

Prolegomena [= Preliminaries] to any Future Metaphysic that can Present itself as a Science

Immanuel Kant

Copyright © Jonathan Bennett 2017. All rights reserved

[Brackets] enclose editorial explanations. Small ·dots· enclose material that has been added, but can be read as though it were part of the original text. Occasional •bullets, and also indenting of passages that are not quotations, are meant as aids to grasping the structure of a sentence or a thought. Every four-point ellipsis indicates the omission of a brief passage that seems to present more difficulty than it is worth. Longer omissions are reported between brackets in normal-sized type.

First launched: July 2004

Last amended: April 2007

Contents

Introduction	1
Preamble on the special features of all metaphysical knowledge	7
General Problems	12
Main transcendental Problem 1: How is pure mathematics possible?	16
Main transcendental problem 2: How is pure natural science possible?	25
Main transcendental problem 3: How is metaphysics possible in general?	45

Conclusion: Determining the boundaries of pure reason	61
Solution of the general question of the <i>Prolegomena</i>: How is metaphysics possible as a science?	1
Appendix: On what can be done to make metaphysics actual as a science	5

Solution of the general question of the *Prolegomena*: How is metaphysics possible as a science?

Metaphysics as a natural tendency of reason is real, but by itself it is dialectical and deceitful (as the analytic solution of the third principal question showed). If we set ourselves to take principles from it, and in using them to follow the natural (but nonetheless *false*) illusion, we can never produce science, but only a pointless dialectical art in which one school may outdo another but none can ever get, and be entitled to, lasting approval.

For metaphysics as a science to be entitled to claim not mere fallacious plausibility but insight and conviction, a critique of reason itself must exhibit

- the whole stock of *a priori* concepts,
- the classification of them according to their different sources (sensibility, understanding, and reason),
- a complete list of these concepts, and
- the analysis of each of them together with all the consequences of that analysis;

but above all the critique must show

- the possibility of synthetic *a priori* knowledge (doing this through a deduction of these concepts),
- the principles governing the use of the *a priori* concepts, and finally
- the boundaries of that use;

and all of this is to be presented in a complete system! Thus criticism, and that alone, contains in itself the whole well-tested and verified plan for achieving metaphysics as a science—the plan and indeed all the means for carrying it out. By any other ways or means the task is impossible.

[Here and below, ‘criticism’ translates *Kritik*, which is usually rendered as ‘critique’.] So the question here isn’t so much •how the task

is possible as •how to get it under way, inducing good minds to quit their mistaken and fruitless cultivation in favour of one that won’t deceive, and •how such an alliance for the common end may best be directed.

This much is certain, that someone who has sampled criticism will for ever after be disgusted with all the dogmatic twaddle that he used to endure—he *had* to endure it because his reason was in need of something and couldn’t find anything better than the twaddle for its nourishment.

Criticism relates to ordinary academic metaphysics exactly as chemistry does to alchemy, or as astronomy does to the astrology of the fortune-teller. I guarantee that when you have thought through and grasped the principles of criticism, even if only in these preliminaries, you will never return to that old and sophisticated pseudo-science of dogmatic academic metaphysics; rather, you will look forward with a certain delight to a metaphysics that is now surely in your power, that requires no more preparatory discoveries, and, above all, that can provide reason with permanent satisfaction. For here is an excellence that metaphysics can confidently count on and that no other possible science can: *it can be completed and put into a permanent state where there are no more changes to be made, and no additions through new discoveries*. That’s because in metaphysics reason has the sources of its knowledge in itself, not in objects and the intuition of them (reason has *nothing* to learn from intuition); and when it has presented the fundamental laws of its own capacities completely, and so definitely as to prevent any misunderstanding, there’s nothing left for pure reason to know *a priori*—indeed, there isn’t even any basis

left for it to ask any further questions. There's something especially attractive about the sure prospect of knowledge that is so definite and so completed—even apart from all its advantages (of which more later).

All false art, all empty 'wisdom', lasts its time out but eventually destroys itself, and its cultural high-point comes at the moment of the onrush of its decay. That this time has come for metaphysics is shown by the condition into which it has fallen in all the learned nations, in contrast with all the zeal with which other sciences of every kind are pursued. The old organization of university studies still preserves its shadow; and now and then a solitary academy of science, by offering prizes, tempts someone or other to have a shot at it; but it is no longer counted among the solid sciences. You can judge for yourself how a gifted man would take it if he were called 'a fine metaphysician'! It might be meant as a compliment, but hardly anyone would want to be so labelled.

Yet, though the time of the collapse of all dogmatic metaphysics has undoubtedly arrived, we are still far from being able to say that the time has come for its rebirth through a solid and complete critique of reason. When someone's inclinations shift from running one way to running in the opposite direction, he passes through an intermediate stage of indifference in which he isn't inclined in any direction. And this fact about human desires and tendencies has its analogue in shifts of intellectual direction among the sciences. This moment of 'indifference', with an old science on the wane and no new one to take its place, is the most dangerous for an author, but in my opinion it's the most favourable for the science. For when the total breaking of former ties has extinguished the partisan spirit, minds are in the best state to take in, gradually, proposals for a new scheme of alliances.

If I say:

I hope that these preliminaries may excite investigation in the domain of criticism, and provide something new and promising to nourish the universal spirit of philosophy that seems—except for moral philosophy—to be under-nourished,

I can already imagine that everyone who is tired and cross from walking the thorny paths of my critique will ask me: What's your basis for hoping *that*? I answer: *The basis of the irresistible law of necessity.*

Will the human mind ever give up metaphysical researches altogether? There's no more chance of that than there is of our choosing to give up breathing altogether so as to avoid inhaling impure air! So there will always be metaphysics in the world; what's more every person—especially every thinking person—will have metaphysical views, and in the absence of a public standard he will tailor them to suit himself. What has been called 'metaphysics' up to now can't satisfy any demanding mind, but it's quite impossible to give up metaphysics completely; so a critique of pure reason itself must now be *attempted*; or if one exists it must be *investigated* and comprehensively tested. There's no other way to meet this pressing need, which is something more than mere thirst for knowledge.

Ever since I have come to know criticism, when I finish reading a book with metaphysical content—one that has entertained and enriched me by its precision of thought, variety, orderliness, and easy style—I can't help asking: *Has this author really advanced metaphysics a single step?* I hope they will forgive me—those learned men whose writings have been useful to me in other respects and have always helped me to develop my mental powers—for saying that I have never been able to find that the science of metaphysics has been advanced in the least by their works or by my own

lesser ones (even when my egotism speaks in their favour!).

The reason for this is very obvious: it is that metaphysics didn't then exist as a science; and those other writers and I couldn't make small steps towards bringing it into existence, because it can't be assembled bit by bit, but must have its seed fully preformed in the critique. However, in order to prevent any misunderstanding we should bear in mind something I have already said: the understanding gains a great deal from the analytic treatment of our concepts, but the science (of metaphysics) isn't in the least advanced by it, because these analyses of concepts are merely materials out of which the science is to be assembled in the first place. Let the concepts of substance and of accident be ever so well analysed and fixed; that's an excellent preparation for some future use. But if I can't prove that *in everything that exists the substance endures and only the properties change*, our science isn't the least advanced by all this analysis. Metaphysics has so far not been able to prove *a priori* either the above proposition, or the principle of sufficient reason, still less any compound principle such as belongs to psychology or cosmology, or indeed any synthetic proposition whatsoever. So all this analysis has achieved nothing, created and advanced nothing; and despite all this bustle and clatter the science is right back where it was in Aristotle's time; though the preparations for it would have been better advanced now than they were back then, if only the guiding thread to synthetic knowledge had been found.

If anyone thinks himself wronged in this, he can easily refute my charge by producing a single synthetic proposition belonging to metaphysics that he offers to prove *a priori* in the dogmatic manner. Until he has done this I shan't grant that he has really advanced the science; even if the proposition that he claims to be able to prove is sufficiently

confirmed by common experience. No demand can be more moderate or fairer than this, and if it isn't fulfilled (as it quite certainly won't be), the fairest verdict we can give is this: *Up to now, metaphysics has never existed as a science.*

In case my challenge is accepted, I must rule out just two things.

(1) One is: playing around with probability and conjecture, which are as little suited to metaphysics as they are to geometry. Nothing can be more absurd than to think of grounding our judgments on probability and conjecture in metaphysics, which is a philosophy based on pure reason. Everything that is to be known *a priori* is for that very reason announced as absolutely certain, and must therefore be proved as such. We might as well think of basing geometry or arithmetic on conjectures! The calculus of probability, which is part of arithmetic, contains no merely probable judgments. Rather, it consists of completely certain judgments about the degree of possibility of certain upshots in given homogeneous conditions. What happens across the totality of all possible cases *must* be in accordance with such rules or judgments, though these aren't determinate enough to say what will happen in any particular case. Only in empirical natural science can conjectures be tolerated (they come in there through induction and analogy), and even there it must at least be quite certain that what one is assuming *could* be true.

(2) The second thing I rule out is decision by means of the divining rod of so-called *sound common sense*, which doesn't dip in the same place for everyone and is guided by the personal qualities of the person holding it. When we are dealing with concepts and principles not considered as valid with regard to experience but considered as valid even beyond the conditions of experience, appealing to common sense is even more absurd than relying on probability, if

that's possible. For what *is* common sense? It is *ordinary understanding* insofar as it judges correctly. But what is •ordinary understanding? It is the capacity for knowledge and for using rules in application to particular cases, as distinguished from •speculative understanding, which is the capacity for knowledge of rules in the abstract. So common sense can hardly understand the rule that *every event is determined by its cause*, and can never take it in as a general proposition. It therefore demands an example from experience; and when it ·is given one, and· hears that this rule means nothing but what it (·common sense·) always thought when a window-pane was broken or an article of furniture went missing, *then* it understands the principle and agrees to it. •Ordinary understanding is thus of use only to the extent that it can see its rules confirmed by experience (though actually the rules are in it *a priori*); consequently the job of having insight into these rules *a priori* and independently of experience is assigned to •speculative understanding, and lies quite outside the domain of vision of common sense. But metaphysics has to do only with speculative understanding; and someone who appeals to common sense for support in metaphysics shows that he doesn't have much of it! For in this context common sense has no judgment at all; and ·when it is invoked, there is a kind of bad faith in that, because· it is looked down on with contempt except when people are in difficulties and don't know where else to turn for advice or help.

These false friends of common sense (who occasionally prize it highly, but usually despise it) customarily offer this excuse ·for sometimes appealing to it·:

There must in the end be some propositions that are immediately certain, and for which there's no need to give any proof, or even any account at all; because if there were not, there would be no end to the grounds

for our judgments. ·And these immediately certain propositions are the ones we know to be true through our common sense·.

But these people can never prove their right to say this by pointing to anything indubitable that they can immediately ascribe to common sense—with two exceptions ·that are irrelevant to our present concerns·. •One is the principle of contradiction, which ·we can set aside because it· is inadequate for showing the truth of synthetic judgments. •The other is comprised of mathematical propositions, such as that twice two make four, and that between two points there is only one straight line, etc. But these judgments are vastly different from those of metaphysics. For in mathematics when I conceptually represent something to myself as possible I can also make it, construct it, in my thought: to one *two* I add the other *two*, one by one, and so myself make the number *four*; or from one point to another I draw in thought all kinds of lines, and can draw only one in which every part is like every other part ·which means that the line is straight·. But ·no such construction has a place in metaphysics, as I shall explain through the example of the concept of causation·: with all my power of thinking I can't extract from the concept of one thing the concept of *something else* whose existence is necessarily connected with the first thing; rather, ·if I want a basis for connecting something with something else· I must call in experience. Now, my understanding provides me *a priori* (yet always only in reference to possible experience) with the concept of such a connection ·between different things·, namely *causation*. But I can't exhibit this concept *a priori* in intuition, thus showing its possibility *a priori*, as I can the concepts of mathematics. In metaphysics the concept of causation (together with the principles of its application) has to be valid *a priori*, and for *that* there must be a justification and deduction of its

possibility—for otherwise we can't know what its range of validity is, ·e.g.· whether it can be used only in experience or also outside it. Such a ·justification and deduction are nothing remotely like the ·intuitive construction through which we can show possibility in mathematics. [See the long note on page 9.]

In metaphysics as a speculative science of pure reason, therefore, we can never appeal to common sense. We *can* make such an appeal when

we are forced to ·abandon *pure reason* and to renounce all purely speculative knowledge (which must always be *knowledge* ·strictly so-called·, which involves renouncing metaphysics itself and its teaching on certain matters,

·this 'forcing' coming about because·

we find that all we can achieve is ·*reasonable belief*—which suffices for our needs and may indeed be more wholesome for us than knowledge ·strictly so-called·.

When we make that switch, the shape of the situation is completely altered. Metaphysics must be science, over-all and in each part; otherwise it is nothing. That is because metaphysics, as speculation of pure reason, has nothing to hold it steady except *universal* insights. Beyond its domain, however, probability and common sense can be used legitimately and to good effect, but following principles of their own, the importance of which always depends on their reference to practical life.

That's what I consider myself entitled to require for the possibility of metaphysics as a science.

Appendix:

On what can be done to make metaphysics actual as a science

As none of the paths that have so far been followed have reached the goal ·of metaphysics as a science·, and since it never will be reached except through a preceding critique of pure reason, it seems reasonable to ask that this present attempt ·at such a critique· be examined carefully and accurately—unless you think it better to give up all pretensions to metaphysics, which is all right as long as you stick to it.

If we take the course of things as it is, not as it ought to be, there are two sorts of judgments: **(1)** *a judgment that*

precedes the investigation, (2) a judgment that comes after the investigation. In our case **(1)** is what happens when the reader pronounces judgment on the *Critique of Pure Reason* on the basis of his own metaphysics, though the possibility of *that* is what the *Critique* aimed to investigate. In **(2)** ·in our case· the reader is able to ·set aside for a while the consequences of the critical enquiries, which may clash violently with the metaphysics that he used to accept, and ·first examines the grounds from which those consequences can be derived. If what ordinary metaphysics offers were

demonstrably certain (like the theorems of geometry, for instance), judgments of kind **(1)** would be legitimate; for if the consequences of certain principles conflict with established truths, the principles are false and can be rejected without further enquiry. But if metaphysics doesn't have a stock of indisputably certain (synthetic) propositions, and if it is even the case that a number of the propositions of metaphysics—though as plausible as the best of them—have consequences that conflict with one another, and if metaphysics contains absolutely no criterion for the truth of specifically metaphysical (synthetic) propositions, then the **(1)** kind of judging isn't admissible, and the **(2)** method should be followed, that is, the investigation of the principles of the *Critique* must precede all judgments as to its worth or unworth. In the remainder of this Appendix I shall present an actual example of **(1)**, followed by a proposal for an example of **(2)**.

On a sample of a judgment of the *Critique* prior to its examination

This judgment occurs in an anonymous review in the *Göttingen Scholarly News* for January 1782. . . . When an author who knows the subject-matter of his work and has worked hard to present his own thoughts in it falls into the hands of a reviewer who for his part is sharp enough to see the points on which depend the value (if any) of the book, who doesn't hang on the *words* but goes for the *content*, and confines himself to sifting and testing the principles from

which the author started, the author may dislike the severity of his judgment but the public doesn't mind it because here the public is the winner. And the author can be glad that an opportunity to correct or explain his work has come through the examination of a competent judge. If he thinks he is mainly right, he can in this way remove any obstacles that might eventually hurt the success of his work.

It's not like that with my reviewer. He seems to have missed entirely the real point of my enquiry. Perhaps he was impatient with thinking his way through a lengthy work; or angry at the threatened reform of a science in which he thought he had settled everything long ago; or—what I reluctantly believe is the case—narrowness of grasp stopped him from carrying his thoughts beyond his school metaphysics. Anyway, he impetuously whips through a long series of propositions which no-one could grasp without knowing their premises, and scatters around his condemnations without giving understandable reasons. So his review is no use to the reader, and doesn't do the slightest harm to me in the judgment of experts. So I would have passed over this review completely if it hadn't given me an opportunity to provide some clarifications that may save some readers of these *Preliminaries* from misinterpretations.

Wanting to position himself so as to set the whole work in a light that is most unflattering to its author, doing this easily without putting any work into it, Reviewer begins and ends by saying: 'This work is a system of transcendental (or, as he translates it, of higher) idealism.'¹⁶

¹⁶ 'Higher'—no way! High towers, and metaphysically-great men that resemble them, are not for me—there is usually too much wind around them! My place is the fertile bottom-land of experience; and the word 'transcendental'—whose meaning was so often explained by me but not once grasped by Reviewer (so carelessly has he looked at everything)—doesn't signify something that goes beyond all experience, but something that does indeed precede experience *a priori*, but whose role is simply to make knowledge through experience possible. If these concepts step beyond experience, their employment is termed *transcendent*, as distinct from their *immanent* use, that is, their use limited to experience. Don't confuse 'transcendent' with 'transcendental'. All misunderstandings of this kind have been adequately guarded against in the work itself, but it suited the reviewer's turn to misunderstand me. [The use here of 'Reviewer', as though it were a proper name, is Kant's. He will do this once more.]

A glance at this line showed me what sort of review was in store for me. It was like someone who has never seen or heard of geometry, finds a copy of Euclid and on flipping through its pages sees various figures, is asked his opinion of it, and replies: 'The work is a text-book of drawing; the author uses a special language in which to give dark, incomprehensible directions that in the upshot teach nothing more than what everyone can accomplish with a good natural eye, etc.'

Meanwhile, let us see what sort of idealism it is that runs through my whole work, although it is far from constituting the soul of the system.

The thesis of all genuine idealists from the Eleatic school to Bishop Berkeley is contained in this formula:

All knowledge through the senses and experience is nothing but sheer illusion, and only in the ideas of the understanding and reason is there truth.

The principle that governs and determines *my* idealism throughout is on the contrary:

All knowledge of things through unaided pure understanding or pure reason is nothing but sheer illusion, and only in experience is there truth.

This is precisely the opposite of the former, genuine idealism. So how did I come to use this expression for a completely opposite purpose, and how did my reviewer come to see genuine idealism everywhere?

The solution of this difficulty rests on something that could have been very easily understood—by anyone who wanted to!—from the over-all structure of the work. Space

and time, together with everything they contain, are not things or qualities in themselves, but belong merely to the appearances of such things and qualities; up to this point I am doctrinally at one with the ·genuine· idealists. But they, and especially Berkeley, regarded space ·itself· as a mere empirical representation, and held that it together with all its properties is known to us only by means of experience or perception—just like the appearances *in* space. As against this, I show in the first place, that

space (and also time, which Berkeley ignored) and all its properties can be known by us *a priori*, because space (as well as time) •is present in us before all perception or experience as a *pure form of our sensibility* and •makes possible all sensible intuition and thus all appearances.

It follows from this ·contrast between Berkeley and me· that •because truth rests on universal and necessary laws as its criteria, experience **for Berkeley** can have no criteria of truth, because its appearances (according to him) have nothing underlying them *a priori*, from which it follows in turn that they are nothing but sheer illusion; whereas **for me** space and time (in combination with the pure concepts of the understanding) prescribe their law *a priori* to all possible experience, and this at the same time yields the sure criterion for distinguishing truth from illusion in experience.¹⁷

My so-called idealism (properly: *critical* idealism) is thus of a quite special kind, in that

it overthrows ordinary idealism; and through it all *a priori* knowledge, even that of geometry, first re-

¹⁷ Genuine idealism always has a visionary purpose; it is bound to. But my idealism is designed solely for grasping the possibility of our *a priori* knowledge of objects of experience—a problem that has never been solved before, and never even been posed. In this way all visionary idealism collapses. As was already to be seen in Plato, visionary idealism inferred from our ·having· *a priori* knowledge (even that of geometry) ·that there is· another intuition different from that of the senses, namely an intellectual intuition. It never occurred to any of them that the senses themselves might intuit *a priori* ·as I say they do, for example in geometry·.

ceives objective reality; and even the most zealous ·ordinary· realists couldn't have claimed *that*, because they lacked my demonstrated ideality of space and time—that is, my proof that space and time are forms of our sensibility·.

In these circumstances I would have liked, so as avoid all misunderstanding, to name this concept of mine differently; but I can't very well alter the name totally. So I may be permitted in future to call it 'formal idealism' (·as I did on page 52·) or, better, 'critical idealism', to distinguish it from the dogmatic idealism of Berkeley and the sceptical idealism of Descartes.

I find nothing else worthy of comment in this review of my book. All the way through the reviewer presents blanket judgments—a smart procedure for a reviewer to use, because it doesn't reveal the state of his knowledge or ignorance; ·whereas· a single criticism that was thorough and detailed, if it concerned the main issue (as it ought to), might have exposed error in my work, and might also have revealed the reviewer's level of skill in this sort of enquiry. Another well-conceived device for removing early on the readers' desire to read the book itself—readers who usually form their conceptions of books merely from newspaper articles—is •to pour out all in one breath a number of propositions, torn out of the context of their grounds of proof and explanations, which are bound to strike the reader as nonsensical (especially considering that they are poles apart from all ·ordinary· school-metaphysics), •to make the reader disgusted with the demands on his patience ad nauseam, and then, after presenting ·and attributing to me· the brilliant proposition that *constant illusion is truth* (which was news to me!), •to conclude with the firm, fatherly

rebuke: 'What's the point, then, of this quarrel with accepted language, what's the point—and what's the source—of the idealistic distinction?' After a first judgment that all that is special in my book is metaphysically heretical, now at the end it is said to be a mere change of language; which clearly proves that my would-be judge hasn't the slightest grasp of it, and hasn't even understood himself.¹⁸

Reviewer speaks like a man who must be aware of having important and excellent insights—but ones that he keeps hidden, for I don't know of anything recent relating to metaphysics that would justify his tone. It is wrong for him to withhold his discoveries from the world, for there are doubtless many others like me who haven't been able to find, in all the fine things that have been written in this branch of philosophy, anything that has advanced the science ·of metaphysics· by so much as a finger-breadth. What we *do* find are •definitions sharpened, •lame proofs fitted out with new crutches, •the crazy-quilt of metaphysics supplied with new patches or with a change of pattern; but none of this is what the world requires! The world has had enough of metaphysical assertions; what is wanted is ·to establish· •the possibility of this science, •the sources from which certainty could be derived in it, and •sure criteria by which to distinguish the dialectical illusion of pure reason from truth. The reviewer must have the key to all this; otherwise he would never have spoken in such a high tone.

But ·joking aside· I am inclined to suspect that no such requirement for the science ·of metaphysics· has ever entered his head. If it had,

he would have focussed on this matter in his review, and ·if he thought I had been wrong about it· even a failed attempt in such an important affair would

¹⁸ [Kant has a footnote here, protesting at two of the reviewer's misunderstandings.]

have won his respect. If that is how things stand, we are good friends again. He can think his way as deeply as he likes into his metaphysics; no-one will stop him; but he can't make judgments about the source of metaphysics in reason, for that lies outside metaphysics.

That's if the requirements for a science of metaphysics had entered his head. But my suspicion that they *didn't* is not unfounded, as is shown by the fact that he doesn't say a word about the possibility of synthetic knowledge *a priori*, though this was the real problem on the solution of which the fate of metaphysics wholly rests, and to which my *Critique* (along with the present *Preliminaries*) was entirely directed. The idealism that he stumbled on in the *Critique*, and was pinned down by, was incorporated in the system only because it was the sole means for solving the above problem (though it was later confirmed on other grounds); so if he had understood what was going on he would have to have shown either that the problem isn't as important as I make it out to be in the *Critique* (and again now in these *Preliminaries*), or that my *appearance* concept doesn't solve it at all or provides a solution that is inferior to some other. But I don't find a word of this in the review. So the reviewer understood *nothing* of what I wrote, and perhaps also nothing of the spirit and nature of metaphysics itself; unless (and I would rather think this) a reviewer's haste, and annoyance at the difficulty of working through so many obstacles, threw an unfavourable shadow over the work lying before him, hiding from him its fundamental features.

In the domain of metaphysics as elsewhere, there is a good deal to be done before a learned journal—however carefully recruited and well-chosen its contributors are—can maintain its otherwise well-deserved reputation. Other sciences and branches of knowledge have their standards.

Mathematics has its standard within itself; history and theology have it in secular or sacred books; natural science and medicine have it in mathematics and experience; jurisprudence has it in law books; and even matters of taste have standards in the examples of the ancients. But for judging the thing called metaphysics the standard has yet to be found (I have made an attempt to settle what it is and how it should be used). Until it is worked out, what is to be done when works of this kind are to be judged? If the works are of the dogmatic kind, do what you like with them; when someone plays the master over others in this game, it won't be long before he runs into someone else who pays him back in kind. But if the writings are of the critical sort—offering a critique not of other writings but of reason itself—then the standard of judgment can't be taken for granted but must first be sought for. When such writings are in question, it may still be all right to offer objections and blame; but underlying them should be an attitude of co-operation, because the need for standards, and for metaphysics to become a science is common to us all, and the lack of the needed insight makes it inappropriate for anyone to come across as a judge handing down verdicts.

But so as to connect this defence of my work with the interests of the philosophizing public, I propose a *test* that will settle the question of how metaphysical enquiries should be directed towards their common end. It is just what mathematicians have done to show by competition which methods are best:

I challenge my reviewer critic to prove *in his way* any one really metaphysical principle that he accepts. Being metaphysical it must be synthetic and known *a priori* from concepts. It could be one of the most indispensable principles, as for instance the principle of the persistence of substance, or of the necessary

determination of events in the world by their causes; but it •must (this is a fair demand) be proved on a *priori* grounds.

If he can't do this (and silence is a confession), he must admit that

as metaphysics is nothing at all without the absolute certainty of propositions of this kind, and as he can't prove any of them in his dogmatic manner, the first thing that's needed—before anything else is done—is to establish the possibility or impossibility of metaphysics, in a critique of pure reason.

So he is obliged either to admit that my principles of criticism are correct, or to prove that they are not. I can already foresee that, although he has been carefree in his reliance on the certainty of his principles, when it comes to a strict test he won't find a single one in the whole range of metaphysics that he can boldly bring forward. So I shall grant him the most favourable terms that can ever be expected in such a competition, namely: I shall take the onus of proof from him and lay it on myself.

He finds in these *Preliminaries* [section 51] and in my *Critique* (B 454–89, the Antinomies chapter) eight propositions, in pairs whose members contradict each other, but each of which necessarily belongs to metaphysics, which must either accept or disprove it (although each has in its day been accepted by some philosopher). Now the reviewer is at liberty to select •any one he likes out of these eight propositions, and to accept it without any proof (that's a gift from me), but •only one (for wasting time won't do either of us any good); and then to attack my proof of the contrary proposition. If I can rescue the latter, thereby showing that the opposite of the proposition he chose can be just as clearly proved in accordance with principles that every dogmatic metaphysics must necessarily recognize,

then this will settle that metaphysics has a hereditary fault that can't be *explained*—let alone *removed*—until we ascend to the birth-place of metaphysics, pure reason itself. So my critique—which makes that ascent—must either be accepted or replaced by a better one; it must at least be *studied*, which is all I am demanding now. If on the other hand I can't save my proof, then •a synthetic proposition *a priori* from dogmatic principles is firmly entrenched on my opponent's side, •my impeachment of ordinary metaphysics is revealed as unfair, and •I pledge myself to recognize his censure of my critique as justified (though none of this *will* happen!). But for this it would be necessary, it seems to me, that he should *drop his anonymity*. Otherwise I don't see how I could avoid, instead of having just one problem to deal with, being honoured or assailed by many problems from anonymous and indeed uninvited opponents.

Proposal for an investigation of the *Critique*, on which a judgment can follow

I am obliged to the learned public for the silence with which it has for a long time honoured my *Critique*; for this shows •a postponement of judgment, and thus •some supposition that a work that leaves all the beaten paths and strikes out on a new and initially difficult one may contain something through which an important but currently withered branch of human knowledge might derive new life and fruitfulness; and thus it also shows •a concern not to break off and destroy the still delicate graft through a hasty judgment. A specimen of a judgment that was delayed for the above reasons is now before my eyes in the *Gotha Scholarly News*. Setting aside my own (suspect) praise for this review, any reader can see for himself that it is a solid piece of work; this can be seen from its graspable and accurate presentation of a portion of the basic principles of my work.

Because an extensive structure can't be judged as a whole from a hurried glance, I propose that it [the system of *Critique of Pure Reason*] be tested piece by piece from its foundations, and that the present *Preliminaries* be used as a general outline with which the work itself could then sometimes be compared. If this suggestion were based only on the imagined importance that vanity usually attributes to one's own output, it would be immodest and would deserve to be indignantly rejected. But that isn't how things stand; something very serious is at stake; the affairs of speculative philosophy are now on the brink of total extinction, although human reason hangs onto them with undying affection, an affection that is now trying (and failing) to change into indifference because it has been constantly disappointed.

In our thinking age one might expect that many deserving men would use any good opportunity to work together for the common interest of an ever more enlightened reason, if only there were some hope that in this way they would reach their goal. Mathematics, natural science, law, arts, even morals etc., don't completely fill the soul; there's always a space staked out for pure, speculative reason. The emptiness of this space prompts us to resort to grotesque masks and worthless glitter, or to mysticism, ostensibly in search of employment and entertainment though really we are just distracting ourselves so as to drown out the burdensome voice of reason, which, true to its own nature, demands something that can satisfy *it*, and not merely something that started up so as to serve other ends or to satisfy our inclinations. So a study that is concentrated on •this territory of *reason existing for itself* must (or so I have reason to hope) have a great attraction for anyone who has tried in this way to stretch his thought, because it is just precisely •here that all other kinds of knowledge—all other goals, even—must come together and unite into a whole. I would venture to say that

the attraction is greater than any other theoretical knowledge has; one wouldn't lightly trade this one for any of them—e.g. forgoing metaphysics in order to take up chemistry.

However, for this investigation I am not offering the work itself, but rather these *Preliminaries* as plan and guide. Although

I am even now well satisfied with the *Critique* as far as its content, order, and manner of presentation are concerned, and with how carefully I weighed and tested every sentence before writing it down (for it has taken me years to be completely satisfied not only over-all but also in detail, sometimes labouring to become satisfied with the sources of one particular proposition),

I am nevertheless not completely satisfied with my exposition in some chapters of the Doctrine of Elements—for example on the Deduction of the Concepts of the Understanding, or on the Paralogisms of Pure Reason—because a certain long-windedness takes away from their clarity; and your examination of the work as a whole could be based on what these *Preliminaries* say about those chapters rather than on the chapters themselves.

The Germans are praised for taking things further than people of other nations in matters where steady and continuous work is needed. If this opinion is well founded, then an opportunity to confirm it presents itself here: a project in which all thinking men have an equal interest, and whose successful outcome is hardly in doubt, though it has never succeeded before. The prospects for completing the project are good especially because the science in question is of such a peculiar sort that it can be brought to completion all at once, reaching a *permanent state* in which it can never be •taken the least bit further, •amplified by later discoveries, or even •altered in any way (apart from improvements in

clarity in some places, or improvements in how the science is used for all sorts of purposes). This advantage of being made finally complete in a single operation is one that no other science can have, because none of the others concerns a cognitive faculty that is as completely isolated and as independent of other faculties as is the faculty of pure reason. The present moment seems to be favourable to my expectations, because just now in Germany no-one seems to know how to occupy himself outside the so-called useful sciences, doing something that isn't mere play, but a project in which success will be permanent.

I must leave to others to work out how the efforts of scholars might be united in the pursuit of this goal. I'm not looking for a mere acceptance of my theses by anyone; I'm not even flattering myself with the *hope* of that. But as long as the matter is investigated from the ground up, perhaps with my system's being subjected to attacks, repetitions, qualifications, or confirmation, completion, and extension, the outcome is certain to be a system—maybe not mine—which can become a possession for which future generations will have reason to be grateful.

It would take too long for me to show here what kind of metaphysics may be expected to ensue if we first get right about the principles of criticism, and to show how the resultant metaphysics would appear richly and respectably outfitted, *not* cutting a poor, paltry, plucked figure just because its old false feathers had been pulled out! But other great benefits that such a reform would bring with it are immediately obvious. The ordinary metaphysics had good uses, in that it sought out the elementary concepts of pure understanding in order to clarify them through analysis and make them definite through explanation. In this way it was a training for reason, in whatever direction it might go. But that's all the good the ordinary metaphysics did; and really it did *less* than that. For it negated this service

that it had performed for reason by encouraging conceit through reckless assertions, sophistry through subtle escapes and excuses, and shallowness through the ease with which it settled the most difficult problems by means of a little school-philosophy. This school-philosophy is all the more seductive the more it has the option of taking something from the language of science (on the one hand) and something from ordinary speech and thought (on the other), thus being all things to all men—but in reality nothing at all! In contrast, criticism gives to our judgment a standard by which knowledge can with certainty be distinguished from pseudo-knowledge; and, by being brought into full operation in metaphysics, criticism lays the basis for a way of thinking that goes on to extend its healthy influence over every other use of reason, for the first time inspiring the true philosophical spirit. But the service that criticism does for theology also, by making it independent of the judgment of dogmatic speculation and thus securing it completely against the attacks of all dogmatic opponents, is certainly not to be valued lightly. For ordinary metaphysics, although it promised to give great help to theology, couldn't keep this promise; indeed it was worse than useless to theology. By calling speculative dogmatics to its assistance, which it did under the influence of common metaphysics, theology succeeded only in arming enemies *against* itself. Mysticism, which can prosper in a rationalistic age only when it hides behind a system of school-metaphysics, under the protection of which it may venture to *rave rationally*, so to speak, will be driven by critical philosophy from this, its last hiding-place. And concerning all of this nothing else can be as important for a teacher of metaphysics as to be able to say—once and for all, with universal agreement—that what he is expounding is at last *science*, and that it will bring real benefit to the public.