

Critique of Pure Reason up to the end of the Analytic

Immanuel Kant

Copyright ©2010–2015 All rights reserved. Jonathan Bennett

[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. Each 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 square brackets in normal-sized type. This version follows (B) the second edition of the *Critique*, though it also includes the (A) first-edition version of the Preface and of one other extended passage. Numerals like vii and 27 in the margins refer to page-numbers in B; ones like A xii and A 242 refer to A, and are given only for passages that don't also occur in B; and the likes of ..68 mean that B 68 (or whatever) started during the immediately preceding passage that has been omitted. These references can help you to connect this version with other translations or with the original German. Cross-references to other parts of this work include the word 'page(s)', and refer to page-numbers at the foot of each page. When something is referred to as 'on page n' it may run over onto the next page.

First launched: January 2007

Last amended: May 2007

Contents

Prefaces and Introduction	1
Preface (first edition)	1
Preface (second edition)	6
Introduction	17
Transcendental aesthetic	28
Space	29
Time	32
Logic Introduction: The Idea of a Transcendental Logic	41
Analytic of concepts:	
Chapter 1: Metaphysical Deduction	47
Chapter 2: Transcendental deduction	57
The analytic of principles	89
Introduction: Transcendental judgment in general	89
Chapter 1: The schematism of the pure concepts of the understanding	91
Chapter 2: The system of all principles of pure understanding	95
1. Axioms of Intuition	100
2. Anticipations of perception	102
3. Analogies of experience	106
4. Postulates of empirical thought	123
Chapter 3: The basis for distinguishing all objects into phenomena and noumena	135
Appendix: The amphiboly of the concepts of reflection	143

Logic Introduction: The Idea of a Transcendental Logic

1. Logic in general

[The Elements part of the work divides into Aesthetic, which started on page 28, and Logic, which starts now.]

74 Our knowledge comes from two basic sources in the mind—
 •the getting of representations (the *receptiveness* of impressions), and
 •the power to achieve, through these representations, knowledge of objects (*activeness* of concepts). Through the former an object is •*given* to us, through the latter it is •*thought* on the basis of that representation (which is a mere state of the mind). So all our knowledge is made up out of intuition and concepts, so that we can't have an item of knowledge involving •concepts without any intuition that somehow corresponds to them, or •intuition without any concepts. Intuitions and concepts each divide into •pure and •empirical. If a representation contains sensation (which presupposes the actual presence of the object), it counts as empirical; if no sensation is mixed into it, the representation is pure. [Recall that 'representation' = 'intuition or concept'.] We can call sensation the 'matter' of sensible knowledge; and what is left when that is removed is the 'form'.
 75 pure intuition contains merely the form under which something is intuited, and pure concept contains only the form of the general *object*-thought. [What Kant wrote there is strictly translated by 'pure concept', with no article, and no plural. This is the first such occurrence in the work, but there will be a few more later on.] Pure intuitions or concepts are possible only *a priori*, empirical ones only *a posteriori*. [See note on 'form'/'matter' on page 19.]

If we use the label 'sensibility' for our mind's •receptiveness to getting representations when it is affected somehow, then 'understanding' is the right label for the mind's power to produce representations from itself—its •activeness in knowl-

edge. It's just a fact about our nature that our intuition can never be other than sensible, i.e. that all there is to it is our being •affected by objects in a certain way. Our ability to •think the objects of sensible intuition, on the other hand, is the understanding. Neither of these is to be preferred to the other. Without sensibility no object would be given to us, and without understanding none would be thought. Thoughts without content are empty, intuitions without concepts are blind. We have just as much need to

- make the mind's concepts sensible (i.e. add an object to them in intuition)

as we have to

- make the mind's intuitions understandable (i.e. bring them under concepts).

And these two powers or capacities can't exchange their functions: the understanding can't intuit anything, and the senses can't think anything; only through bringing them together can knowledge arise. But this need for them 76 to collaborate shouldn't lead us to mix up their roles; it is in fact a strong reason to separate them carefully and distinguish them from one another. So we distinguish

- aesthetic—the science of the rules of sensibility in general—

from

- logic—the science of the rules of understanding in general.

Another dichotomy, this time *within* logic, which can be undertaken with either of two different aims: (1) As the logic of the **general** use of the understanding, logic contains the absolutely necessary rules of thinking—*any* thinking, whatever it is that's being thought about. Without these rules, the understanding can't be employed. (2) As the logic of the **special** use of the understanding, logic contains the rules for correctly thinking about this or that specific kind of

object. We can call the former ‘the logic of elements’; what the latter is, on the other hand, is the organon of this or that particular science. [See the page 25 note on ‘organon’, and on ‘canon’ which is coming shortly.] In academic teaching, the latter is often presented as the *way into* the science in question; though in actual intellectual practice the *logic* of a particular science is the *last* thing to be completed—it is done long after the science has been completed, when all it needs are a few finishing touches to make it perfect. For you must already

77

know the objects pretty well if you want to present the rules for how a science of them is to be obtained.

Yet *another* dichotomy! General logic is either •pure or •applied. In pure general logic we filter out all the empirical conditions under which our understanding is exercised, e.g.

- the influence of the senses,
- the play of imagination,
- the laws of memory,
- the power of habits and inclinations, etc.,
- the sources of prejudice

—indeed in general all causes from which this or that item of knowledge arises—because these merely concern how the understanding behaves in certain circumstances, and we can’t know about these circumstances without bringing in experience. So **pure general logic** has to do with strictly *a priori* principles; it is a *canon of the understanding* and reason, but only with regard to what is formal in their use, whatever the content is (empirical or transcendental). An **applied general logic** is directed to the rules for the use of the understanding under the subjective empirical conditions that we learn about from •empirical• psychology. So it has empirical principles; but it certainly counts as general because it concerns the use of the understanding on

78

any subject-matter. . . .

In general logic, therefore, the part that is to constitute

the •pure doctrine of reason must be sharply separated from the part that constitutes •applied general logic. It’s only the former of these that is properly a science—not a rich luxurious science, but a short dry one! That is inevitable in a methodically correct presentation of a doctrine of the elements of the understanding. In this science, therefore, logicians must always have two rules in view.

(1) As *general* logic, it abstracts from—i.e. filters out—all content of the knowledge through the understanding, and from variety in what the knowledge is about. It has to do with nothing but the mere form of thinking.

(2) As *pure* logic, it has no empirical principles; so it takes nothing from psychology (as it has sometimes been thought to do). Thus, psychology has no influence at all on the canon of the understanding. The latter is a proven doctrine, and everything in it must be known for certain completely *a priori*.

In the usual sense of the phrase, ‘applied logic’ is something that provides exercises in which the rules of pure logic are applied to concrete examples. In my usage, ‘applied logic’ is a representation of the understanding, and of the rules it must obey when it is used *in concreto*—i.e. under the conditions that the thinker happens to be in or under and that may hinder or help him in his thinking; these being conditions that can be known about only empirically. This kind of logic deals with

79

- attention—what it achieves, and what gets in its way,
 - the source of error, and
 - the states of doubt, of hesitation, of conviction, etc.
- Pure general logic relates to •applied general logic in the same way that •pure ethics relates to •the theory of virtue. The •former contains only the necessary moral laws of a free will in general, while the •latter considers these laws under the hindrances of the feelings, inclinations, and passions to which human beings are more or less subject—it can’t ever

yield a true and proven science, because it requires empirical and psychological principles, just as applied logic does.

2. Transcendental logic

As I have shown, general logic abstracts from all •content of knowledge, i.e. from how any item of knowledge relates to the object that it is *about*, and considers only the logical form of such items, as exhibited in how they relate to one another. That is, it considers only the form of thinking in general. •My next topic concerns thought and knowledge *about objects*, and straight away we need a two-part distinction•. Just as there are •pure **intuitions** as well as •empirical ones (as we saw in the transcendental aesthetic), we may be able to distinguish **thoughts of objects** into •pure and •empirical; 80 •and the pure ones, just because they are pure, fall within the scope of a *logic* properly so-called•. This would be a logic in which we *don't* abstract from all content of knowledge; it would contain the rules of the pure thinking *about an object*, •and that would distinguish it from general logic•. Like general logic it would, •because it was 'pure'•, exclude all items of knowledge that have empirical content. It would be concerned with the *origin* of items of knowledge, but of course only when the origin is something other than empirically given objects. Its concern with *origins* marks it off again from general logic, because general logic has no interest in the origins of knowledge—it concerns only the laws according to which the understanding relates representations to one another, whether they come from within ourselves *a priori* or are given empirically.

•In the foregoing paragraph I have been working towards introducing *transcendental logic*, which is the title of this section. But that label risks being misunderstood•. The following important point will be relevant all through the present work, and you shouldn't lose sight of it:

The term 'transcendental' does not apply to *all* items of *a priori* knowledge, but only to ones through which we know that certain representations (intuitions or concepts) *can* be used in an entirely *a priori* way and know *how* this is so. Something is 'transcendental' only if it is *about the possibility* of a certain kind of *a priori* knowledge. So there is nothing transcendental about space or the *a priori* geometry of space; what 81 is transcendental is the knowledge that these representations don't have an empirical origin yet can be related *a priori* to objects of experience. . . .

•This explanation reserves the term 'transcendental' for something that I haven't shown to exist! Well, take it that I am expecting there to be concepts that can be related to objects *a priori*. . . .as acts of pure thinking; and that I am providing for such concepts by formulating the idea of a science of knowledge by pure understanding and pure reason, knowledge in which we think objects completely *a priori*. This science would settle the origin, the scope, and the objective validity of such items of knowledge. Such a science would have to be called 'transcendental logic', because it deals merely with the laws of understanding and of reason, attending only to their *a priori* dealings with objects—unlike 82 general logic, which attends to empirical as well as pure rational knowledge, without marking any distinction between them.

3. The division of general logic into analytic and dialectic

'What is truth?' This is the old and famous question that was supposed to drive logicians into a corner, forcing them to reveal the emptiness of their entire art by either resorting to a miserable circle or else admitting their ignorance. Those who asked the question •didn't mean by it what its words

mean: they were taking for granted the nominal definition of truth, namely that it is the agreement of knowledge with its object—and that's an answer to the question 'What is truth?' What they really wanted to ask was this: What is the general and certain *criterion* of the truth of any item of knowledge?

83 One great proof of intelligence or insight is knowing what questions it is reasonable to ask. For if a question is intrinsically absurd and calls for an answer where none is needed, then it brings shame on the questioner and misleads the incautious listener into absurd answers, so that the whole scene is (as the ancients said) of one person milking a ram while the other holds a sieve underneath. That's the situation with the stupid question at the end of the preceding paragraph, as I now proceed to show.

If truth consists in the agreement of an item of knowledge with its object, the object in question has to be distinguished from other objects. If it weren't thus distinguished, an item of knowledge concerning an object *x* could count as true without fitting *x*, just because it happened to fit some other object *y*. [See note on 'knowledge' on page 2.] Now a *general criterion* of truth would be one that had the form 'Any item of knowledge is true if and only if it is *F*', so it would have to be valid of all items of knowledge without any distinction among their objects. This means that a general criterion of truth would abstract from all the content of items of knowledge—i.e. from their relation to their objects—but relation-to-object is precisely what truth is about. . . . So there can't possibly be a sufficient and yet general mark of truth: its generality keeps objects out, its concern with truth brings them in, so that the whole notion is self-contradictory.

84 But the universal and necessary rules of understanding give us a necessary though not a sufficient condition for the truth of an item of knowledge, simply because anything

that contradicts these rules is false (because in any such item the understanding contradicts its own general rules of thinking and thus contradicts itself). But this is only a *necessary* condition of truth, because it concerns only the *form* of the item in question. An item of knowledge could completely satisfy this criterion i.e. be in complete accord with logical form, i.e. not contradict itself, yet still be false because it contradicts the object that it's about. Notice that the impossible necessary and sufficient criterion of truth concerned the *content* of items of knowledge, while this legitimate merely necessary condition concerns their *form*.

General logic separates the formal business of the understanding and of reason into its constituents, presenting them as principles of all logical evaluation of our knowledge. This part of logic can therefore be called an 'analytic' (because of its process of separating-out = analysing), and it is at least the negative touchstone of truth. Before we investigate the content of an item of knowledge in order to learn whether it contains positive truth about its object, we must first examine and evaluate its *form* by means of these rules. But something's passing this test—agreeing perfectly with logical laws—doesn't guarantee that it is materially (objectively) true. So nobody can venture to think or say anything about objects on the basis of logic alone, without first getting solidly based information about them from outside logic. . . . Still, there's something seductive about this glittering art for giving all of our items of knowledge the form of understanding (even if we remain dead ignorant about their content!). Indeed it's so seductive that this general logic, which is merely a *canon* for judging, has been used, *misused*, as if it were an *organon* for the actual production of objective assertions or something like them. [See note on 'canon' and 'organon' on page 25.] When general logic is misused in this way

85

as an organon, it is called 'dialectic'.

86 The ancient philosophers gave the term 'dialectic' various different meanings when using it as the name of a science or art, but their actual *use* of the term shows that they meant it as a name for *the logic of illusion*—that and nothing else. Dialectic in this sense is a tricky set of techniques for giving an air of truth to ignorance and even to intentional tricks, which it does by aping the methodical thoroughness that logic always prescribes, and using its technical paraphernalia to prettify every empty pretension. [Kant writes of the ignorance and tricks with a possessive pronoun which in this context means *its*, so that he is referring to the ignorance and tricks of dialectic itself. This is peculiar; but in some contexts the pronoun means *his*, and Kant may have meant to speak of the ignorance and tricks of the person who engages in Dialectic.] Now, here is something certain and worth bearing in mind: when general logic is viewed as an organon, it is always a logic of illusion, i.e. is dialectical. For ·when it is used properly· general logic has nothing at all to say about the content of knowledge, and deals only with the formal conditions for items of knowledge to be in harmony with the understanding—conditions that have nothing to do with the objects ·or content· of knowledge. So the presumptuousness of using general logic as a tool or organon purporting to extend our knowledge yields nothing but *talk*, in which the talker somewhat plausibly supports or attacks anything that he happens to choose for such treatment.

Such a procedure is quite unworthy of the dignity of philosophy, ·and we don't need 'dialectic' or any other word to name something so bad·. So I prefer to use the noun 'dialectic' to stand for *a critique of dialectical illusion*; such a critique *does* count as part of logic, and that's how 'dialectic' is to be understood in the present work.

4. The division of transcendental logic into analytic and dialectic

In a transcendental logic we isolate the understanding (as I isolated sensibility in the transcendental aesthetic), and separate out from our knowledge the part that originates solely in the understanding. But we can't *do* anything with this pure knowledge unless it can be applied to objects that are given to us in intuition. Without intuition, all our knowledge would be object-less and thus completely empty. So the part of transcendental logic that expounds •the elements of pure knowledge yielded by the understanding, and •the principles without which no object can be thought at all, is the transcendental analytic. . . . But there is a great temptation to *misuse* these •pure items of knowledge of the understanding and these •principles, by using them on their own ·without connecting them with objects·, and even using them beyond all bounds of experience, which means using them without even the possibility of objects for them, because the objects would have to come from experience. When the understanding succumbs to this temptation, it runs the risk of using empty tricks to make a •material use of the merely •formal principles of pure understanding, flailing away with judgments about objects that aren't and perhaps couldn't be given to us. Since the transcendental analytic should properly be only

•a canon for evaluating the empirical use ·of the understanding·,

it's a misuse to let it count as

•the organon of a general and unrestricted use ·of the understanding·,

and to judge synthetically, to assert, and to decide about objects in general, on the basis of nothing but the pure understanding. Using pure understanding in this way as an organon would thus be dialectical. So the second part of the

transcendental logic has to be a critique of this dialectical illusion; it is called ‘transcendental dialectic’, meaning not that it dogmatically *creates* such illusions but rather that it is a *critique* of the supranatural use of the understanding and of reason, aimed at exposing the false illusion of their groundless pretensions. It aims to replace •their claims to discover and extend our knowledge purely through transcendental principles by something more modest, namely •evaluating the pure understanding and guarding it against sophisticated tricks. [Kant wrote *transzendental Grundsätze* = ‘transcendental principles’; that seems not to fit his use of ‘transcendental’ on page 26, or his account of its meaning in the indented passage on page 43; but we have to face the fact that he does sometimes use *transzendental* to mean merely ‘going beyond all experience’. In an indented question on page 12 we have seen him use the different word *transzendent* with that meaning; but when he distinguishes *transzendent* from *transzendental* early in the Dialectic, he gives the words meanings that don’t seem to fit very well with either page 12 or page 43.]

•END OF INTRODUCTION TO TRANSCENDENTAL LOGIC, WHICH BEGAN ON PAGE 41•

89 [The Transcendental logic divides into the Transcendental analytic, which starts here, and the Transcendental dialectic—the second half of the *Critique*—which would start right after page 154.]

Transcendental analytic consists in the dissection of all our *a priori* knowledge into its elements, which have been yielded by the pure understanding. The most important points are these:

- The concepts must be pure and not empirical.
- They must belong not to intuition and sensibility but rather to thinking and understanding.
- They must be elementary concepts, and clearly distinguished from •more complex• ones that are built up out of them.
- The list of them must be complete, covering the entire

field of pure understanding.

When a science is just an aggregate •of doctrines• assembled by empirical means, there can’t be any reliable basis for estimating that it is complete. To know that a science—specifically, the science that I call ‘the transcendental analytic’—is complete, we need •three things•:

- an idea of the totality of the *a priori* knowledge provided by the understanding,
- the classification of concepts that such an idea generates, and
- the inter-connections among those concepts, making them constitute a system.

Pure understanding distinguishes itself completely not only from everything empirical but even from all sensibility—i.e. from our intuitions of space and time, which are sensible but not empirical. So it is an independent and self-sufficient unity, not to be supplemented by additions from 90 other sources. Therefore the totality of its knowledge will constitute a system that is to be shaped by and understood through one idea. The correctness and genuineness of all the items of knowledge belonging to this system are assured by the system’s completeness and the way its parts are hooked together. But this part of the transcendental logic, •despite being such a unity•, is to be expounded in two ‘books’, one on the *concepts* of pure understanding, the other on its *principles*. [The Analytic of concepts starts now; the Analytic of principles starts on page 89.]

Analytic of concepts: Chapter 1: Metaphysical Deduction

What I mean by an ‘analytic of concepts’ is *not* the analysis of concepts—the usual procedure in philosophical investigations, of taking the content of whatever concepts present themselves and making them clearer by analysing them. I use the phrase to stand for something that until now has seldom been tried, namely the dissection of the faculty of understanding itself, in order to research the possibility of *a priori* concepts by seeking them only in the understanding as their birthplace and by analysing what is common to all pure uses of the understanding. This is the proper
91 business of a transcendental philosophy; anything beyond this is the logical treatment of concepts in philosophy. Let us, then, track the pure concepts back to their first seeds and dispositions in the human understanding, where they lie ready until at last, triggered by experience, they are developed and exhibited in all their clarity, liberated by that same understanding from the empirical conditions attaching to them.

When we put a faculty of knowledge into play, various concepts become prominent in various circumstances, and the faculty can be known through these; and an account of it can be built up, its degree of completeness depending on how long and accurately we have studied it. This rather mechanical procedure has two drawbacks. (1) There’s no way of knowing for sure when the investigation will be completed. (2) The concepts that are discovered in this
92 piecemeal way won’t exhibit any order or systematic unity. At best they’ll be arranged in pairs according to similarities among them, and placed in series according to how much content they have, the series running from simple concepts to more composite ones. There is some method in the

creation of such a series, but it’s far from being *systematic*.

When transcendental philosophy seeks for its concepts, it has the advantage but also the duty of proceeding according to a single principle. That is because those concepts spring pure and unmixed from the understanding, which is an absolute unity, so they must be connected with one another in accordance with one concept or idea. That kind of interconnection provides a *rule* through which •each pure concept of the understanding can be assigned its proper place, and •the completeness of the list of them can be determined, all this being done *a priori*. Without the rule, the placings of the concepts, and the judgment as to whether we had all of them, would depend upon chance or on what we *decided* to accept.

1. The logical use of the understanding in general

So far, I have given only a negative account of what the understanding is, calling it a non-sensible faculty of knowledge [see page 41]. Now we can’t have any intuition that
93 isn’t sensible, so there can’t be any intellectual intuition, so the understanding isn’t a faculty of intuition. But the only kind of knowledge there is, apart from intuition, is knowledge through *concepts*. Thus the knowledge of every understanding—or every human understanding, at least—is a knowledge through concepts; it isn’t intuitive but discursive. [The difference between (1) intuitive and (2) discursive is that between (1) knowing about something by being confronted by *it* and (2) knowing about something by having a description of it or thought about it or concept that applies to it.] Because all intuitions are sensible, they rest on •passive states, while concepts rest on •actions, specifically the action of unifying a number of representations by bringing them under one common representation (I call such actions ‘functions’). So concepts are based on the •activeness of thinking, while sensible intuitions are based

on the receptiveness or passiveness of impressions. [Kant now presents three theses in a well-stirred mixture, making the remainder of this paragraph especially hard to follow. What follows is an attempt to present the three separately; it steps over the bounds that have usually been respected in doing these texts, but there seems to be no other way of bringing this material within reach. **(1)** Kant has just said that a concept *unifies* many items; and our present passage goes from that to the thesis that judgments are also unifiers, because a judgment is a certain structure of concepts. **(2)** Kant has also said that the items that a concept brings together are 'representations', and he now explains this. My concept of *body* (for example) is something I can apply to things in the world only through how the world *appears* to me through my senses. The sights and feels of bodies are 'representations' of them; so my concept of *body* brings together all the intuitions that I do or might have of bodies, and *through* doing that it brings together bodies. Remember that 'representation' is a catch-all term that covers both concepts and intuitions. So Kant is saying that a (1) concept is a representation of many (2) representations of (3) things that aren't representations; if you like, you can say that (1) the concept represents (3) the things, but don't forget that it represents them 'mediately' or indirectly; whereas it represents the (2) intuitions of them directly, just as (2) those intuitions represent (3) the things directly. **(3)** Having earlier described the understanding as a faculty for *thinking*, Kant now calls it a faculty for *judging*; and he sets out here to show that the two descriptions are both right. The crucial idea is that obviously

•thinking is operating with concepts,
to which Kant adds the important thesis (this being taken straight from his text) that

•the only use understanding can make of concepts is

to judge by means of them.

This thesis will be crucial in what follows. In expounding it, Kant weaves it together with **(1)** his thesis about concepts (and thus judgments) as unifiers and **(2)** his thesis about how concepts (and thus judgments) connect with things only mediately = indirectly, *through* the appearances of things, i.e. through our sensory representations of things. This interweaving is what makes the passage so hard to follow. It also has the effect that nothing much is said in *defence* of **(3)** the thesis about concepts as usable only in judging. The paragraph ends thus:] Therefore the concept of *body* signifies something—*metal*, for example—that can be known or thought about through that concept. That's what makes it a *concept*—the fact that it applies to other representations *through* which it applies to bodies. So it is the predicate for a possible judgment, e.g. 'Every metal is a body'. This tight tie-up of concepts and judgments has the result that if we can present *all* the functions of unity in judgments—i.e. all the basic ways in which concepts can be brought together in judgments—we'll be able to list *all* the functions of the understanding. The following section will show that this can quite easily be done. ..94

[On page 36 Kant started section 8 of the Aesthetic. He now returns to that numbering system, assigning 9 through 27 to chunks of the Analytic of Concepts. Some of these chunks are *subsections*; others are whole sections to which Kant *also* gives numbers of their own (i.e. ones that don't carry on from the Aesthetic numbering). The one we are about to meet, for example, is numbered '2' and '9'. In the present version, each start of such a subsection will be marked by a label of the form **3/1**, and so on. For example, at page 60 we reach a subsection that gets the heading '14' in Kant's system; in this version it is labelled **1/2**, because this is the second subsection in section 1 of that chapter.]

2. The logical function of the understanding in judgments

- 95 If we set aside all the content of judgments and attend only to their form, we find that there are twelve kinds of judgment, specifically four groups of three. Here they are in a table:

Table of judgment-kinds

Quantity		
Singular		
Particular ('Some . . .')		
Universal ('All . . .')		
Quality	Relation	
Affirmative (. . . is mortal')	Categorical	
Negative (. . . is not mortal')	Hypothetical	
infinite (. . . is non-mortal)	Disjunctive	
Modality		
Problematic		
Assertoric		
Apodictic		

- 96 This classification seems to differ in some inessential respects from the one the logicians normally use, so I had better explain it.

Quantity: Logicians rightly say that in syllogisms singular judgments can be treated like universal ones. In the judgment that *Plato is a philosopher* (for example) the predicate-term 'philosopher' is applied to *everything* that is contained under the subject-term, just like the predicate-term in the universal judgment that *All Greeks are philosophers*. But if we compare a singular judgment with a universal one

considered as expressing some knowledge, then they are utterly different, just as *one* differs from *infinity*. (To know that Plato is a philosopher, you have only to know about that one man; whereas to know (for some F and G) that All Fs are G, you have to know about all the Fs, which may be an open-ended and practically infinite class.) So singular judgments are entitled to have a place in a list of forms of judgment (though obviously not in a logic that is concerned only with how different judgments relate to one another).

97

Quality: In general logic, infinite judgments are rightly lumped in with affirmative ones, and aren't given a place of their own in the classification; but in a transcendental logic infinite judgments must be listed separately from affirmative ones. General logic is interested in the notion of a predicate's either applying or not applying to a given subject, but it isn't interested in *what* predicate is in question—e.g. it isn't interested in whether it's a negative predicate or a positive one. But transcendental logic is interested in this; it wants to know what the value or content is of a judgment in which a merely *negative* predicate is positively affirmed of something—what sort of addition it makes to our knowledge. If I say of the soul 'it is not mortal', this is a negative judgment that does achieve something, for it at least rules out an error, the error of saying that the soul is mortal. Now consider the 'infinite' proposition 'The soul is non-mortal'. [With astonishing carelessness, Kant wrote *ist nicht sterblich* ('is not mortal') in a passage whose entire point is to distinguish infinite judgments—affirmative ones with negative predicates—from negative judgments. Most editors rightly correct the text at this point, to *ist nichtsterblich*, putting the negativity into the predicate.] In this I have certainly made an actual *affirmation*, so far as logical form is concerned, for I have placed the soul *within* a certain domain, the domain of undying things. [The next bit is harder than it needs to be. Kant's main point in it is that although

•affirmative judgments put the things referred to by the predicate-term *within* a certain domain,

whereas

•negative judgments put the things in question *outside* a certain domain,

98

when we have an infinite judgment—i.e. an affirmative judgment with a negative predicate—the domain of the things referred to by the predicate-term is so vast that the contribution to our knowledge that such a judgment makes is like the contribution made by an outright negative judgment. Kant's rather complicated exposition of this point doesn't give any clear reason for not saying something like this:

Negative judgments differ from affirmative ones in the following manner [etc., etc.]; and to know whether the judgment expressed by a sentence is negative you have to know not just whether it contains a 'not' or a *nicht*; you also have to know whether its predicate is essentially negative.

That approach would abolish 'infinite judgments' as a class on its own. This obviously wouldn't suit Kant, who wants his four-by-three structure for formal kinds of judgment; but he doesn't theoretically justify this part of the structure.]

Relation: [Kant is going to connect disjunctive judgments with *Gemeinschaft*, standardly translated as 'community'. When he says that in 'P or Q or R' the propositions P and Q and R have *Gemeinschaft*, he means that they are contributing in the same way—all on the same level—to the meaning of the disjunction, unlike P and Q in the hypothetical 'If P, then Q'. 'Community' doesn't at all express this, but it seems that no other one English word does either. So 'community' will be used here; remember what it means.] There are three thought-relations that can be involved in a judgment: (1) In a judgment of the categorical form *S is P* the predicate is related to the subject. (2) In a judgment of the hypothetical form *If Q then R* one

proposition (the ground) is related to another proposition (the consequence). The hypothetical proposition *If there is perfect justice, then obstinate evil will be punished* relates the two propositions *There is perfect justice* and *Obstinate evil is punished*. It doesn't settle whether either or both of these are true; the only thought that's involved here is the thought that one proposition implies the other. (3) In a disjunctive judgment of the form *Q or R or S or . . .* [which Kant understands in the exclusive sense, i.e. taking the proposition to say that one *and only one* of those items is true] several judgments or propositions are related to one another. The relation in question is not the relation of *following*, but rather

99

•the relation of logical opposition,

because there is no overlap between the spheres of possibility in which they are true ('. . . only one'), and also

•the relation of community,

because the judgments jointly exhaust the whole sphere of knowledge ('. . . at least one'). Take for example the proposition *The world exists through blind chance, or the world exists through inner necessity, or the world exists through an external cause*. Each of these propositions occupies one part of the sphere of possible knowledge about the existence of worlds, and together they occupy the entire sphere. To learn that the truth doesn't lie in one of these spheres is to learn that it does lie in one of the other two. And to learn that it *does* lie in one of the spheres is to remove it from the others. So a disjunctive judgment involves a certain *community* of items of knowledge, consisting in the fact that they mutually exclude each other but taken together they cover the whole extent of possible knowledge in the sense that whatever we come to know, it will be compatible with at least one of those three. For present purposes that's all I need to say about disjunctive judgments.

100 **Modality:** A judgment's modality is a quite special function of it. It's unlike the other three because it has nothing to do with the judgment's content. (The content of a judgment involves the properties of quantity, quality, and relation, and nothing else.) The modality of a judgment P has to do not with its content, then, but with what kind of thought is expressed by its copula.

[Kant is thinking here of the three types of modality as exemplified by

The speed of light **may be** finite (problematic)

The speed of light **is** finite (assertoric)

The speed of light **must be** finite (apodictic)

and thinking of the bold-type item in each as its copula. In a problematic judgment the assertion or denial is regarded as merely possible; in an assertoric judgment it is considered to be actual or true; in an apodictic judgment it is seen as necessary. Kant develops all this by combining it with the trio of judgment-kinds under the heading of Relation. In thinking a categorical judgment one thinks it as asserted; in thinking a hypothetical or disjunctive judgment one thinks each of its constituents merely as possible or problematic. What follows is the remainder of the paragraph with that unhelpful detour through 'Relation' filtered out.]

..101 In the problematic thought *It may be the case that P* I am allowing the proposition P a place in my understanding, as not ruled out. In the assertoric thought *P* I think of logical actuality or truth, thinking of *P* not as something I choose to grant a perhaps-temporary place in my understanding, but as already firmly lodged in my understanding (in accordance, of course, with its laws). And in my thought of the apodictic proposition *It must be the case that P* I am thinking of *P* as determined or settled *by* the laws of the understanding; so I am asserting *P a priori*, in this way expressing its logical necessity. So we have here a three-step procedure: I first judge *P* problematically, then maintain its truth assertorically, and finally assert *P* to be inseparably connected with the understanding, i.e. I assert *P* as necessary and apodictic. So

it is legitimate to see these three modal features of judgments or propositions as corresponding to three ways of thinking.

3. The pure concepts of the understanding, i.e. categories

102

3/1

As I have already said several times, general logic abstracts from all content of items of knowledge, and looks to some other source—whatever it may be—to provide it with the representations that it is to turn into concepts by means of analysis. Transcendental logic, on the other hand, does take account of some content, and knows very well what its source is. Specifically, it confronts a manifold [see note on page 20] of sensibility that is presented to it *a priori* by the transcendental aesthetic. It's this manifold of space and time that provides *matter = content* for the pure concepts of the understanding; without it, they would be completely empty. Any objects that we are to know or think about must satisfy the basic pre-conditions for being received by our mind, and those conditions are space and time. So we can't have any representations that don't involve space and/or time, and that is how space and time affect—or are taken account of by—our concepts. We are passive or receptive in respect of our intuitions of space and time, but our thought is *active*—it creates knowledge only by *doing* things. For it to have any knowledge of the *a priori* manifold of space and time, therefore, it must go through it, take it up, and pull it together in a certain way. I call this activity 'synthesis'.

102

By 'synthesis' in its most general sense I mean the action of assembling different representations and grasping their manifoldness—their variety—in *one* item of knowledge. Such a synthesis is 'pure' if the manifold is given not empirically but *a priori* (like that of space and time). Before we can analyse any representations we must *have* them; so we

can't get any new concepts—ones with new content—through •analysis. What gives us our first hand-hold on knowledge is the •synthesis of a manifold (given either empirically or *a priori*); the knowledge may at first be rough and ready, and confused, and thus in need of •analysis; but it's the •synthesis and nothing else that gathers together the elements for knowledge and unites them to form a certain content. If we want to know about the first origin of our knowledge, what we must attend to is *synthesis*.

We'll see later that synthesis in general is a mere effect of the imagination—something that the soul does blindly, usually without our being conscious of it—though it is indispensable because without it we wouldn't know anything. But it's the role of the understanding to bring this synthesis to *concepts*, and in this way to provide our first knowledge properly so-called. . . .

Different representations are brought **under** one concept analytically—general logic takes care of that. But transcendental logic teaches us how to bring **to** concepts not •representations but •the *pure synthesis of* representations. [The emphases on 'under' and 'to' are Kant's own. He regularly uses 'x comes **under** concept C' as a way of saying that C applies to x. Bringing a synthesis of representations **to** (or **onto**) a concept seems to be making the synthesis—or the gathered-together assemblage that the synthesis produces—available to the concept, so that the concept can confer on it some special kind of 'unity'.] For us to have knowledge about anything, we need three things to be given to us *a priori*: (1) the manifold of pure intuition; (2) the imagination's synthesis of this manifold; and (3) the concepts that give unity to this pure synthesis. (The imagination's synthesis isn't enough for knowledge. For any kind of cognitive state we have to go from (2) to (3).) What a concept *is*—everything that it is—consists in the representation of this necessary synthetic unity. And concepts depend on the understanding.

[The brief paragraph *seems* to be saying: the intellectual activities through which we make •judgments are the very ones in which the mind pulls together the elements of an intuition so as to make it a single unified •intuition. This is support for the thesis—mentioned but not defended earlier—that concepts are best thought of as capacities for making certain kinds of judgments. Kant continues:]

..105

That's how it comes about that there are exactly as many •pure concepts of the understanding that apply *a priori* to objects of intuition as there were •logical functions of all possible judgments [= 'basic kinds of judgment'] in the table on page 49. For these functions specify the understanding completely, and provide an exhaustive inventory of its powers. I shall follow Aristotle in calling these concepts *categories*, for my aim here is basically the same as his, though our ways of going after it are very different.

106

·**Table of categories**·

Quantity

Unity
Plurality
Totality

Quality

Reality
Negation
Limitation

Relation

Inherence and subsistence
Causality and dependence
Community [see note on page 50]

Modality

Possibility—impossibility
Existence—nonexistence
Necessity—contingency

That's the list of all the basic pure concepts of synthesis that

the understanding contains in itself *a priori*. . . . This classification is systematically derived from a common source, namely the structure of the faculty for judging (which is the same as the faculty for thinking). That's how we know that it is complete. A list that was assembled in a piecemeal fashion on the basis of a haphazard search for pure concepts could never be known for sure to be complete. And it would have another drawback that my list doesn't, namely that a piecemeal list would never show us *why* these concepts inhabit the pure understanding and others don't. Aristotle's search for these basic concepts was an effort worthy of such an acute man. But he had no systematic basis for identifying the pure concepts; he simply picked them up as they came his way. On his first pass he rounded up ten of them, which he called 'categories'; then later he thought he had found five more. . . . But his list omitted some concepts that ought to have been on it. And it included concepts that should *not* have been there: several items belonging to pure sensibility and one empirical concept, none of which belong in a list of concepts that stem from the understanding; and also some derivative concepts were included among the basic ones. . . .

[Kant's next two paragraphs concern derivative pure concepts of the understanding. A complete transcendental philosophy would have to identify all of them, but in this 'merely critical essay' there is no need to do that, because all it needs are the basic pure concepts of the understanding, i.e. the categories. Kant makes a suggestion about how to go about locating all the derivative pure concepts, and remarks that this would be useful and quite enjoyable. Then:]

In this work I deliberately omit the definitions of the twelve categories,

what Kant wrote: *ob ich gleich im Besitz derselben sein möchte.*

which could mean: although I may have them.

or it could mean: although I would like to have them.

Later on in the work, I'll analyse these concepts only as far as is needed for the doctrine of method that I am working up [occupying about the last 25 pages of the work, after the Dialectic]. If I were offering a *system* of pure reason—as distinct from a *critique* of it—it would be right to demand these definitions; but here they would only be a distraction, arousing doubts and objections that can be kept till later without doing harm to the essential aims of the present work. In any case, the little that I have here said already makes it clear that a complete glossary with all the needed definitions would be easy to produce. . . .

3/2

This table of categories suggests some nice points that could be made, ones that might have an important bearing on the scientific form of all items of knowledge through reason. If you think that that's too grand a claim, consider the following. This table contains *all* the elementary concepts of the understanding, and even provides the form though not the content of a system of them in the human understanding. So it directs us to all the *moments* [perhaps = 'crucial turning points' or = 'important elements'] of a planned speculative science, and even to their order. . . . This makes it obvious that in the theoretical part of philosophy the table of categories is notably useful, indeed indispensable, for offering the *complete over-all plan* for a science based on *a priori* concepts, and dividing it systematically on the basis of definite principles. I now present three of these points.

(a) This table, which contains four classes of concepts of the understanding, can be split into two parts, one concerned with objects of intuition (pure as well as empirical), the other with the existence of these objects (in relation either to each other or to the understanding).

I'll call the first class the 'mathematical' categories, the second the 'dynamical' ones. You can see that the categories in the first class have no correlates, whereas those in the second class do have them. This difference must be based somehow on the nature of the understanding. [Kant means just that none of the first and second trios of categories can be expressed, as each of the third and fourth trios can, as some kind of polarity or contrast or opposition. That presumably explains his labelling the first Relational category not as 'substance' but as 'subsistence and inherence' (substances *subsist* while their properties *inhere* in them), and the second not as plain 'causation' but as 'causation and dependence'. 'Community' doesn't fit this pattern, but Kant doesn't mention that.]

(b) When we use concepts to make an *a priori* division, the division has to be a •dichotomy. Yet each of the four classes of categories has precisely •three members. There is something to be thought about here. The solution is that in each of these trios the third member arises from the combination of the first two members. Thus:

- ³allness (totality) is just ²plurality considered as a ¹unity,
- ³limitation is just ²reality combined with ¹negation,
- ³community is the ²causal situation of ¹substances that mutually interact, and
- ³necessity is nothing but the ²existence that is given by ¹possibility itself.

But don't think that the third category is a mere derivative from the other two, and thus not a *basic* concept of pure understanding. That would be a mistake, because: as well as the acts of the understanding involved in using the first and second members of each trio, a further *and different* act is required for the combination of those two to produce the third. . . . For example, to understand what it is for there to be •community, i.e. one substance to be the cause of some state of another substance, you don't merely put together

your concept of •cause with your concept of •substance. This shows that a special act of the understanding is required here, and similarly in the other cases.

(c) Of the twelve correspondences I have found between the categories and basic forms of judgment, one is less obviously correct than the other eleven. The one concerns the category of community [see note on 'community' on page 50]. 112

[Kant devotes two paragraphs to explaining why he thinks that the claimed correspondence between •disjunction and •community is legitimate. The core of it is that

•in a disjunctive judgment 'P or Q or R or . . .' one is thinking of the disjuncts P, Q, R etc. as on a level, with no one or more of them having any precedence or seniority over the others in one's thought (in the way that P takes precedence over Q in the judgment 'If P, then Q');

and, similarly,

•when several objects are in community with one another, each of them acts on *and is acted on* by the others, so that again there is no primacy or seniority (in the way that there is a kind of seniority when one thing acts on another which doesn't act back).

Along with expounding this, Kant throws in a reason why the category of community is 'quite different' from that of one-way causation; he needs it to be different so that it won't count as a mere 'derivative' of the other. The difference he presents is that when several things are causally inter-related in the 'community' manner, that makes them *parts of a single whole*; whereas one thing's acting causally on another isn't enough to make them parts of whole; if it were, there might be a single thing of which God was one part and the world another.]

..113 **3/3**

The transcendental philosophy of the ancients includes yet another chapter containing pure concepts of the understanding. The ancient philosophers didn't call these concepts 'categories', but they regarded them as pure *a priori* concepts of objects—i.e. categories! That would raise the number of categories to more than twelve, so it can't be right. The concepts in question are displayed in the proposition, so famous among the scholastics:

quodlibet ens est unum, verum, bonum

·Whatever is a thing is *one, true, and good*·.

They got very little (only tautologies, indeed) from the use of this principle, which is why it came later to be given a place in metaphysics almost solely as a courtesy. Still, when a thought has sustained itself for so long, even if it seems empty, its origin is worth investigating. One suspects that it must have been based on some rule of the understanding that has—as so often happens—merely been wrongly interpreted. These supposedly transcendental predicates of things—'one', 'true', 'good'—are really just logical requirements and criteria for all *knowledge of things as such*, having the effect that all such knowledge is based on the categories of quantity—unity, plurality, totality. . . .

114

These categories have been taken ·by many philosophers· as material, i.e. as belonging to the possibility of things itself, whereas they really should have been used in a merely formal sense, as belonging to the logical requirements for every cognition. That is, these criteria of thinking were carelessly made into properties of things in themselves. ·That explains what went wrong in the deployment of those three concepts, but it doesn't explain their origin. If they came, as I have suggested, from a misunderstanding of ·something sound, what was ·it? Implausible as this may seem·, the concepts
one, true, good

are based on the categories of quantity, i.e. the concepts of unity, plurality, totality.

[Kant's explanation of this surprising claim is excessively hard to follow. (i) The connection between ·one and ·unity doesn't need to be explained, and Kant doesn't explain it. He does liken the 'unity' that is involved in pulling the manifold of knowledge into a single conceptual whole to 'the unity of the plot of a play, or the unity of a speech'. (ii) He connects ·true with ·plurality through the claim that any 'true consequences that follow from a given concept' are signs that it is objectively real (= true), so that the more true consequences there are the more signs of reality. Although he doesn't say so, Kant is here connecting plurality with truth by connecting one plurality with *another plurality* which is said to have something to do with truth. (iii) Kant's linking of ·good with ·totality is startlingly obscure, but the core of it is intelligible. It consists in replacing 'good' by a word meaning 'perfect', and then giving this one of its old meanings, namely that of 'complete'. (The German word (*vollkommen*) has a part (*voll*) that can mean 'fully' or 'completely'. Similarly, the English 'perfect' comes from Latin words meaning 'made' and 'throughout'; a perfect thing is one that is made throughout, thoroughly made, i.e. one whose construction is complete.) Once that change is made, it isn't hard to bring ·totality into the picture, which Kant does in some obscure remarks about the 'completeness' of a concept.—After presenting these three connections, Kant repeats that he has been giving 'one', 'true' and 'good' a role in an account of ·concepts and of items of knowledge considered in themselves, not of ·how concepts and knowledge relate to objects. Thus:] Consider the question of whether a given concept is possible (not whether its object is possible). The criterion for this is the concept's definition; and what a proper definition does is to embody (i) the unity of the concept, (ii) the truth of

..115

everything that can be immediately inferred from it, and (iii) the completeness of everything that is drawn from it; and those three items are everything that is needed for the whole concept to be produced. [Kant follows this with a supposedly analogous three-part criterion for whether a hypothesis is acceptable—(i) whether it does its explanatory job without help, i.e. alone; (ii) whether it is true; (iii)...something utterly obscure about completeness. Then:] So the concepts of unity, truth, and perfection are not to be added to the transcendental table of the categories, as though it had gaps that they fill. Rather, the relation of these ·three· concepts to objects doesn't arise; our use for the concepts is in thinking and talking about general logical rules for the agreement of knowledge with itself. [Also, Kant says in passing that

- the application of unity, plurality and totality to objects

involves applying them to items that are 'completely homogeneous', whereas

- the application of 'one', 'true' and 'perfect' to concepts and knowledge

has to do with pulling 'heterogeneous elements of knowledge into one consciousness'.]