition to an extensive introduction and cross-references to many relevant notes among Kant's literary remains, this is the first edition of the *Critique* to include all of Kant's notes in his own copy of the first edition of 1781.)

Kant, I. (1999) *Correspondence*, ed. and trans. A. Zweig, Cambridge: Cambridge University Press.

(A much expanded and revised replacement of Zweig's earlier edition of 1967.)

Kant, I. (2000) *Critique of the Power of Judgment*, ed. P. Guyer, trans. P. Guyer and E. Matthews, Cambridge: Cambridge University Press.

(Contains both versions of the introduction, and extensive references to Kant's notes on aesthetics and lectures on anthropology.)

Kant, I. (2002) *Theoretical Philosophy after 1781*, ed. H.E. Allison and P. Heath, trans. H.E. Allison, M. Friedman, G. Hatfield and P. Heath, Cambridge: Cambridge University Press.

(Contains new translations of the *Prolegomena* and *Metaphysical Foundations of Natural Science* as well as Kant's polemical writings from the 1790s.)

The remaining volumes to appear in the Cambridge edition are: *Anthropology*, *History*, and *Education*; *Natural Science*; *Lectures on Anthropology*; and *Notes and Fragments*.

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(The only translation currently available.)

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(Kant's polemical defence of the idea of the synthetic a priori from the Wolffians, with valuable supplementary material.)

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(Handbook to Kant's lectures on anthropology, focusing especially on cognitive and moral psychology.)

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(Contains Beck's essays on analytic-synthetic distinction and on political philosophy.)

Beck, L.W. (1969) *Early German Philosophy: Kant and his Predecessors*, Cambridge, MA: Harvard University Press.

(Detailed history of German philosophy from the middle ages to Kant, the only work of its kind.)

Beck, L.W. (1978) *Essays on Kant and Hume*, New Haven and London: Yale University Press.

(Contains noteworthy essays on causation.)

Beiser, F.C. (1987) *The Fate of Reason: German Philosophy from Kant to Fichte*, Cambridge, MA: Harvard University Press.

(A detailed study of the reception of Kant; contains extensive bibliography of primary sources.)

Caygill, H. (1995) *A Kant Dictionary*, Oxford: Blackwell.

(Short but informative essays on many of Kant's key concepts and terms.)

Chadwick, R. (1992) *Immanuel Kant: Critical Assessments*, London: Routledge, 4 vols.

(One volume of classical critiques from Friedrich Schiller to Strawson and Bennett, followed by three volumes of recent articles.)

De Vleeschauwer, H.J. (1934–7) *La Déduction Transcendentale dans l'œuvre de Kant* (The Transcendental Deduction in the Work of Kant), Antwerp, Paris, and the Hague: De Sikkel, Champion, and Martinus Nijhoff, 3 vols.

(More general than its title suggests, it is still the most detailed study of Kant's philosophical development available.)

De Vleeschauwer, H.J. (1962) *The Development of Kantian Thought: The History of a Doctrine*, trans. A.R.C. Duncan, London: Thomas Nelson.

(An abridgement of De Vleeschauwer (1934–7).)

Förster, E. (1989) *Kant's Transcendental Deductions: The Three 'Critiques' and the 'Opus postumum'*, Stanford: Stanford University Press.

(Includes noteworthy essays by Dieter Henrich and John Rawls.)

Guyer, P. (1992) *The Cambridge Companion to Kant*, Cambridge: Cambridge University Press.

(Specially written chapters surveying the whole of Kant's philosophy and an extensive bibliography.)

Guyer, P. (1998) Kant's Groundwork of the Metaphysics of Morals: Critical Essays, Lanham, MD: Rowman & Littlefield.

(Includes essays by the leading writers on the Groundwork from the last two decades, and an extensive bibliography.)

Henrich, D. (1994) The Unity of Reason: Essays on Kant's Philosophy, ed. R. Velkley, Cambridge, MA: Harvard University Press.

(Translations of Henrich's important monograph on the transcendental deduction from 1976 and several of his essays on Kant's ethics.)

Höffe, O. (1994) Immanuel Kant, trans. M. Farrier, Albany: State University of New York Press.

(The best recent German survey of Kant's philosophy.)

Klemme, H.F. and Kuehn, M (1999) Immanuel Kant, Ashgate: Dartmouth, 2 vols.

(Fifty of the most important journal articles on Kant's theoretical philosophy, moral philosophy, political philosophy and philosophy of religion, from 1939 to 1996.)

Timmons, M. (2002) Kant's Metaphysics of Morals: Interpretative Essays, Oxford: Oxford university Press.

(Seventeen studies of Kant's most detailed work on moral and political philosophy by leading authorities.)

Walker, R.C.S. (1978) Kant, London: Routledge & Kegan Paul.

(A well-informed, argumentative overview.)

Watkins, E. (2001) Kant and the Sciences, Oxford: Oxford University Press.

(Twelve essays on the scientific context of Kant's work and on his views in physics, psychology, chemistry and biology.)

Wolff, R.P. (1967) Kant: A Collection of Critical Essays, Garden City: Doubleday Anchor.

(Includes Lewis White Beck's papers on the analytic-synthetic distinction.)

Individual topics

Allison, H.E. (1983) Kant's Transcendental Idealism, New Haven and London: Yale University Press.

(Influential presentation of the 'two-aspect' theory, includes extensive bibliography.)

Allison, H.E. (1990) Kant's Theory of Freedom, Cambridge: Cambridge University Press.

(Controversial defence of a theoretical proof of freedom.)

Allison, H.E. (1996) *Idealism and Freedom: Essays on Kant's Theoretical and Practical Philosophy*, Cambridge: Cambridge University Press.

(Essays extending and defending the controversial views on transcendental idealism and its role in Kant's ethics advanced in Allison (1983) and (1990).)

Allison, H.E. (2001) *Kant's Theory of Taste: A Reading of the Critique of Aesthetic Judgment*, Cambridge: Cambridge University Press.

(An interpretation of Kant's theory of aesthetic judgment and its connection to morality, not heavily dependent upon Allison's interpretation of transcendental idealism.)

Ameriks, K. (1982) *Kant's Theory of Mind: An Analysis of the Paralogisms of Pure Reason*, Oxford: Clarendon Press. rev edn, 2000

(Using Kant's lectures on metaphysics, argues that Kant's departure from traditional rational psychology is not as radical as is usually assumed.)

Aune, B. (1979) *Kant's Theory of Morals*, Princeton, NJ: Princeton University Press.

(A careful analytical study.)

Beck, L.W. (1960) *A Commentary on Kant's Critique of Practical Reason*, Chicago, IL: University of Chicago Press.

(Only detailed commentary on the second Critique, defends a perspectival approach to freedom.)

Beiser, F.C. (1992) *Enlightenment, Revolution and Romanticism: The Genesis of Modern German Political Thought, 1790–1800*, Cambridge, MA: Harvard University Press.

(Places Kant's political thought in detailed historical context.)

Bennett, J. (1966) *Kant's Analytic*, Cambridge: Cambridge University Press.

(Together with Bennett (1974) constitutes one of the most influential analytical studies of Kant; the 1966 work remains more successful.)

Bennett, J. (1974) *Kant's Dialectic*, Cambridge: Cambridge University Press.

(Together with Bennett (1966) constitutes one of the most influential analytical studies of Kant; the 1966 work remains more successful.)

Brittan, G.G., Jr. (1978) *Kant's Theory of Science*, Princeton, NJ: Princeton University Press.

(A contemporary assessment of Kant's philosophy of mathematics and physics.)

Brook, A. (1994) *Kant and the Mind*, Cambridge: Cambridge University Press.

(A study of Kant's philosophy of mind aimed at contemporary philosophers.)

Buchdahl, G. (1992) *Kant and the Dynamics of Reason: Essays on the Structure of Kant's Philosophy*, Oxford: Basil Blackwell.

(Contains many of Kant's influential papers, especially on 'regulative principles'.)

Butts, R.E. (1986) *Kant's Philosophy of Physical Science: Metaphysische Anfangsgründe der Naturwissenschaft 1786–1986*, Dordrecht: Reidel.

(Contains important papers by G. Brittan, G. Buchdahl, M. Friedman and P. Kitcher, among others).

Cohen, T. and Guyer P. (1982) *Essays in Kant's Aesthetics*, Chicago, IL: University of Chicago Press.

(Includes important papers by R. Aquila, D. Crawford and D. Henrich as well as the editors; includes extensive bibliography.)

Crawford, D.W. (1974) *Kant's Aesthetic Theory*, Madison: University of Wisconsin Press.

(The first important analytical study of Kant's aesthetics, it argues for a moral completion of the deduction of taste.)

Crowther, P. (1989) *The Kantian Sublime: From Morality to Art*, Oxford: Clarendon Press.

(Tries to broaden the Kantian theory of the sublime beyond morality.)

Dryer, D.P. (1966) *Kant's Solution for Verification in Metaphysics*, London: George Allen & Unwin.

(Overshadowed by Strawson (1966) and Bennett (1966), remains a wordy but valuable study of Kant's theory of the synthetic a priori.)

England, F.E. (1930) *Kant's Conception of God: A Critical Exposition of its Metaphysical Development together with a Translation of the Nova Delucidatio*, New York: Dial Press.

(An account of Kant's early as well as mature treatment of God.)

Ewing, A.C. (1924) *Kant's Treatment of Causality*, London: Routledge & Kegan Paul.

(Old but still insightful.)

Förster, E. (2000) *Kant's Final Synthesis: An Essay on the Opus postumum*, Cambridge, MA: Harvard University Press.

(A lucid guide through some of the main themes of Kant's obscure and incomplete final work.)

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

(Influential papers on Kant's philosophy of geometry and physics, and a detailed study of the *Opus postumum*.)

Galston, W.A. (1975) *Kant and the Problem of History*, Chicago, IL: The University of Chicago Press.

(A wide-ranging survey focusing on history and political progress.)

Gardner, S. (1999) *Kant and the Critique of Pure Reason*, London: Routledge.

(An introductory work, often helpful, although heavily committed to the defence of transcendental idealism.)

Gregor, M. (1963) *Laws of Freedom: A Study of Kant's Method of Applying the Categorical Imperative in the Metaphysik der Sitten*, Oxford: Basil Blackwell.

(The standard English commentary on the *Metaphysics of Morals*.)

Grier, M. (2001) *Kant's Doctrine of Transcendental Illusion*, Cambridge: Cambridge University Press.

(A helpful study of the 'Transcendental Dialectic'.)

Guyer, P. (1979) *Kant and the Claims of Taste*, Cambridge, MA: Harvard University Press; 2nd edn, Cambridge: Cambridge University Press, 1997.

(A critical scrutiny of Kant's analysis and deduction of judgments of taste, now amplified with a chapter on Kant's conception of art.)

Guyer, P. (1987) *Kant and the Claims of Knowledge*, Cambridge: Cambridge University Press.

(After a study of Kant's development in the 1770s, separates Kant's theory of categories from transcendental idealism.)

Guyer, P. (1993) *Kant and the Experience of Freedom: Essays on Aesthetics and Morality*, Cambridge: Cambridge University Press.

(A collection of essays placing Kant's aesthetics in its historical context and exploring connections with Kant's moral philosophy.)

Guyer, P. (2000) *Kant on Freedom, Law, and Happiness*, Cambridge: Cambridge University Press.

(Essays on the development of Kant's moral philosophy and on its foundations, applications in political philosophy and ethics, and philosophy of history.)

Hanna, R. (2001) *Kant and the Foundations of Analytical Philosophy*, Oxford: Clarendon Press.

(A detailed defence of Kant's treatment of both analytic and synthetic judgments.)

Herman, B. (1992) *The Practice of Moral Judgment*, Cambridge, MA: Harvard University Press.

(A vigorous defence of a non-formalistic approach to Kant's ethics.)

Hill, T.E., Jr. (1992) *Dignity and Practical Reason in Kant's Moral Theory*, Ithaca, NY: Cornell University Press.

(Important papers, primarily on Kant's normative ethics.)

Hill, T.E., Jr. (2000) *Respect, Pluralism and Justice: Kantian Perspectives*, Oxford: Oxford University Press.

(Further studies of both the foundations of Kant's ethics and his political and legal philosophy.)

Howell, R. (1992) *Kant's Transcendental Deduction: An Analysis of Main Themes in his Critical Philosophy*, Dordrecht and Boston: Kluwer.

(A detailed study influenced by Hintikka's philosophy of language.)

Kemp Smith, N. (1923) *A Commentary to Kant's Critique of Pure Reason*, London: Macmillan, 2nd edn.

(The classical English presentation of the 'patchwork theory' of the composition of the first Critique, it remains stimulating and the only important English commentary on every part of the Critique.)

Kersting, W. (1993) *Wohlgeordnete Freiheit: Immanuel Kants Rechts- und Staatsphilosophie*, Frankfurt am Main: Suhrkamp, 2nd edn.

(The most important German study of Kant's political philosophy, it argues for tension between liberal and conservative elements; 2nd edition adds introduction on Kant's contemporary impact and includes extensive bibliography.)

Kersting, W. (1993) *Wohlgeordnete Freiheit: Immanuel Kants Rechts- und Staatsphilosophie* (Well-ordered Freedom: Immanuel Kant's Philosophy of Law and of the State), Frankfurt am Main: Suhrkamp, 2nd edn.

(The most important German study of Kant's political philosophy, it argues for tension between liberal and conservative elements; the 2nd edn adds an introduction on Kant's contemporary impact and includes an extensive bibliography.)

Kitcher, P. (1990) *Kant's Transcendental Psychology*, Oxford: Oxford University Press.

(A defence of Kant's cognitive psychology.)

Korsgaard, C.M. (1996) *Creating the Kingdom of Ends*, Cambridge: Cambridge University Press.

(Includes all of the author's important papers on Kant's ethics, originally published between 1983 and 1993.)

Langton, R. (1988) *Kantian Humility*, Oxford: Clarendon Press.

(A forceful defence of the view that Kant's distinction between phenomena and things-in-themselves is best understood as that between relational and non-relational properties.)

Linden, van der, H. (1988) *Kantian Ethics and Socialism*, Indianapolis, IN, and Cambridge, MA: Hackett.

(Finds grounds for socialism in Kant.)

Longuenesse, B. (1998) *Kant and the Capacity to Judge: Sensibility and Discursivity in the Transcendental Analytic of the Critique of Pure Reason*, Princeton: Princeton University Press.

(A detailed study of Kant's conception of judgment and concept-formation.)

Louden, R.B. (2000) *Kant's Impure Ethics: From Rational Beings to Human Beings*, New York: Oxford University Press.

(A study of Kant's moral anthropology.)

Makkreel, R. (1990) *Imagination and Interpretation in Kant*, Chicago, IL: University of Chicago Press.

(A hermeneutic approach.)

Longuenesse, B. (1998) *Kant and the Capacity to Judge: Sensibility and Discursivity in the Transcendental Analytic of the Critique of Pure Reason*, trans. C.T. Wolfe, Princeton, NJ: Princeton University Press.

McFarland, J.D. (1970) *Kant's Concept of Teleology*, Edinburgh: Edinburgh University Press.

(A useful general survey in English.)

McLaughlin, P. (1990) *Kant's Critique of Teleology in Biological Explanation*, Lewiston, NY: Edwin Mellen Press.

(Focuses on Kant's theory of organisms.)

Melnick, A. (1973) *Kant's Analogies of Experience*, Chicago, IL: University of Chicago Press.

(Indispensable interpretation of the Analogies.)

Melnick, A. (1989) *Space, Time, and Thought in Kant*, Dordrecht: Kluwer.

(Immensely complicated reconstruction of the genesis and content of Kant's theory of empirical judgment.)

Mulholland, L.A. (1990) *Kant's System of Rights*, New York: Columbia University Press.

(An interesting successor to Gregor's commentary on the *Metaphysics of Morals*.)

Nell, O. (O'Neill) (1975) *Acting on Principle: An Essay on Kantian Ethics*, New York: Columbia University Press.

(The most important interpretation of the categorical imperative.)

O'Neill, O. (1989) *Constructions of Reason: Explorations of Kant's Practical Philosophy*, Cambridge: Cambridge University Press.

(Papers on both the interpretation and application of Kantian ethics.)

Paton, H.J. (1936) *Kant's Metaphysics of Experience: A Commentary on the First Half of the Kritik der reinen Vernunft*, London: George Allen & Unwin, 2 vols.

(Extensive rebuttal of Kemp Smith's 'patchwork theory'; like the contemporary work by De Vleeschauwer, makes much use of Kant's notes.)

Paton, H.J. (1947) *The Categorical Imperative: A Study in Kant's Moral Philosophy*, London: Hutchinson.

(The classical English commentary on the Groundwork.)

Prauss, G. (1974) *Kant und das Problem der Dinge an sich (Kant and the Problem of the Ding an sich)*, Bonn: Bouvier.

(An influential presentation of the 'two-aspect' interpretation of the distinction between appearances and things in themselves.)

Reich, K. (1992) *The Completeness of Kant's Table of Judgments*, trans. J. Kneller and M. Losoncy, Stanford: Stanford University Press.

(Influential defense of the metaphysical deduction.)

Riley, P. (1983) *Kant's Political Philosophy*, Totowa: Rowman and Littlefield.

(Examines tensions between Kant's liberalism and his teleology.)

Rosen, A.D. (1993) *Kant's Theory of Justice*, Ithaca, NY: Cornell University Press.

(Defends Kant's position on revolution.)

Sassen, B. (2000) *Kant's Early Critics: The Empiricist Critique of the Theoretical Philosophy*, Cambridge: Cambridge University Press.

(Translations of the notorious first review of the Critique of Pure Reason and of many other responses to Kant in the 1780s, including F.H. Jacobi's influential critique of Kant's concept of the thing in itself.)

Savile, A. (1987) *Aesthetic Reconstructions: The Seminal Writings of Lessing, Kant, and Schiller*, Aristotelian Society Series 8, Oxford: Basil Blackwell.

(A useful comparative study.)

Savile, A. (1993) *Kantian Aesthetics Pursued*, Edinburgh: Edinburgh University Press.

(A variety of studies, including applications of Kantian theory to music and architecture.)

Schönfeld, M. (2000) *The Philosophy of the Young Kant: The Precritical Project*, Oxford: Oxford University Press.

(A detailed but accessible study of Kant's philosophical development from 1746 to 1766.)

Sherman, N. (1997) *Making a Necessity of Virtue: Aristotle and Kant on Virtue*, Cambridge: Cambridge University Press.

(Argues for the role of emotions in Kant's ethics.)

Strawson, P.F. (1966) *The Bounds of Sense: An Essay on Kant's Critique of Pure Reason*, London: Methuen.

(An elegant reconstruction, based on Strawson's theory of meaning, that stimulated much of the best work on Kant in the 1960s and 1970s.)

Vaihinger, H. (1881–92) *Commentar zu Kants Kritik der reinen Vernunft* (Commentary on Kant's Critique of Pure Reason), Stuttgart: W. Spemann and Union Deutsche Verlagsgesellschaft, 2 vols.

(The most detailed study of the Introduction and Transcendental Aesthetic ever produced.)

Van Cleve, J. (1999) *Problems from Kant*, New York: Oxford University Press.

(A lucid analytical study of topics in the first Critique, focusing on space and time, objectivity, the concepts of substance and causation, and transcendental idealism.)

Ward, K. (1972) *The Development of Kant's View of Ethics*, Oxford: Basil Blackwell.

(The only modern study of this topic in English.)

Williams, H. (1983) *Kant's Political Philosophy*, New York: St. Martin's.

(A general survey.)

Williams, H. (1992) *Essays on Kant's Political Philosophy*, Chicago, IL: University of Chicago Press.

(Contains essays by O. Höffe, W. Kersting and O. O'Neill among others.)

Wolff, R.P. (1963) *Kant's Theory of Mental Activity: A Commentary on the Transcendental Analytic of the Critique of Pure Reason*, Cambridge, MA: Harvard University Press.

(Valuable commentary on the first-edition deduction and the second Analogy.)

Wood, A.W. (1970) *Kant's Moral Religion*, Ithaca and London: Cornell University Press.

(A valuable study of Kant's moral theology.)

Wood, A.W. (1978) *Kant's Rational Theology*, Ithaca and London: Cornell University Press.

(A study of Kant's critique of the traditional arguments for the existence of God, drawing heavily on Kant's lectures.)

Wood, A.W. (1999) *Kant's Ethical Thought*, Cambridge: Cambridge University Press.

(A bi-partite study of Kant's ethics, first arguing that the several formulations of the categorical imperative are meant to be used together in moral reasoning, and then connecting Kant's formal moral philosophy to his pessimistic empirical account of human nature.)

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

(Argues for a proto-Hegelian account of Kant's philosophy of historical progress.)

Zumbach, C. (1984) *The Transcendent Science: Kant's Conception of Biological Methodology*, The Hague: Martinus Nijhoff.

(Focuses on Kant's theory of organisms.)

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