

Look at Table of Contents

Kant's epigraph (Bacon): "Let us be silent concerning ourselves. But what concerns the things to be dealt with here, we wish that it will be regarded not as a mere utterance of opinion but as an honest work which can convince one that its concern is neither merely the foundation of a sect nor the justification of an opportune accident, but the foundation of human welfare and dignity in general."

Axiii (Hecuba): "I was not long ago the greatest of beings, powerful by so many progeny—now how I drag myself exiled and destitute."

Axx (Persius): "Dwell within yourself and you will know how simple for you is the inventory."

1. Idea of a Criticism of Pure Reason—A Preface
2. The Copernican Experiment—B Preface
3. The Humean Challenge—*Proleg* Preface

A Preface – What is Metaphysics? does it even exist as a science?

The curse of reason. Reason, by its very nature, presents itself with questions that are then systematized and studied by metaphysicians. These concern the cause that is not itself an effect, the part that is not itself a whole of other parts, the first beginning of the world, the individual which includes within itself all possible reality (the supreme being), the perishability of the soul, etc. These questions are not arbitrary or accidental; they come from the very nature of reason itself, and must eventually manifest themselves to all in whom the power of reason does not lie dormant. Yet, it is **reason's curse** to discover that the furnishing of certain, definitive solution completely transcends its powers. This is the doctrine of the **Transcendental Dialectic**, which then proceeds to explore the various sophisms and contradictions which are the inevitable result when reason, responding to its own natural and essential impulses, ignores its limits and strives to furnish answers to its questions.

This predicament is a direct consequence of the principles reason cannot help employing in the course of experience: cause and effect, substance, space, time, a reality distinct from our minds. It finds that these principles can only *extend* our inquiries, never *conclude* them. As it traces back the causes for given effects, the causes of these causes, and so forth, it is finally forced to recognize that, so long as it proceeds in this experience-dependent manner, the questions it poses itself are unanswerable. Finding this incompleteness intolerable, it resorts to "principles which **overstep all possible empirical employment**, and which yet seem so unobjectionable that even ordinary consciousness readily accepts them." As a result, reason is plunged into confrontation with itself (contradictory positions each of which seems to follow logically from unchallengeable positions — the **Antinomies**), and the impenetrable mists that result when sophism escapes undetected. Kant's contention, the principal thesis of his book, is that *so long as reason fails to subject its principles to a criticism capable of tracing its innumerable failures to their root source, it will condemn itself everlastingly to vain struggles and fruitless disputes.*

He then offers a capsule **history of metaphysics**. Through to Aristotle, its confidence was still complete and unshaken, and it reigned as queen of all the Sciences. But after Aristotle, it came under the assault of a certain nomadic tribe known as **skeptics**: having no territory of their own to defend, they lived by hit and run raids to steal the goods of settled folk, wandering to wherever the pickings were ripest. Nevertheless, these ancient skeptics were too disorganized and unsophisticated to overpower the citadels of metaphysical civilization, and so, with neither able to subdue the other, an enduring equilibrium was established (*Kant emphasizes that this*

weakness is the lot only of ancient skeptics: one knows from other texts, that he viewed modern skepticism, esp. Hume, quite differently: metaphysics was powerless to halt the revolutionary deluge unleashed by Humean skepticism).

This newly secured metaphysics went self-contentedly on, right into modern times, growing ever more corrupt and sophisticated in the interval. The first promise of reform was not Descartes, Spinoza, or Leibniz, but **Locke**, in the form of what Kant labels a "physiology of the human understanding" (meaning the investigation of human understanding from the point of view of empirical psychology). But this vulgar (unqueenly) genealogy in experience Kant rejects: not on account of its crudeness, but because it fails to explain the **origin** of the concepts for which it proposes to account (see A86 and A271). It thus failed to have the effect Locke desired, and metaphysics once more relapsed into its self-contented dogmatic slumber. And here Kant has in mind Germany: above all Christian Wolff and his school.

Now, he calls those thinkers who reject dogmatic metaphysics but who had nothing to put into its place *indifferentists*. Uppermost in his mind were a group of now obscure but then celebrated philosophers known as the **popular philosophers**, who wrote philosophy for everyman, scorning the technical jargon and hair-splitting argumentation of the schools, in order to appeal to the good sense and sound intuition of readers. In Kant's view, the indifferentists, being too superficial and careless in their approach to philosophy, could never offer an enduring, viable alternative to dogmatic method, which therefore would once again, given the native propensity of human reason toward metaphysical questions, reestablish itself. Indeed, the indifferentists themselves are proof of this, since, when push came to shove, they inevitably relapsed into the very sorts of dogmatic reasoning and assertion they professed to despise: the only difference being that they did so incompetently and without effect.

Nevertheless, Kant sees in indifferentism a promise for a real reform of metaphysics, one capable of restoring it to a point where it might be fit to stand side by side with the mathematics of Euler and the physics of Newton. For indifferentism is symptomatic that, in an age of Enlightenment, people have become critical, and are no longer willing to put up with anything that pretends to be knowledge but cannot present its scientific credentials upon demand. The time had therefore come when metaphysics has either to be established as a science fit to rank alongside these others or to be abandoned entirely. It is this task that Kant proposes to take up in his book, interpreting it as "a call to reason to undertake anew the most difficult of all its tasks, namely, that of **self-knowledge**, and to institute a **tribunal** which will assure to reason its lawful claims, and dismiss all groundless pretensions, not by despotic decrees, but in accordance with its own eternal and unalterable laws."

It is this tribunal that he entitles *the critique (better: criticism) of pure reason*. **Its business is: to examine what reason may strive for and attain unaided by any experience; it therefore will render a verdict on the possibility or impossibility of metaphysics itself.**

This is Kant's new, wholly original path. He thinks that *no one before him has ever successfully mounted the sort of investigation capable of determining the competence of reason for metaphysical inquiry.*

– Some (the dogmatists) simply assume that, if reason has the power to pose such questions, it must have the power to answer them as well: after all, what kind world would it be, what justice would there be, if it were not so (God as evil deceiver, etc.)?
– Others (the skeptics) assume the opposite: noting the many contradictions into which metaphysical reason leads all those who trust in it, they conclude that reason is *never* to be trusted.

But neither side has ever been able to back up its assumptions with the necessary warrants: (i) an enumeration of reason's powers, (ii) the conditions of their use and limits of their application, or (iii) how to deal with our native predisposition to misuse them. Both sides lack such knowledge, the very sort on which their case hinges, and so can lay claim to no more than opinion, not to the scientific probity and assurance of mathematics or natural science. In the

CPR, Kant will change this: provide a foundation for a *science* of metaphysics by determining whether such a science is possible and, if so, how, through a criticism of reason. This investigation poses and answers questions that have never before been thought of — questions that, in order to be answered, call for entirely new methods of proof and analysis. These methods lead to discoveries that the author claims will determine scientifically, once and for all, the **ground-plan** of a metaphysical science from which metaphysicians hereafter may work with complete confidence and security in their results. However, he offers here no sketch, as he does in the B Preface, of what science is and what is necessary in order to make metaphysics into one (these questions are posed only in the Introduction).

The rest of the A Preface is devoted to two questions: the *completeness* and the *clarity* of both the criticism of reason and the metaphysical science it is supposed to found.

Kant makes the seemingly arrogant claim that, in his book, "there is not a single metaphysical problem which has not been solved, or for the solution of which the key at least has not been supplied." Anything less would be inadequate if metaphysics is to be put on a scientific footing: if his method should prove to be "insufficient for the solution of even a single one of all the questions to which it itself gives birth we should have no alternative but to reject the principle." This being the case, he turns to the question, here and in the B Preface as well, as to how such completeness is possible? The answer is that, in contrast to the metaphysicians, who claim to tell us things about the world, its creator, the ultimate destiny of the human soul, and so forth, which they cannot possibly know by means of experience, the critique of reason is concerned only with reason itself, and that only insofar as it is completely pure: "I have to deal with nothing save reason itself and its pure thinking; and to obtain complete knowledge of these, there is no need to go far afield, since I come upon them in myself."

As such, Kant's inquiry is analogous to that of the logician, whose task is to identify and isolate simply the acts of conception, judgment, and rational inference, without any thought at all to what they are about. They differ, of course, in that Kant is concerned with the knowledge of objects and truth; and specifically, not with such propositions as such, but our capacity to assert them completely a priori. That is, the only object about which he will be making knowledge claims is reason itself: its powers, the materials and methods available to it when operating without the aid of the senses, is something we may at least hope to know; and to know it at all is, of course, to know it a priori. For this reason he excludes all hypotheses, all probability, from his investigation: reason is either known a priori, and so absolutely and necessarily, or it is not known at all; **it is a non-sequitur to think of a criticism of reason even being able to admit, much less having to rely on, anything that is not necessarily true if true at all.** It would be just as absurd to include the probable here as to include a discussion of inductive inference in a purely formal logic, whose brief demands the exclusion of everything specific to human beings, including their finite, limited perspective, and psychological peculiarities.

[Ignore subjective/objective transcendental deduction.]

So much for completeness. Turning to clarity, Kant becomes penitential, and rightly so. The book, he recognizes, is devoid of appeal to imagination; it has none of the elegance and panache of Descartes' *Meditations*, it is devoid of the concrete examples that illuminate Locke's *Essay*, it lacks the diverting speculative flights of a Plato or a Leibniz, and it has no place for the common sense naturalism of Hume's *Enquiry*. Kant's excuse that to have endeavored to make it clearer would only have made it less clear by obscuring the completeness which must take priority over everything else in a critique of pure reason. You may decide for yourself, as you struggle bravely and often in vain with his thoughts, whether this excuse is adequate.

At the end of this Preface, as in the B Preface, Kant promises us a system of metaphysics to follow upon the critique of pure reason — a work which will finish the ground-laying work of metaphysics once and for all and leave to his successors the task only of finding applications for it. Do not be misled; it is not really anything more than we get here. What he had in mind, as he

made clear in correspondence, was a metaphysical system patterned after Baumgarten's textbook on metaphysics (a minor Wolffian whose book Kant used in his courses on metaphysics). It would have begun with the equivalent of the transcendental aesthetic. Then it would have introduced the categories and, instead of going straight to the trans. deduction, it would have developed various **predicables** of the categories, that is, derivative concepts like action, force, motions, etc. — concepts that involve combining different categories with one another or with space and time. In the process, he would have commented on them much as Baumgarten did. Only after that would the system move on to the transcendental deduction of the categories and space and time (for the two are in fact one — the critical conception of space and time is given in and with the transcendental deduction of the categories as we shall see), the analytic of principles, and finally the transcendental dialectic. In other words, the system of metaphysics would be the present *Critique* + more clutter. The completeness would be less evident, but there would be an abundance of digressions and examples.

B Preface

As formulated here (and Kant gets directly to the point this time), the preeminent problem of rational knowledge is how to set metaphysics on the sure path of a science. Geometry became a science in the time of the Greeks, and the study of nature attained that dignity by the early 18th century. Why, Kant asks, has metaphysics so conspicuously failed to do the same?

Metaphysics faces two obstacles that these others sciences did not.

(i) Like metaphysics but unlike physics, mathematics is an a priori science, in no way beholden to experience either for any of its concepts or for the validation of its propositions. Unlike metaphysics, however, mathematics is not about things that have real existence in the world. It deals with mere ideas and their relations, and is completely indifferent to whether anything exists, or even can exist, corresponding to these ideas. In other words, mathematics is not about objects existing outside our thought; if it can be applied to them, fine, but it is not these things that it is about, and its deliverances would remain just as true even if it had no use or application outside our thought: $1+1$ would still = 2, the sum of the angles of a triangle would still = two right angles, regardless of whether these equations expressed the true natures of anything outside our thought. Not so metaphysics: metaphysics is about really existing objects, and in that sense it is like natural science.

(ii) However, natural science, unlike metaphysics, is empirical; it can obtain its concepts of objects from actual experience of these objects themselves, and so there can be no doubt that these concepts have objective application and use. And empirical conclusions are quite enough for the natural scientist: even the most well-substantiated theory of nature must admit of revision in the light of new evidence or reconsideration of existing evidence. The laws postulated by scientific theory have only a relative universality and necessity; the possibility always remains that at some greater or smaller scale of magnitude, or under certain special conditions, things that were thought to be universal laws turn out to be special cases of still more general laws. Metaphysics, by contrast, does not have this luxury: its laws must be strictly necessary and universal, true of everything without even so much as the possibility of an exception. Its laws must therefore all be a priori – true prior to and independently of experience. Moreover, the concepts of metaphysics are a priori, they cannot be obtained through experience of objects.

So, metaphysics seems to have the shortcomings of both mathematics and physics, without the advantages that allow each nevertheless to become science. Like mathematics, it is a priori; but since its claims deal with actually existing objects, its conclusions, unlike mathematics, would have to be dismissed as mere fantasies if they could not be shown to be valid of things outside our thought. But as a priori, it does not have the luxury physics does of deriving its concepts directly from the objects and testing its principles against the actual behavior of these objects. Metaphysics must obtain its concepts of objects anywhere *but* from the objects

themselves and cannot look to these objects for confirmation or guidance of any kind; its proofs must all be conducted entirely within pure thought alone, yet still somehow reach out beyond pure thought. How is such a science possible?

Kant's answer is given in his famous Copernican Experiment.....

There have been innumerable suggestions as to just what the shift of standpoint is which he regarded as a necessary preliminary to the attainment of metaphysical science. I shall just briefly state my own view: Kant doesn't seem to have in mind primarily the shift from a geocentric to a heliocentric scheme, since he speaks of leaving the stars – not just or specifically the sun, but the stars generally – at rest. The result is not an exchange of one center for another – the sun in preference to the earth – but rather the elimination of the whole idea of a single center: *all* the stars are at rest; hence, all are, as it were, independent centers, and so, in truth, none is the center. They become instead the fixed points by reference to which the observer is able to plot his own movements, even when he is completely unaware that he is in motion. For we can represent ourselves as in motion by the simple expedient of treating the stars as being at rest – just as the appearance of you becoming nearer to me can be a way of determining my own movements provided I stipulate that you are at rest and so attribute all the change to myself.

Therein lies the key to the Copernican hypothesis, I believe. It is much, much simpler than one might be led to suppose. Standing on this planet, we have no sense at all that we are in motion; nothing seems stiller, more at rest, than the earth that supports us and everything around us. By contrast, every day and night we are witness to the movements of sun, moon, and stars above us. It is only when we are prepared to distrust our senses, to admit the possibility of movement even where the sense of it, even the possibility of sensing it, is denied us, that we can make the progress from pre-science to a true, objective science of astronomy. Similarly, we have no sense at all, no awareness, that the very objects which confront our senses and towards which we direct our thoughts are themselves products of the very same faculties which produce our senses perceptions and thoughts of them. So long as we let ourselves be kept in the leading strings of our own introspective capacity to determine what role if any we have in the constitution of the objects of perception and thought, then metaphysics can never become a science. That capacity is fine as far as it goes; that is, for the purposes of human life, our introspective capacity is perfectly adequate – just as is our sense of motion, the motion of our own bodies or of that on which we are standing (e.g. a chariot, a carriage, a bus). But once we move to matters that take us beyond the ordinary circumstances of life, where these senses may be trusted, we must reckon with their limitations, and the ease with which we may be misled by trusting too far with them. When it is a question whether or not the earth itself be in motion, then our sense of motion ceases to be any use at all, and instead becomes a positive hindrance. Similarly, when it is a question whether or not the objects of intuition and thought conform to the constitution of our own faculty of representation, then our introspective sense is less than useless, it is a positive hindrance, since it prevents us from seriously entertaining Kant's Copernican hypothesis. We must accept that our ordinary guide to the action or lack thereof of our minds – introspective, what is ordinarily called 'consciousness' – is here no guide at all, and instead other sorts of evidence must be discovered and called to our aid. If that upsets our ordinary notions of consciousness, then too bad – they need to be upset. For metaphysics can no more find the path to science so long as we refuse to surrender our implicit reliance on our senses than astronomy could have done so if we remained wedded to our bodily sense of motion as the ultimate arbiter of theory.

If this is the correct approach to Kant's Copernican hypothesis, then it is worth pointing out its affinities with some of the anti-introspective views of the great empiricists, Locke and Hume (curiously, in present-day philosophical lore, the empiricists are supposed to be diehard adherents of introspection, whereas nothing could be farther from the truth).

Locke: “Because Sight ...conveying to our Minds the *Ideas* of Light and Colours, which are peculiar only to that Sense; and also the far different *Ideas* of Space, Figure, and Motion, the several varieties whereof change the appearances of its proper Object, *viz.* Light and Colours; we bring ourselves by use to judge of the one by the other. This in many cases, by a settled habit, in things whereof we have frequent experience, is performed so constantly, and so quick, that we take that for the Perception of our Sensation, which is an *Idea* formed by our Judgment; so that one, *viz.* that of Sensation, serves only to excite the other, and is scarce taken notice of it self; as a Man who reads or hears with attention and understanding, takes little notice of the Characters, or Sounds, but of the *Ideas*, that are excited in him by them. Nor need we wonder that this is done with so little notice, if we consider how *quick* the *actions of the Mind* are performed. For, as itself is thought to take up no space, to have no extension; so its actions seem to require no time, but many of them seem to be crowded into an Instant... How frequently do we, in a day, cover our Eyes with our Eye-lids, without perceiving that we are at all in the dark? Men, that by custom, have got the use of a By-word, do almost in every sentence pronounce sounds which, though taken notice of by others, they themselves neither hear nor observe. And therefore it is not so strange, that our Mind should often change the *Idea* of its Sensation, into that of its Judgment, and make one serve only to excite the other, without our taking notice of it... I ...leave with my Reader, as an occasion for him to consider, how much he may be beholding to experience, improvement, and acquired notions, where he thinks, he has not the least use of, or help from them.” (ECHU II/ix/§§8-10)

Hume: “We fancy, that were we brought on a sudden into this world, we could at first have inferred that one Billiard-ball would communicate motion o another upon impulse; and that we needed not to have waited for the event, in order to pronounce with certainty concerning it. Such is the influence of custom, that, where it is strongest, it not only covers our natural ignorance, but conceals itself, and seems not to take place, merely because it is found in the highest degree.” (EHU IV/i, 24)

Just consider Kant’s Copernican experiment a reaffirmation of this same basic lesson, but of a still profounder, more radical kind (“Copernicus ... dared, in a manner contradictory to the senses, yet true...” Bxxii n.).

Next Kant notes that his experiment, at the same time that it defines and legitimizes the scientific use of metaphysical concepts, also limits them. For it is only to objects which conform to our faculty of intuition that they have application; and since an object that depends on a faculty of intuition is, by definition, itself an intuition, a mere representation in us, it follows that metaphysical concepts are valid of objects only insofar as these objects themselves are mere representations in us. Objects that are not mere representation in us, they have no validity for. If nevertheless we try to apply them to objects insofar as these objects exist really and for themselves, the result, Kant argues, is that such objects cannot be even so much as thought without contradiction (= Antinomies). Thus, one final outcome of the experiment, and in his eyes the most basic of all, is that the discovery of the untrasgressible limitations of the a priori cognitive faculty: it is impossible for us to know a single thing about objects as they exist apart from our own capacity of representation: “we cognize a priori of things only what we ourselves put into them.” (Bxviii)

Does this mean that the *Critique* has only negative worth, as pointing up the limits of our metaphysical knowledge of reality? Kant argues that this is not exclusively the case. It must not be forgotten that it is not only reason that is limited but also sensibility. If the objects that can be known a priori are those that conform to our faculty of intuition, this also has the consequence that we cannot suppose that the objects of our faculty of intuition are coextensive with the real; there may also be objects to which we are insensible, yet real nonetheless. And although we cannot know these supersensible objects by means of our reason, we can still *think* them, in this very way: by recognizing that the very terms of the experiment leave open a space for a supersensible realm of reality. No contradiction will result from such a thought provided that I do not suppose I can use my concepts of objects to *know* this reality. Now, since, in Kant’s view, pure reason has a non-cognitive, moral employment as well as cognitive one, the ability to think this realm beyond objects of appearances turns out to be absolutely crucial. For it opens the way to a conception of human freedom that is compatible with an unrestricted reign to natural necessity: Bxxvii (bot p. 27).

This reasoning extends to God and immortality as well, Kant stating, famously, that “I have therefore found it necessary to deny **knowledge** in order to make room for **faith**.” (Bxxx)

One last note about the Copernican hypothesis: Kant tells us in a note that, though in the Preface he formulates it as a hypothesis and talks of giving it experimental confirmation (he means the Antinomies chapter of the Transcendental Dialectic), such talk must not be taken literally. He states categorically that “in the *Critique* itself it will be proved apodeictically, not hypothetically, from the nature of our representations of space and time and from the elementary concepts of the understanding.” (Bxxii n)

Next Kant claims that the science of metaphysics resulting from his new method is a strict unity to which no addition can be made by future efforts. For if metaphysics deals solely with that in objects which the thinking subject itself puts into them, it is not a knowledge of objects per se that is required or even possible, but rather a knowledge of this subject, taken in isolation, as a self-subsistent unity. Ignorance of the objects can therefore never be pled as an excuse for incompleteness in metaphysics, since metaphysics never has to do with objects except insofar as the subject itself produces them. That is, reason is here dealing with nothing other than itself, the principles of its own cognition, in their own internal, organic unity; hence, none of the piece can be missing nor any relation of any of the pieces to any other. Like logic, therefore, metaphysics must admit of the strictest completeness.

Kant then notes that despite all the pretended cognition that will have to be discarded because of his critique, it is no great loss, and certainly will cause no upset among the broader run of men. The subtle arguments of metaphysicians regarding freedom, God, and the immortality of the soul never meant much of anything to the vast majority of believers; their belief in these things had quite other foundations, so that the elimination of metaphysical sophistries occasioned by critique will cause not even a ripple in the world at large. And “just as fine-spun arguments in favour of useful truths make no appeal to the general mind, so neither do the subtle objections that can be raised against them” (Bxxxiv). Or, as Hume put it far more effectively, “errors in religion are dangerous, those in philosophy only ridiculous.”

Prolegomena

The *Prolegomena* is directed to those open-minded enough to entertain seriously the question, “Is such a thing as metaphysics possible at all?” Kant thinks that this question has taken on a new urgency and importance in the wake of the most momentous event in the history of metaphysics: the attack against it launched by David Hume. The promise of a renewed, restored metaphysics emerging from this devastation is far from obvious, but in fact Hume has struck a spark from which a flame might be brought forth once its fire has been fueled and carefully nursed.

Hume's attack focused merely on one of the concepts of metaphysics, but that the most important: the necessary connection between cause and effect (together with its variants: force, action, agency, activity, energy, power, etc.). Hume demanded of metaphysicians who claim that this concept originates through pure reason alone, unaided by experience, to show him how reason can ever conclude from the existence of one thing that something else, totally independent of it, *necessarily* exists. For any claim to know by pure reason alone that if *X* exists then necessarily *Y* exists also, fails to take into account that there is no *contradiction* in supposing that *X* exists but *Y* does not, or *Y* exists and *X* does not. Since this is just to say that the existence of *X* and that of *Y* are *logically* independent of one another, how can causal connections be purely a matter of reason? The only necessities and impossibilities that pure reason can know a priori are logical ones: the whole is greater than any of its proper parts, all bodies are extended, and for every effect there is a cause (which is not to say there are effects—it is only to say that *if* there were, the meaning of 'effect' would *logically* imply a cause—but whether there really are such things as effects at all is here the point in question); etc. As Kant

put it, Hume "demonstrated irrefutably that it was entirely impossible for reason to think a priori and by means of concepts such a combination as involves necessity. We cannot at all see why, in consequence of the existence of one thing, another must necessarily exist, or how the concept of such a connection can arise a priori."

In Kant's eyes, therefore, Hume's great accomplishment was to formulate two questions that had never before been posed: (i) how, without the aid of experience, can it be known that the existence of one thing necessitates that of another? and (ii) how can the concept of such a connection be acquired entirely a priori? The inability to answer these questions suffices to put the whole of metaphysics in doubt, to put in question its employment of the one concept it simply cannot afford to do without. For just imagine what metaphysics would be if its conceptual arsenal were stripped of all **causal** concepts: power, force, action, agency, activity, influence, dependence, conditionedness, necessity, entelechy, conatus, irritation, receptivity, creation, destruction, will, and so on and so on. Clearly, then, pure reason would be totally incapacitated if it were beyond its power to think that two things, logically distinct from one another, might nevertheless somehow depend on one another; and until metaphysics can produce the warrant for the use of such a concept totally a priori, and explain how a concept bearing on the existence of things can be acquired totally a priori, it must stand exposed as an emperor with no clothes—and this, as Kant well knew, precisely what Hume's challenge meant for his own treatise of the *mundus intelligibilis*.

As for Hume's own account of the validity of the causal principle and the origin of the concept of cause, it might seem that Kant's intention is to reject it out of hand; he does, after all, accuse Hume of having turned it into "a bastard of imagination" by mistaking "a subjective necessity (custom) for an objective necessity arising from insight." Yet, it is not so simple as that. Kant's point was that either cause and effect is a pure concept of the understanding or there is no such thing at all. It does no good to entitle a concept garnered from experience 'cause', for it must inevitably lack what is essential to that concept: necessary connection between the existence of one thing and that of another. For from experience no concept of necessity can be derived; experience can teach us that something *is* and *has always been* the case, but not that it is *necessarily* the case; and without a true concept of this necessity, there can be no causality properly so called. That is why Hume's notion of custom is a bastard, not entitled to the honored family name of 'cause'. Better not to talk of 'causes' at all if a certificate of birth independently of experience cannot be produced for it.

Yet, when this is said and done, Kant's account of the origin and employment of the concept is strikingly similar to that of Hume. On Hume's analysis, there are only three possible sources of the concept: we perceive necessary connection (will); a self-evident truth of pure reason; and consciousness, what goes on in our own minds as we perceive and judge what our senses present to us. Hume chose empirical consciousness, in the form of customary association; Kant defined a kind of consciousness which is pure, antecedent to all association, and to this pure mental activity he traced the metaphysical concept of cause and effect.

Like Hume, Kant grounds its application to objects on the imagination: only, in his case, it is the a priori imagination in its transcendental synthesis—a faculty with which Hume never expressed acquaintance and which he no doubt would have had no truck with. But, beyond its application, the concept itself is acquired, according to Kant, in the act of thinking the transcendental synthesis of imagination; hence, apart from pure imagination, we would indeed have the potential for pure concepts of understanding, but we could never realize that potential; and, indeed, it was on this ground that Kant could claim not to be an innatist with regard to pure concepts—they are acquired in the pure act of thought of the synthesis of the manifold in imagination (see handout).

In the passages which follow, Kant eulogizes Hume, and laments the sad fate of minds as original as his, which are condemned to be misunderstood or ignored. In this case, the culprits names are the so-called *common sense philosophers*—Reid, Oswald, Beattie and Priestly. They

are said to have taken for granted that which Hume questioned, and to have demonstrated zealously what it had never occurred to Hume to doubt. Specifically: Hume never questioned the certainty of the causal principle (that every beginning of existence must have a cause); his concern focused solely on the nature of this certainty: intuitive (self-evident) or demonstrative or some other? Reid et al insisted that Hume was denying its certainty, when in fact he was simply questioning the nature of that certainty, denying that it is a purely rational certainty (true by non-contradiction, i.e. the law of identity).

Now, Hume located its certainty in what he termed the "permanent, irresistible, and universal" principles of the imagination, which are "the foundation of all our thoughts and actions, so that upon their removal human nature must immediately perish and go to ruin." Indeed, he went very far in a Kantian direction by basing on the principle of cause and effect all our knowledge of nature, indeed the very possibility of an objectivity beyond the memory and senses itself. Yet, though every bit as certain and fundamental to human thinking as genuine propositions of reason (among which he included those of mathematics, e.g. $7+5=12$), this has nothing whatever to do with reason, including probable reason: reason knows nothing whatever of existential dependence, and the concept of cause cannot be employed except within the purview of human imagination. Thus, like Kant after him, Hume's concept of cause, as bound up with human consciousness, can never be applied to any object other than those which present themselves to it (viz. our perceptions); and its application even to them is conditioned by their relation in human imagination—as soon as they are considered in isolation from it, we have violated the conditions of the application of the concept to objects, and so speak without a meaning. This of course means that metaphysics in the sense of knowledge of things in themselves is strictly ruled out by Hume: even in respect of our perceptions, let alone things in themselves, the objectivity of the concept of cause is conditioned by the object's relation to consciousness—if perceptions or things we know nothing of may exist independently of our conscious regard, then *ipso facto* they cannot be involved in any causal relations. But, unlike Kant, Hume's rejection of metaphysics was unqualified: for having concluded that the concept we call 'cause' is in fact a product of *empirical* imagination, he precluded the possibility of a priori knowledge even of the objects of perception and experience.

At any rate, these were the tollings that roused Kant from his dogmatic slumber; in other words, he himself, was the flammable material ready to ignite when brought into contact with Hume's spark. As he recounts it, the first thing he undertook upon awakening was to determine whether Hume's criticism of cause might be generalized to all the concepts metaphysical reason desires to employ a priori: substance, reality, magnitude, etc. In its generality, the problem became: how can reason acquire *any* concept of an object purely a priori? and how can it think *any* combination of objects a priori, whether of dependence, or inherence, or magnitude, or necessity, etc.? One is the question: how is it possible to acquire pure concepts? And the other: how are synthetic judgments a priori possible? The second thing he did upon awakening from his slumber was to set about determining the precise number of metaphysical concepts, eliminating all those that were merely derivative, in the hope of discovering some clue as to their source (given that experience is ruled it). Since their origin had to be such as to make comprehensible how these concepts can be valid of objects a priori, Kant had to think of an a priori origin compatible with an objective employment. Realizing that an innate origin, though it might succeed in explaining how we get the concepts, could never give us any reason for thinking that the *objects themselves* are under any obligation to conform to these concepts, he decided that their origin had to be an *acquisition*, yet nonetheless not a derivation from anything else (the sensible and/or empirical)—an *original acquisition* (like the original right of man of Rousseau). How can they be original and still be known a priori to be valid of objects? The Copernican hypothesis was the answer: if the objects must conform to our pure concepts, if the objects themselves are *produced* in conformity with the rules these concepts prescribe in a manner analogous to the way mathematical concepts and the concepts of the physical sciences

prescribe rules to constructive acts, then the original acquisition of these concepts is achieved in the very act of this prescription itself: the act of thought, or judgment, with the transcendental schemata being the constructive acts.

But what of Hume? Why should Hume, if he could be told of this great project, think its execution important, and not scoff at it as so much artificial and unnecessary metaphysical filigree work? Here was Kant's coup de grace: Hume, he thinks, failed to recognize that the same doubts that beset the concepts of metaphysics and their application to objects equally affect those of mathematics, including basic arithmetic! In other words, if Hume had realized that even $2+2=4$ is not a necessary truth of pure reason, guaranteed solely by the principle of non-contradiction, he would have realized the imperative need for a thorough criticism of pure reason.